





EXHIBITION GUIDE



















Fáilte romhaibh chuig Taispeántas Eolaí Óg agus Teicneolaíochta BT, an seóthaispeántas scoileanna maidir le heolaíocht agus teicneolaíocht is mó a bhfuil tóir air in Éirinn, agus an taispeántas is mó dá leithéid san Eoraip, nó fiú ar domhan.

Is deacair a chreidiúint, go bhfuil an 52ú bliain den taispeántas seo á ceiliúradh againn in 2016 agus arís eile tá clár imeachtaí iontach againn ar mhaithe leat féin chun taitneamh a bhaint as san RDS an tseachtain seo.

Sna laethanta amach romhainn beidh an deis agat féachaint ar gach a bhfuil le fáil sa Taispeántas Eolaí Óg agus Teicneolaíochta BT. Feicfidh tú le do shúile cinn na 550 tionscadal atá ar an ngearrliosta i mbliana agus an oiread obair chrua atá i gceist idir an obair a dhéanann na daltaí ar na tionscadal agus a múinteoirí a thugann tacaíocht agus spreagadh dóibh lena gcuid smaointe a fhorbairt.

Chomh maith leis sin tá seónna idirghníomhacha againn le daoine ar nós draíodóra David Meade, World of Robots, Celestial Voyage 3T, agus tá an róbat, Titan, a bhfuil cáil air ar fud an domhain, ar ais linn. Gan trácht a dhéanamh ar na hiontais atá romhat sa limistéar 'World of Science & Technology' ('Saol na hEolaíochta & na Teicneolaíochta'). Is údar mór bróid dúinn fáilte a chur roimh breis agus 3,000 eolaí agus teicneolaí óg ó bhunscoileanna ar fud na tíre ag a bhfuil sárthionscadal ar taispeáint an tseachtain seo ag Aonach Eolaíochta na mBunscoileanna RDS.

Ó bhunaigh an Dr. Tony Scott agus an tAthair Tom Burke, go ndéana Dia trócaire air, an taispeántas sna 1960idí, cuireadh beagnach 8,000 tionscadal isteach chuig taispeántas na n-eolaithe óga. Tá an-rath go deo ar chuid mhaith dár n-alumnas ina slí bheatha sna réimsí eolaíochta,

teicneolaíochta, innealtóireachta agus matamaitice. Tá cáil ar an taispeántas anois ar cheann de na hardáin is fearr le daoine óga cumasacha a chothú agus dúil sna hábhair STEM (Eolaíocht, Teicneolaíocht, Innealtóireacht agus Matamaitic), ábhair atá an-tábhachtach, a spreagadh. Éiríonn go maith lenár n-alumnas a bhuíochas dár 83 moltóir den chuid is mó, daoine gairmiúla a bhfuil an-taithí acu sna réimsí gnó agus STEM, a thugann a gcuid ama as a stuaim féin chun moltóireacht a dhéanamh ar na tionscadail agus a leagann an sprioc síos maidir le fiúntas agus caighdeán na dtionscadal lena bhfuiltear ag súil sna tionscadail seo gach bliain.

Tá an dúshuim againn in STEM, ní hamháin de bharr go mbímid ag brath ar an saineolas inár ngnó féin ó lá go lá mar chuideachta cumarsáide agus lT atá ar thús cadhnaíochta sa domhan, ach má chreidimidne go láidir gurb iad na daoine óga a bhfuil an t-eolas agus na scileanna sna réimsí sin acu a chuirfidh Éire chun cinn amach anseo. Leanaimid ar aghaidh brandaí móra an domhain a tharraingt anseo le gnó a bhunú a bhuíochas le lucht oibre oilte na hÉireann maidir le STEM. Is í seo an chúis a d'eagraíomar agus a thugamar urraíocht don imeacht seo le sé bliana déag anuas. Is de bharr sin atáimid i ndiaidh a fhógairt ar ball beag gealltanas dhá bhliain sa bhreis a thabhairt chun an t-imeacht seo den chéad scoth a eagrú agus a chur ar fáil.

Mar sin féin, ní fhéadfaimis an t-imeacht seo a chur ar fáil gan ár bpáirtithe, a bhfuil ardmheas againn orthu, agus tá focal ar leith tuillte ag an Roinn Oideachais agus Scileanna i bPoblacht na hÉireann, RTÉ, Analog Devices, Elan, Intel, Perrigo agus an Roinn Oideachais i dTuaisceart Éireann, agus neart páirtithe eile atá liostaithe sa treoir seo. Ba mhaith liom buíochas a ghabháil chomh maith lenár moltóirí, a bhfuil an-mheas orthu, na tuismitheoirí agus ár sárfhoireann d'oibrithe deonacha BT 'na Cótaí Dearga' a dhéanann a bpost lae a mhalartú le cúnamh a thabhairt chun an taispeántas a chur ar siúl agus bainistíocht a dhéanamh air.

Thar aon cheo eile, ba mhaith liom buíochas ar leith a ghabháil le gach aon dalta a chur tionscadal isteach ar thaispeántas 2016. Má tá do thionscadal ar an ngearrliosta nó mura bhfuil, thaispeáin tú cruthaitheacht agus scil le smaoineamh a fhorbairt agus is gaisce é sin ann féin.

Mar fhocal scoir, tá súil agam go mbainfidh tú, an cuairteoir, taitneamh as ár dtaispeántas agus go mbeidh tú chomh tógtha céanna leis an eolaíocht, an teicneolaíocht agus faoina bhfuil romhainn agus atáimidne in BT.

Go mbaine tú taitneamh as do chuairt agus guím gach rath ar na scoileanna uile atá páirteach ann an tseachtain seo. Go n-éirí an t-ádh leat.



Stiúrthóir Bainistíochta, BT Ireland

Tá BT ar cheann de na cuideachtaí seirbhísí cumarsáide agus IT atá ar thús cadhnaíochta sa domhan. Le tuilleadh eolais maidir le BT a fháil, tabhair cuairt ar www.btireland.com



Greetings and welcome to the 2016 BT Young Scientist & Technology Exhibition, Ireland's most popular science and technology schools' showcase and the largest exhibition of its kind in Europe, if not the world.

It's hard to believe, but 2016 actually marks the 52nd year of this world class exhibition and once again we have a superb programme of events for you to enjoy here at the RDS this week.

Over the coming days you will have the opportunity to explore all that the BT Young Scientist & Technology Exhibition has to offer. You will see for yourself the 550 projects that have been shortlisted this year and how much hard work goes into these projects by the students and indeed the teachers who support and encourage them in developing their ideas.

As well as that we have interactive shows by acts such as illusionist David Meade, World of Robots, Celestial Voyage in 3D, and the return of the world renowned robot, Titan. Not to mention the wonders that await in the 'World of Science & Technology' area. We're also proud to welcome over 3,000 junior scientists and technologists from primary schools across the country who have some fantastic projects on display this week at the RDS Primary Science Fair.

Since the exhibition was founded back in the 1960's by Dr. Tony Scott and the late Fr. Tom Burke, there's been almost 8,000 projects entered into the young scientist exhibition. Many of our alumni have forged hugely successful careers in the fields of science, technology, engineering and maths and the exhibition itself is today regarded as one of the best platforms for nurturing young talent and giving them an appetite for the critical STEM subjects. This is in large part down to our 83 judges, all highly experienced professionals in the fields of business and STEM, who give their time freely to judge the projects and who set the bar in terms of the calibre and quality expected in these projects each year.

At BT we are hugely passionate about STEM, not just because it's the expertise we depend on in our own day to day business as a world leading communications and IT company, but because we truly believe that young people equipped with knowledge and skills in these fields will drive Ireland's future success as we continue to attract big global brands who set up their businesses here on the strength of Ireland's skilled STEM workforce. This is why we've organised and sponsored this event for the past sixteen years and why we've just announced a further two year's commitment to organise and deliver this world class event.

However, we could not deliver this event without our valued partners and special mention must go to the Department of Education & Skills in the Republic of Ireland, RTE, Analog Devices, Elan, Intel, Perrigo and the Department of Education in Northern Ireland, and a host of other partners whom you'll find listed in this guide. I would also like to thank our esteemed judges, the teachers, the parents and our fantastic team of BT 'Redcoat' volunteers who swap their day job in BT for the week to help run and manage the exhibition.

Above all, I would like to thank every single student who entered a project in the 2016 exhibition. Whether your project was shortlisted or not you've shown creativity and skill in developing an idea and that is success in itself.

Finally, I hope that you, the visitor, enjoys our exhibition and that you leave here with the same excitement about science, technology and the future ahead, as we do in BT.

Enjoy your visit and I wish the very best of luck to all the schools taking part this week.

Go n-éirí an t-ádh leat.

Shay Walsh

Managing Director, BT Ireland





The BT Young Scientist & Technology Exhibition 2016 is proudly sponsored and supported by;



































































An Phríomh-Oifig Staidrimh Central Statistics Office

























































































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AWARDS

lan O'Sullivan and Eimear Murphy from Kanturk, Co Cork BT Young Scientist(s) & Technologist(s) of the Year 2015

MAIN AWARDS

Here are all the awards that will be presented at the BT Young Scientist & Technology Exhibition 2016.

BT Young Scientist & Technologist(s) of the Year 2016 **Individual** or Group

- BT Young Scientist(s) of the Year Trophy (perpetual)
- Cheque for €5,000 / £4,500
- The chance to represent Ireland at the European Union **Contest for Young Scientists**

Best Individual or Best Group

- BT Trophy (perpetual)
- Cheque for €2,400 / £2,160

Runner-up Individual and Runners-up Group

- BT Trophy (perpetual)
- Cheque for €1,200 / £1,080

Please note, if the title BT Young Scientist & Technologist of the Year is awarded to an Individual, a Best Group Award will also be made. If the title BT Young Scientist of the Year is awarded to a Group, a Best Individual Award will be made.

CATEGORY AWARDS

There are 36 prizes for Individuals and 36 prizes for group projects. The prizes take the form of 1st, 2nd and 3rd in Junior, Intermediate and Senior sections of each of the four categories:









The prizes are:

1st prize of €300 / £270

for both Individual and Group projects

2nd prize of €225 / £202

for both Individual and Group projects

3rd prize of €150 / £135

for both Individual and Group projects

In the event of a tie in any category, the prize money will be split equally.

A number of highly commended and display awards will also be awarded in each category by the panel of judges.

TRAVELAWARDS ANALOG DEVICES









STUDENT AWARDS

Analog Devices Student Award

This award is presented to an individual or group for outstanding work exhibited in the Technology category, except where the project has been selected as BT Young Scientist & Technologist(s) of the Year. The prize consists of a trophy and an all expenses paid trip to America as the guests of Analog Devices, visiting San Francisco and Los Angeles. In addition, Analog Devices will donate €2,500 to the school of the winning student(s) as a contribution towards its science laboratory equipment fund.

Intel Student Award

This award is presented to an individual or group for outstanding work exhibited in the Chemical, Physical & Mathematical Sciences category, except where the project has been selected as BT Young Scientist & Technologist(s) of the Year. The prize is an all-expenses paid trip to the USA to

compete in the Intel International Science and Engineering Fair (ISEF) in Phoenix, Arizona, May 8-13, 2016. The teacher/ mentor of the winner(s) of this award will also receive an allexpenses paid trip to ISEF.

Perrigo Student Award

Perrigo will be offering an award in the Biological and Ecological category to the best placed project, either group or individual, except where the project has been selected as BT Young Scientist & Technologist(s) of the Year. The winning project will be awarded €2,000.

RTÉ Student Award

RTÉ will be offering an award in the Social and Behavioural Sciences category to the best placed project, either group or individual, except where the project has been selected as BT Young Scientist & Technologist(s) of the Year. The winning project will visit RTÉ for a tour.









Analog Devices

Intel

RTÉ Perrigo

EDUCATOR OF EXCELLENCE AWARDS

These awards will be presented to the teachers whose commitment and encouragement have consistently enabled their students to participate successfully in all categories of the exhibition.

Analog Devices Educator of Excellence Award -**Technology**

The winner receives the Analog Devices Trophy and an allexpenses paid trip to America.

BT Educator of Excellence

Biological and Ecological Sciences The winner receives €2,000 **Social and Behavioral Sciences** The winner receives €2,000

Intel Educator of Excellence Award

Chemical, Physical and Mathematical Sciences

The winner will receive the Intel trophy and an all-expenses paid trip to the USA to attend the Intel International Science and Engineering Fair which takes place in Phoenix, Arizona, May 8-13, 2016. The selected teacher will also have the opportunity to attend sessions at the Intel Educator Academy.

SPECIAL AWARDS

We are pleased and proud to have a fabulous range of special awards at this year's Exhibition presented by our partner organisations. Special awards recognise excellence in specific areas, examples include projects which have a focus on innovation in technology, physics, chemistry, sustainability, recycling, the environment, research or improving cancer awareness. Each award is industry-sponsored and details of each organisation and awards can be found on the Awards section of our website www.btyoungscientist.com

REVEREND DR TOM BURKE BURSARY

Fr Tom was one of the co-founders of the project and sadly passed away in 2008. In memory of his contribution to the project, a €1,000 bursary is awarded in his name to an individual participant who is deemed by the judges as the best communicator. This will be paid to a student to help them in their second/third level education.

This bursary will be open to participants of all categories across all age groups - but the winner cannot be either the overall Individual Winner or Runner Up.











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Full details of all the Special Awards and the criteria for each can be found on our website www.btyoungscientist.com

Schools awards

Each year two school awards are made, one for Best School in Northern Ireland presented by MATRIX and one for Best School in Republic of Ireland presented by NAPD. These are presented on a points based system and cannot be won by the same school in a three year period.





























































An Phríomh-Oifig Staidrimh Central Statistics Office





















BT YOUNG SCIENTIST & TECHNOLOGY JUDGES

Biological & Ecological Sciences



Prof Donagh Berry Prof Ann Cullinane **Prof Sarah Culloty Prof Michael Doherty** Prof Liam Dolan Dr Evelyn Doyle **Hubert Fuller**

Prof Marie Guidon **Prof Des Higgins** Dr Mary Kelly-Quinn ★ 1976 Prof Grace McCormack Prof Jennifer McElwain Prof Deirdre McGrath Dr John Monahan ★ 1965

Prof Grace Mulcahy Dr Kathy O'Boyle Prof John O'Halloran Prof Donal O'Shea Dr Brid Quilty Prof John Quinn Dr Dagmar Stengel

Social & Behavioural Sciences



Siobhan Aherne **Prof Joe Barry** Dr Mairin Boland Dr Barry Brunt Prof Brendan Buckley Annette Cahalane **Prof Catherine Comiskey** Dr Catherine Conlon ★ 1981 Dr Jean Cushen Ciaran Ennis

Conor Faughnan Dr Domnall Fleming Dr Yseult Freeney Prof Marie Guidon **Prof Anne Hickey** Dr Jones Irwin Dr Angela Leahy Prof Theo Lynn Eoin MacCuirc Dr Maeve Martin

Lynda Mc Sweeney Prof Des McCafferty Michelle McCarthy-Severs Prof Niall Moyna Dr Elizabeth Nixon Dr Anita Prunty Aidan Ryan David Silke **Prof Anthony Staines** Dr Joanne Stuart

Chemical, Physical & Mathematical Sciences



Prof Tom Brazil Dr Mike Byrne **Prof Stephen Connon Prof Sean Corish** Prof Padraig Dunne Prof Orla Feely

Prof Pat Guiry Dr Graeme Horley **Prof Tom Laffey** Dr Michael McGrath Prof Ronan McNulty ★ 1985 Dr Maria Meehan

Dr Aoibhinn Ni Shuilleabhain Dr Fergal O'Reilly Dr Rachel Quinlan Dr Tony Scott Dr Emma Sokell

Technology



Colm Buckley Dr Sarah Jane Delany Prof Linda Doyle John Dunnion Dr Carol Gibbons Prof Jim Greer

Leonard Hobbs Barry Kennedy **Noel King** Aaron McCormack Ann O'Sullivan Dr Diarmuid O'Brien Tom O'Dwyer Brian O'Mara Dr Mary Shire Dr Peter Taylor ★ 2001

BT Chairperson

Ruth Murphy

Special Awards Chairperson

Professor Eoin O'Neill

* Young Scientist of the Year past winner





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2016 PROJECTS - QUICK SEARCH



PROJECT CATEGORY

Biological and **Ecological Sciences** Social and Behavioural Sciences

Chemical, Physical and **Mathematical Sciences**

Technology

1100 - 1610

<u>2</u>100 - 2720

3100 - 3610

SCHOOL NAME

Antrim			
Ballymena Academy			3510
Ballyclare High School			3605
Rathmore Gs			1501
St Killian's College	4401,	4408,	4415
Armagh			
St Catherine's College		1426,	3521
St Patrick's High School		2432,	3411
Carlow			
Gaelcholáiste Cheatharlach			1536
Presentation de la Salle College			2104
St. Leo's College	2215,	2586,	4103
Clare			
Ennis Community College, Gaelcholaíste an	Chlaír		2573
		_	
Mary Immaculate Secondary School - Lisdo 2203, 2306, 1100, 1104, 1203, 1404,	, 1407,		
	, 1407,	1410,	
2203, 2306, 1100, 1104, 1203, 1404,	, 1407,	1410,	,4306 1561
2203, 2306, 1100, 1104, 1203, 1404, Scoil Mhuire	, 1407,	1410, , 1515	,4306 1561
2203, 2306, 1100, 1104, 1203, 1404, Scoil Mhuire St Flannan's College	, 1407,	1410, , 1515	,4306 1561 4307
2203, 2306, 1100, 1104, 1203, 1404, Scoil Mhuire St Flannan's College St John Bosco Community College	, 1407, 1510 ., 2403	1410, ,1515 1530, ,2424 2565,	, 4306 1561 4307 1413 , 2426 2567,
2203, 2306, 1100, 1104, 1203, 1404, Scoil Mhuire St Flannan's College St John Bosco Community College Cork Bandon Grammar School 2106, 2401 2431, 2434, 2560,	, 1407, 1510 ., 2403	1410, ,1515 1530, ,2424 2565,	, 4306 1561 4307 1413 , 2426 2567,
Scoil Mhuire St Flannan's College St John Bosco Community College Cork Bandon Grammar School 2106, 2401 2431, 2434, 2560, 2568, 1421	, 1407, 1510 ., 2403	1410, ,1515 1530, ,2424 2565,	, 4306 1561 4307 1413 , 2426 2567, 3409
Scoil Mhuire St Flannan's College St John Bosco Community College Cork Bandon Grammar School 2106, 2401 2431, 2434, 2560, 2568, 1421. Boherbue Comprehensive School	, 1407, 1510 ., 2403 , 2575, , 1431,	1410, ,1515 1530, ,2424 2565, 3107,	, 4306 1561 4307 1413 , 2426 2567, 3409 2555 2409
Scoil Mhuire St Flannan's College St John Bosco Community College Cork Bandon Grammar School 2106, 2401 2431, 2434, 2560, 2568, 1421. Boherbue Comprehensive School Christ King Girls Secondary School	, 1407, 1510 ., 2403 , 2575, , 1431,	1410, ,1515 1530, ,2424 2565, 3107,	,4306 1561 4307 1413 ,2426 2567, 3409 2555 2409 4407
Scoil Mhuire St Flannan's College St John Bosco Community College Cork Bandon Grammar School 2106, 2401 2431, 2434, 2560, 2568, 1421 Boherbue Comprehensive School Christ King Girls Secondary School Clonakilty Community College 2408, 1201	, 1407, 1510 ., 2403 , 2575, , 1431,	1410, ,1515 1530, ,2424 2565, 3107,	,4306 1561 4307 1413 ,2426 2567, 3409 2555 2409 4407 4601
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Cork (continued)	
	, 2510, 2517, 2529, 2566,
	, 1503, 1505, 1509, 1513, 5, 3515, 3519, 4105, 4505
Coláiste Muire - Crosshaven	2210, 2214
Coláiste Pobal Bheanntrai	2559
Colaiste Treasa	2511, 1504
Davis College	1204, 4204, 4515
Douglas Community School	4403
Gaelcholáiste Charraig Uí	1412, 2412, 2419, 2423
Glanmire Community College	2579, 4504
Kinsale Community School 2102 2421, 2430	, 2105, 2107, 2110, 2412,), 2581, 1107, 1425, 3408
Midleton College	1550, 1572, 4107
Millstreet Community School	2544, 2553, 1528
Mount Mercy College	3100
Mount St Michael	4214, 4520
North Monastery Secondary Schoo	4414, 4519
Pobalscoil na Tríonóide	2701
Sacred Heart Secondary School	2531, 2540, 1423, 3203, 3516, 3522, 3610
Schull Community College 2218	3, 2518, 2580, 1411, 1602
Scoil Mhuire	4304
Scoil Mhuire gan Smál - Blarney	2400, 2597, 3103, 4412
St Aloysius College	1101, 1524, 3207, 4527
St Aloysius School	1529, 3401, 3405
St Mary's Secondary School - Macro	oom 2501, 2508, 2505
St Mary's Secondary School - Mallo	w 2414, 2416, 4406
St. Angela's College	2206, 2592
St. Brogan's College	1553





SCHOOL NAME

Donegal	
Coláiste Ailigh	2301, 2720, 2417, 2595, 2602 2717, 1430, 3529, 4516
Magh Ene College	1605, 4512
Mulroy College Pobalscoil Ghaoth Dobhair	1408
St Columba's College	2522, 2700 1519
	1313
Down New-Bridge Integrated Colle	ge 2719
Our Lady's GS	ge 2719 3104
South Eastern Regional Colle	
St Mark's High School	2201
	2201
Dublin Ardgillan Community College	1207, 3114, 3213, 3306
Ardscoil Rís	1207, 3111, 3213, 3300
Balbriggan Community College	
Blackrock College	1210, 3102, 3110
C.B.S. Westland Row	3407
Castleknock College	4302
Clonkeen College	2407, 2420
Coláiste Chilliain	3208
Coláiste Eoin	3212
Coláiste Iosagáin	2546, 2543, 1544, 3523
Coláiste Phádraig - Lucan	2402, 2554, 3109, 3202,
	3500, 3503, 4503, 4507, 4600
Colaiste Pobail Setanta	2100
Dominican College - Drumco	ndra 2516, 2563, 2578, 2603
Gaelcholáiste an Phiarsaigh	1427
Gaelcholáiste Reachrann	2536, 2598
Gonzaga College	2601, 3211
Loreto Abbey Secondary Sch	ool 2425, 1401, 3514
Loreto College - Crumlin Roa	d 2305
Loreto College - Foxrock	2557, 2562, 3527
Loreto College - St Stephens	
Lawta IIIah Cala	1103, 3404
Loreto High School	2503, 1500, 1517, 1571
Loreto Secondary School - Ba	albriggan 2307, 1300, 1551 1609
Lucan Community College	2427

Dublin (continued)	
Malahide Community School	2429, 4215, 4301, 4602
Marian College	2502
Mount Anville Secondary Schoo	l 1564
Newpark Comprehensive School	3300
Rosmini Community School	1542
Sandford Park School Ltd	2600, 4409
Santa Sabina Dominican College	1403, 3403
Scoil Chaitriona	4606
Skerries Community College	1314,4106
St Andrew's College	1102, 1305, 4100
St Benildus College	3106
St Colmcille's Community School	1567
St Declan's College	4219
St Dominics College	2715
St Louis High School	3606
St Mary's Secondary School	2577
St Marys College - C.S.Sp.	3526, 4410
St Marys Secondary School	2547, 2709
St. Fintan's High School	2551, 3205
Sutton Park School	2533, 3533, 4200
Synge Street CBS	3206, 3302, 3604, 3608
Terenure College	4207
Wesley College - Ballinteer	1569
Galway	
Coláiste Bhaile Chláir	2406, 4404
Coláiste Mhuire	1557, 1563
Coláiste Naomh Eoin	1315
Dominican College - Galway	1202, 1415, 1522
Gairmscoil na bPiarsach	2212
Garbally College	2707
Merlin College	1106
Portumna Community School 1	308, 1417, 1527, 1538, 4411
Seamount College	2711, 1562
St. Jarlath's College	1508
St. Mary's College	2708, 1108





2016 PROJECTS - QUICK SEARCH



1310

SCHOOL NAME

Kerry	
Coláiste Bhréanainn	4216
Coláiste na Sceilge	1309, 1418
Comprehensive School - Tarbert	2521, 4206, 4209
Gaelcholáiste Chiarraí	2570
Killorglin Community College	2418, 4402
Mean Scoil Naomh Ioseph	1608
The Intermediate School	1424
Kildare	
Kildare Town Community School	3412
Maynooth Post Primary School	2111, 4522
Meánscoil lognáid Ris	4528
Newbridge College	1302
Patrician Secondary School - Newbridge	2303
Salesian College - Celbridge	3513
St Wolstan's Community School	2542, 2571, 1312
Kilkenny	
Castlecomer Community School	1531, 1546
Coláiste Eamann Rís	1555
Coldiste Editidiii Nis	1555
Coláiste Mhuire	4609
Coláiste Mhuire	
Coláiste Mhuire	4609 , 2532, 3511, 3518,
Coláiste Mhuire Coláiste Pobal Osraí - Kilkenny 2519	4609 , 2532, 3511, 3518, 3534, 4212, 4517
Coláiste Mhuire Coláiste Pobal Osraí - Kilkenny 2519 Loreto Secondary School - Kilkenny	4609 , 2532, 3511, 3518, 3534, 4212, 4517 2569, 2576, 1532
Coláiste Mhuire Coláiste Pobal Osraí - Kilkenny 2519 Loreto Secondary School - Kilkenny Meánscoil na mBráithre Criostaí	4609 0, 2532, 3511, 3518, 3534, 4212, 4517 2569, 2576, 1532 2535, 2590
Coláiste Mhuire Coláiste Pobal Osraí - Kilkenny 2519 Loreto Secondary School - Kilkenny Meánscoil na mBráithre Criostaí St Kieran's College	4609 0, 2532, 3511, 3518, 3534, 4212, 4517 2569, 2576, 1532 2535, 2590
Coláiste Mhuire Coláiste Pobal Osraí - Kilkenny 2519 Loreto Secondary School - Kilkenny Meánscoil na mBráithre Criostaí St Kieran's College Laois	4609 9, 2532, 3511, 3518, 3534, 4212, 4517 2569, 2576, 1532 2535, 2590 1559, 4211
Coláiste Mhuire Coláiste Pobal Osraí - Kilkenny 2519 Loreto Secondary School - Kilkenny Meánscoil na mBráithre Criostaí St Kieran's College Laois Mountrath Community School	4609 2, 2532, 3511, 3518, 3534, 4212, 4517 2569, 2576, 1532 2535, 2590 1559, 4211
Coláiste Mhuire Coláiste Pobal Osraí - Kilkenny 2519 Loreto Secondary School - Kilkenny Meánscoil na mBráithre Criostaí St Kieran's College Laois Mountrath Community School Portlaoise College	4609 2, 2532, 3511, 3518, 3534, 4212, 4517 2569, 2576, 1532 2535, 2590 1559, 4211
Coláiste Mhuire Coláiste Pobal Osraí - Kilkenny 2519 Loreto Secondary School - Kilkenny Meánscoil na mBráithre Criostaí St Kieran's College Laois Mountrath Community School Portlaoise College Leitrim	4609 9, 2532, 3511, 3518, 3534, 4212, 4517 2569, 2576, 1532 2535, 2590 1559, 4211 1208 3517
Coláiste Mhuire Coláiste Pobal Osraí - Kilkenny 2519 Loreto Secondary School - Kilkenny Meánscoil na mBráithre Criostaí St Kieran's College Laois Mountrath Community School Portlaoise College Leitrim Ballinamore Community School	4609 2, 2532, 3511, 3518, 3534, 4212, 4517 2569, 2576, 1532 2535, 2590 1559, 4211 1208 3517 2500
Coláiste Mhuire Coláiste Pobal Osraí - Kilkenny 2519 Loreto Secondary School - Kilkenny Meánscoil na mBráithre Criostaí St Kieran's College Laois Mountrath Community School Portlaoise College Leitrim Ballinamore Community School Carrick-On-Shannon Community School	4609 2, 2532, 3511, 3518, 3534, 4212, 4517 2569, 2576, 1532 2535, 2590 1559, 4211 1208 3517 2500 2308, 2706

Limerick	2525	4210	4 F10	4525	4520
Ardscoil Ris	3535,	4210,			
Coláiste Chiaráin		1518,	3400,	4502,	
Colaiste Ide and Iosef					2558
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Desmond College - Lir 1514,	nerick 2202, 1601, 3401,		4300,		4405,
Gaelcholáiste Luimnig	h		2589,	3304,	4506
John The Baptist Com	munity School			2588, 1610,	
Laurel Hill Coláiste FC					1604
Laurel Hill Secondary S	School FCJ		2541,	2550,	4102
Salesian Secondary Co	llege, Pallaskei			2716, 4531,	
Scoil Mhuire agus Ide				2548,	4605
St Nessan's Communit	y College				4201
St Munchin's College					3609
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Loreto College Colerai	ne		т, ,		3308
St Mary's College		3101, 3501,			
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Longford					
Ardscoil Phadraig					2422
Lanesboro Community	/ College		2217,	2221,	2304
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Bush Post Primary Sch	iool	2514,	2524,	4511,	4514
Coláiste Rís					2103
Our Ladys College - Dr	ogheda		1416,	3112,	3209
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St Vincent's Secondary	/ School			1212,	1400
Mayo					
Coláiste Mhuire					2593
Davitt College				2591,	4608
Jesus & Mary Seconda	ry School				2582
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St. Marys Secondary school





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Eureka Secondary School 2574, 2561, 273 St Peter's College - Dunboyne 1523, 160	19
St Peter's College - Dunboyne 1523, 160	
	12
	06
St. Joseph's Secondary School 258	35
Monaghan	
Coláiste Oiriall 14.	22
Patrician High School - Carrickmacross 2525, 252	27
St. Louis Secondary School 2216, 15	52
Offaly	
Colaiste Choilm 1200, 430)3
Gallen Community School 1303, 1512, 440	00
Sacred Heart Secondary School 410	01
St.Brendan's Community School 452	21
Tullamore College 1307, 1311, 1419, 3108, 4217, 460)7
Roscommon	
C.B.S. Roscommon 1502, 1506, 1545, 1547, 2599, 350	06
Castlerea Community School 156	65
Roscommon Community College 2109, 253	39
Scoil Mhuire gan Smál - Roscommon 27:	18
Scoil Mhuire Strokestown 1556, 2207, 35	36
St Nathy's College 270)5
Sligo	
Jesus & Mary Secondary School 1109, 31	13
Ursuline College 2223, 3502, 3509, 4305, 450)9
Tipperary	
Ardscoil na mBráithre 258	37
Borrisokane Community College 250	07
CBS Carrick-On-Suir 120)9
C.B.S. Thurles 460)4
Colaiste Phobáil Rós Cré 32:	10
Comeragh College 258	33
Our Ladys Secondary School 25:	56
Presentation Secondary School 130)4
Presentation Secondary School - Thurles 258	34

Tipperary (continued)	
Scoil Ruain	2205, 2208
St Joseph's College 2513, 1429	, 1526, 3303, 4202, 4508
St. Anne's Secondary School	2428, 3528, 3520
Waterford	
Blackwater Community School 2526	5, 2528, 2530, 2534, 1548
De La Salle College	2220, 4500, 4526
St Angela's	2564, 2572, 3531
Westmeath	
Athlone Community College	1521
Colaiste Mhuire - Mullingar	4413
Loreto College	2200
Marist College - Athlone	1105, 3204, 4513
Moate Community School	2509, 1313, 1511, 1540
	1543, 3512, 4208
Our Lady's Bower	2545, 3607, 4205, 4530
St Aloysius College	4524
Wexford	
F.C.J.Secondary School	2538, 4213
Loreto Secondary School - Wexford	2594
Wicklow	
Avondale Community College	2405, 2704, 1211, 1402 1600, 3201
Coláiste Chill Mhantain	1428
Coláiste Raithín	3301
Dominican College - Wicklow	2433, 1560, 1566, 1570 3530, 3532
East Glendalough School	4203
St David's Secondary	1537, 4104, 4220
St Gerard's	2211, 4218
St Marys College	2222, 1539, 1554

PROJECT QUICK SEARCH IS ALSO AVAILABLE ON **OUR APP...**















Biological & Ecological Sciences

JUNIOR INDIVIDUAL

1100

Title: Does light affect the covering behaviour of the purple sea urchin (Paracentrotus lividus)

Overview: I want to see what effect differences in light intensity and colour has on the covering behaviour of purple sea urchins (Paracentrotus lividus)

School: Mary Immaculate Secondary School - Lisdoonvarna

County: Clare Teacher: Mr John Sims Student(s): Emma Kelly

1101

Title: Using Daphnia Magna to monitor water toxicity Overview: The aim of my project is to determine if sediments from parking lots contain compounds that are harmful for aquatic organisms. School: St Aloysius College County: Cork

Teacher: Ms Aine Hyland Student(s): Mavis Ode

1102

Title: Does nettle enhance the growth of strawberry plants? Overview: Do strawberry plants, when watered with a solution of nettle and water, produce more/ better quality fruit and leaves than strawberry plants watered with water alone?

School: St Andrew's College County: Dublin

Teacher: Ms Hilary Rimbi Student(s): Tom O'Gorman

Title: Treating Gastric Ulcers in Horses Overview: A test to see if the spice Fenugreek can cure, improve or have any effect on gastric ulcers in Horses. School: Loreto College - St Stephens Green

County: Dublin Teacher: Ms Louise Kerr Student(s): Annie Madden

1104

Title: Factors affecting the movement of periwinkles (Littorina littorea) on the shore

Overview: I am looking at the movement patterns of periwinkles (Littorina littorea) on a number of shores in North Clare and what might affect their movement.

School: Mary Immaculate Secondary

School - Lisdoonvarna County: Clare Teacher: Mr John Sims

Student(s): Amy Woods

1105

Title: Boglands - A Changing Environment Overview: This project will analyse

the difference between the developed and undeveloped bog in terms of the impact on the existing habitats. School: Marist College - Athlone

County: Westmeath Teacher: Mr Cían O'Brien Student(s): Daniel Breheny

Title: The Lunar Cycle affects Mares

Overview: this study is an examination of mares foaling at full moon, the research will show that mares consistently foal on full moon. School: Merlin College County: Galway

Teacher: Mr. James McHugh Student(s): Ian McDonagh

1107

Title: The effect pH of water has on the yield of wheatgrass. Overview: My project aims to evaluate if ionised water of varying pH values improves the yield of wheatgrass.

School: Kinsale Community School County: Cork

Teacher: Mr Shaun Holly Student(s): Alva White

Title: An investigation into the best type of light suitable for the activity of Hermit Land Crabs during daylight

Overview: I keep land hermit crabs. However, they are nocturnal. I want to investigate what intensity and colour of light best suits daylight activity. School: St. Mary's College County: Galway

Teacher: Mr Anthony Carey Student(s): Eamonn Mac Donnacha

1109

Title: animals reacting to mirrors Overview: My project is on animals reacting to themselves in mirrors. My end goal is to see which animals recognize their reflection in mirrors and how.

School: Jesus and Mary secondary school

County: Sligo

Teacher: Ms Louise Conlon Student(s): Harry Maguire

INTERMEDIATE INDIVIDUAL

1200

Title: Courses for horses; feeding performance horses as nature intended.

Overview: I aim to improve the digestive health and efficiency of performance horses by incorporating their high starch, high energy diets into a natural feeding routine. School: Colaiste Choilm

County: Offaly

Teacher: Mr Brendan McGlynn

Student(s): Daniel Carroll

Title: To investigate the lung capacity of a brass player versus the non brass

Overview: To investigate if playing a brass instrument increases lung capacity compared to non brass players.

School: Clonakilty Community College County: Cork

Teacher: Mr Patrick O Keeffe Student(s): Orlaith O Driscoll

1202

Title: Transgenerational Memory of Exposure to Environmental Stress by Epigenetic Inheritance in Daphnia pulex

Overview: This study will address the longstanding problem in evolutionary science, of epigenetics by studying how environmental stress effects the physiological properties of the next generation.

School: Dominican College - Galway

County: Galway Teacher: Ms Dee King Student(s): Dana Frank

Title: Does the location of Ranunculus repens in a turlough affect the morphology of the leaves Overview: I am examining the leaves of Ranunculus repens in a turlough to see if their location affects their morphology.

School: Mary Immaculate Secondary

School - Lisdoonvarna County: Clare Teacher: Mr John Sims Student(s): Ashling O'Connell

Title: Does Strongyloides Ransomi exists on Irish pig farms? Overview: To establish through investigation if the internal parasite Strongyloides Ransomi exists on Irish pig farms.

School: Davis College County: Cork Teacher: Ms Carol O Sullivan

Student(s): Cora Twomey

1205

Title: Thigmotropism, The Right Touch

Overview: I am conducting an study on thigmotropism. I will be studying the timing, effects of changing stimuli and the effect of different materials on thigmotropism.

School: Ardscoil Rís County: Dublin Teacher: Ms Riona Daly Student(s): Adam Carty

Title: Using Homeopathy as an Ecofriendly replacement to Molluscides Overview: My project aims to examine the use of the Homoeopathic remedy Helix-Tosta as a mollusc repellent, and researching the possibility of its use in agriculture. School: Mohill Community College County: Leitrim Teacher: Mrs Marina Duffy

1207

Title: The Microbiological State of the Bracken River, its Soils and the Affects on the Flora and Fauna; An Ecological Investigation

Student(s): Ezekiel Stevens

Overview: This project considers the Microbiological state of the River Bracken and ecologically tests the surrounding soils of the River bank. School: Ardgillan Community College County: Dublin

Teacher: Mrs Theresa Gannon Student(s): Killian Leonard

1208

Title: Asthma Control: Laps or Lengths, which matter most? Overview: An investigation into the benefits of swimming for asthmatics compared with other sports School: Mountrath Community School County: Laois Teacher: Dr. Mary Kelly Student(s): Christopher Carew

Title: Can 'bird-brains' be more powerful than we think? Overview: I aim to change the way people think about birds. I will accomplish this by studying possibly the most intelligent type of bird, the crow.

School: CBS Carrick-On-Suir County: Tipperary

Teacher: Mrs Mary Bridget Lenane Student(s): Declan Duggan

Title: An air quality survey of the Dublin area twenty-five years after the smoky coal ban using lichens as bio-indicators.

Overview: This project investigates the change in air quality in the Dublin area twenty-five years after the introduction of the smoky coal ban. School: Blackrock College County: Dublin

Teacher: Mr Killian Grumley Traynor

Student(s): Harry Kearns

Title: An Investigation into the Effects of Weather on Cereal Crop Yields over a Ten Year Period in Ireland. Overview: I wish to investigate if a correlation exists between cereal crop vields and weather data on a county by county basis in Ireland. School: Avondale Community College

County: Wicklow

Teacher: Ms Michelle Finnegan





Student(s): Mary Kate Condren

1212

Title: Can a Venus Fly Trap go Vegan? Overview: I will conduct an experiment determining whether or not a Venus Fly Trap can survive and function properly without a living food source.

School: St Vincent's Secondary School County: Louth

Teacher: Ms. Sarah Hunt Student(s): Aoife McGeough

SENIOR INDIVIDUAL

1300

Title: Developing a predictive tool for identifying FLNc-associated biomarkers of oesophageal cancer metastasis

Overview: To develop, using bioinformatics, a new tool for predicting PRKD2 substrates and binding partners of FLNc, for use as biomarkers of oesophageal cancer metastasis.

School: Loreto Secondary School -Balbriggan

County: Dublin

Teacher: Dr. Niamh Mc Nally Student(s): Renuka Chintapalli

Title: Exploratory Study examining correlation between mass of samara and HypoglycinA levels in the seeds and seedling of Acer pseudoplatanus which contribute to Equine Atipical Myopaty

Overview: Exploratory study investigating correlation between mass of samara and HypoglycinA levels in the seeds and seedling of Acer pseudoplatanus which contribute to Equine Atypical Myopathy School: Desmond College - Limerick County: Limerick

Teacher: Ms Aoife Culhane Student(s): Stacey Flynn

1302

Title: The Manufacture of bio-ethanol from Cereal Straw Overview: extract glucose or starch from barley straw using various enzymes and substances, then ferment into ethanol, which is used to produce biofuel. School: Newbridge College

County: Kildare

Teacher: Mr Dermot Walsh Student(s): Tomás Scully

1303

Title: Ehlers-Danlos Syndrome (EDS) and Autism Spectrum Disorder (ASD). Is there a link? Overview: This project will investigate

whether people with Autism are more likely to suffer from Ehlers-Danlos Syndrome/ Joint Hypermobility Syndrome than those in the general

population.

School: Gallen Community School

County: Offaly

Teacher: Mrs Catherine Hopkins Student(s): Steve Anne Buckley

Title: How ammonia effects horses through water.

Overview: This project is on Ammonia, and how it effects the water in the stable environment. It explores dehydration in horses and ways to reduce it.

School: Presentation Secondary

County: Tipperary Teacher: Ms Marie Lawlor Student(s): Megan Fitzgerald

1305

Title: Effect of different solvents in the extraction of pulmonary bovine surfactant on yield and protein composition aiming to improve treatment of neonatal respiratory distress syndrome

Overview: Investigating the effect of different solvents in the extraction of pulmonary bovine surfactant on yield and protein composition relating to treatment of neonatal respiratory disease.

School: St Andrew's College County: Dublin Teacher: Ms Hilary Rimbi Student(s): Ivaila Valcheva

Title: An assessment of the relationship between rainfall and water levels at Lough Finn County Donegal

Overview: This project assesses the relationship between rainfall and water levels at Lough Finn, County Donegal and also addresses water purity.

School: St Mary's College County: Londonderry Teacher: Mrs Ann Blanking Student(s): Kennedy Keeney Robinson

1307

Title: Clean Hearing Overview: To investigate the bacteria and fungi growth on my hearing aids and develop a suitable polymer to help detect ear infections in the early stages.

School: Tullamore College County: Offalv

Teacher: Ms Julie-Anne Greaney Student(s): Saoirse Underwood

Title: To Design an Educational program for Minor Hurlers towards protein nutrition and supplementation Overview: My project aims to create an educational program for Minor

hurlers towards protein nutrition and protein supplementation.

School: Portumna Community School

County: Galway Teacher: Ms Niamh Barry Student(s): Niall Duane

1309

Title: To Use A Footbalm Containing Seaweed to Help Prevent Blisters Overview: This project will detail the beneficial effects of seaweed and its use regarding the prevention of blisters. The product will be tested on test subjects.

School: Coláiste na Sceilge

County: Kerry

Teacher: Mrs Mary Devane Student(s): Dervla Donegan

1310

Title: Nutritional influences on lamb foetus growth in pregnant ewes **Overview:** To investigate why farmers encounter different ranges of growth in lamb foetuses, revolving around fields the ewes are in while going through trimesters of pregnancy. School: St. Marys Secondary school, Ballina.

County: Mayo Teacher: Margaret Burke Student(s): Katie Kilcullen

1311

Title: To investigate and compare commercial and traditionally based equine products Overview: Investingating the

comparative effective of commercial horse calmers and fly repellents against traditional, natural calmers and repellents by observering performance, temperament and tail movement.

School: Tullamore College County: Offaly

Teacher: miss jillian browne Student(s): Sam Bolton Butler

1312

Title: Hum Your Way to Better Health Overview: Investigate through research and experimentation the effect of nasal breathing and Yoga meditative humming techniques in improving lung function in asthmatics School: St Wolstan's Community School

County: Kildare

Teacher: Ms. Karen O'Callaghan Student(s): Caolann Brady

Title: Risk analysis of Atypical Myopathy in Irish Pasture Overview: A quantitative analysis of the risk of Irish grassland containing Atypical Myopathy, a fatal disease caused by toxins in Sycamore seeds. School: Moate Community School County: Westmeath Teacher: Ms Irene O'Sullivan

Student(s): Colin Doyle

Title: The Study of Halophytes as Carbon Sinks, Potentially to Reduce Atmospheric Carbon Dioxide Overview: Our project is a study of the use of Halophytes as Carbon Sinks, potentially to reduce atmospheric carbon dioxide.

School: Skerries Community College

County: Dublin

Teacher: Dr Katie Corbett Student(s): Sophie Sheahan

1315

Title: An cumas atá ag feamainn mar ábhar leasúcháin.

Overview: To examine the potential of seaweed as a fertiliser source in the management of species-rich grasslands on the Aran Islands. School: Coláiste Naomh Eoin

County: Galway Teacher: Mr Cormac Coyne

Student(s): Naoise Ní Chodlatáin

JUNIOR GROUP

1400

Title: Are everyday household blankets a suitable alternative to cooler blankets for horses? Overview: Are household materials as efficient as cooler blankets at gradually reducing horse temperature after exercise.

School: St Vincent's Secondary School County: Louth

Teacher: Mr John White

Student(s): Lucy McManus, Annie McGinn

1401

Title: Comparing the diet of different birds of prey

Overview: We plan to compare the diets of different birds of prey example Barn Owls, Peregrine Falcons and Raptures by looking at the remains in pellets.

School: Loreto Abbey Secondary School

County: Dublin Teacher: Ms Heather Merrick Student(s): Aisling Round, Katie Aylward, Mia Banton

1402

Title: Lamb alert! Overview: It is a birthing ward for sheep so the sheep is safe warm and has there own spacefor her and the

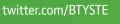
School: Avondale Community College County: Wicklow Teacher: Ms Amy Murphy Student(s): Laura Curry, Sophie Windsor

1403

Title: To investigate the effect of pollution on stomata numbers in











Biological & Ecological Sciences

leaves

Overview: We colected leaves from different areas and studied their stomata. We were then able to tell how polluted the area was based on their stomata School: Santa Sabina Dominican College

County: Dublin Teacher: Ms Audrey Carty Student(s): Naomi Flynn, Clodagh Gibson, Emma Tarpey

Title: Size selection of prey (Mytelus edulis) by dog whelks (Nucella lapillus) Overview: We are looking to see if the choice of mussel by dog whelks is related to the size of mussel. School: Mary Immaculate Secondary School - Lisdoonvarna County: Clare Teacher: Mr John Sims Student(s): Ailisha Leneghan, Katie Thomas

Title: Burnt Bovines- An investigation into the photo-sensitive influence of Heracleum mantegazzianum on Cattle Overview: Burnt Bovines- An investigation into the photosensitive influence of Heracleum mantegazzianum (commonly known as Giant Hogweed) on Cattle School: Desmond College - Limerick County: Limerick Teacher: Ms Aoife Culhane Student(s): Diarmuid O flynn, Jack Corkery

Title: Lactobacillus - An Indicator of the Effects that Steroid Inhalers have on the Oral Cavity Overview: We shall investigate the effect of steroids in inhalers on the commensual bacteria. We will compare the dental microflora of people with and without asthma. School: Coláiste Choilm County: Cork Teacher: Ms Julie Gleeson Student(s): Jay Fitzgibbon, Matilda Skipp-Prendergast, Emma Drummond

Title: Has the location of harebells (Campanula rotundifolia) an effect on the morphology of the plant. Overview: We are looking to see if the location of harebells (Campanula rotundifolia) affects plant height and the morphology of their flowers School: Mary Immaculate Secondary School - Lisdoonvarna County: Clare Teacher: Mr John Sims Student(s): Aoife Dowling, Chloe Geraghty

1408

Title: To investigate the effects of fluoridation and/or energy drinks in the DMFT index of 12 to 18 year old students in a rural DEIS school in North Donegal.

Overview: For our project we aim to investigate tooth decay in young people in North Donegal specifically related to energy drinks and fluoride in drinking water.

School: Mulroy College County: Donegal Teacher: Mr Declan Docherty Student(s): Jason Murray. Taylor Doherty, Lauren McMahon

Title: Comparing the Nutritional Content of Liquid Fertilisers Produced by Anaerobic Digestion Overview: To use different feedstocks in an anaerobic digester and compare the nutritional content of the liquid fertiliser produced. School: Coláiste Choilm County: Cork Teacher: Ms Karen Dalv Student(s): Elizabeth O Connor, Sarah Collins

Title: Factors affecting the size and density of the bladders on bladder wrack (Fucus vesiculosus) Overview: We are looking to see if exposure and location on a shore affects the size and density of the bladders on bladder wrack (Fucus vesicuolus) School: Mary Immaculate Secondary School - Lisdoonvarna County: Clare Teacher: Mr John Sims Student(s): Kate Considine, Sarah Nagle

1411

Title: Dublin Bay Prawns: Improving Food Safety Overview: Our project is focussed on testing sodium metabi sulphite solutions on-board fishing trawlers to improve food safety, by ensuring the prawns are under legal limits. School: Schull Community College County: Cork Teacher: Ms Larissa Kelly Student(s): Martin Fleming, Luke Franklin

Title: Baictéir ar na tránna Overview: Táimid chun staidéar a dheanamh ar na baictéir a fásann ar ár tránna agus chun a fháil amach cad é an áit is sábháilte ann. School: Gaelcholáiste Charraig Uí County: Cork Teacher: Mr Pól Ó Drisceoil Student(s): Robert Keal, Daniel Flynn, Luke Ronayne

1413

Distrubution of Fallopia Japonica and its Potential to Invade More Ecosystems. Overview: Our project aims to examine the propagation of Fallopia Japonica and to map a growth pattern of Fallopia Japonica in our local West

Title: A Study of the Spatial

Clare region. School: St John Bosco Community College

County: Clare Teacher: Ms Anna Quilter Student(s): Ailish Kenny. Katie Donnellan, James Kelly

Title: Variations in the morphology of the flower of the spring gentian (Gentiana verna) at two locations in

Overview: We are looking to see if there are morphological differences in the flower of the spring gentian at two different locations in the Burren. School: Mary Immaculate Secondary School - Lisdoonvarna

County: Clare Teacher: Mr John Sims Student(s): Katelin Vaughan, Emma McGhee

1415

Title: the unseen hazard of diving -Overview: investigate the levels of awareness of narcosis among divers by surveying members develop a device that would easily indicate divers they may be in danger School: Dominican College - Galway County: Galway Teacher: Ms Dee King Student(s): Elisa Sanchis, Orla O Regan

1416

Title: A comparative study of invertebrates that inhabit tree bark Overview: This is an investigation into which invertebrate species are most commonly found on tree trunks and how certain environmental factors affect their presence. School: Our Ladys College - Drogheda County: Louth Teacher: Miss Frances O'Regan Student(s): Anna Savage, Charley McKenna

1417

Title: To investigate and compare four flexibility training principles among a cohort of 13-14 year olds Overview: To investigate the flexibility of 13-14 year olds using the Speedflexer, assign flexibility programmes, and over 6 weeks record pre-test and post-test results. School: Portumna Community School County: Galway

Teacher: Ms Niamh Barry Student(s): Fiachra Callan, Eric Duane

1418

Title: To test and compare the silage qualities in bales of different coloured

Overview: I intend to look at the affects of different coloured plastics on the quality of the silage on my

School: Coláiste na Sceilge County: Kerry Teacher: Mrs Anne Griffin Student(s): Mary Beth O'Donoghue,

Olivia O'Shea

1419

Title: Comparative effectiveness of tooth whiteners Overview: What makes your teeth whiter - genes, toothpaste or technique. School: Tullamore College County: Offaly Teacher: Mrs Elaine Howlin Student(s): Jayne Henry, Lucy Leonard

1420

Title: Investigating The Effects That Drones Have On Birds Overview: There isn't enough scientific research on the effects that drones have on birds even though 2.5 billion dollars worth of drones were sold last year. School: Salesian Secondary College, Pallaskenry County: Limerick Teacher: Ms Claire Sheehy Student(s): Kieran Kelly, James Kelly, Dean Delap

1421

Title: What additives can be added to manure briggittes for the best results? Overview: this project is going to be investigating manure for fire fuel and what additives can be put in for the best results. eg.grass. School: Bandon Grammar School County: Cork Teacher: Mrs Carena McCarthy Student(s): Adrian Wood, Matthew Howe

Title: Anailís ar Leibhéal Luaidhe in

uisce ó áiteanna i n-údaráis áitiúla éagsúla Overview: Chun anailís a dhéanamh ar leibhéal luaidhe in uisce buacaire atá mar thomhaltas ag daoine ó Bhéal Feirste go Baile Átha Cliath. School: Coláiste Oiriall County: Monaghan Teacher: Ms Roisin uí Choinn Student(s): Niamh Ní Mhaolábhail, Aideen NicGabhann





1423

Title: A survey of the extent of Japanese Knotweed invasion in our local area and a campaign to raise awareness in our community Overview: We wish to GPS-locate all Japanese Knotweed plants in our local area (both roadways and waterways) and then raise an awareness campaign in our community School: Sacred Heart Secondary School County: Cork Teacher: Ms Julie Hanlon Student(s): Anna Flynn, Annie Condon, Katelyn Dinneen

1424

Title: How certain drinks affect our bodies. Overview: In this project we aim to investigate the affect certain drinks have on our bodies. School: The Intermediate School County: Kerry Teacher: Ms Sheree Murphy Student(s): Aoife O' Shea, Eabha Ní Chathasaigh

1425

Title: A photometric analysis of the bioluminescence properties of Pyrocytis Lunula Algae when exposed to pollutants. Overview: We plan to focus on the objective measurement of light produced from bioluminescent algae and measure how this light is affected by pollutants. School: Kinsale Community School County: Cork Teacher: Mr Shaun Holly Student(s): Hannah Kellett, Aisling Hurley

1426

a hobby Overview: We aim to prove that Irish dancing is a sport. We'll compare results of fitness and body coordination tests between young dancers and GAA players School: St Catherine's College County: Armagh Teacher: Mr Ciaran Connolly Student(s): Maeve O Hagan, Eva Fox

Title: Irish dancing is a sport, not just

1427

Title: An Bunús Bithcheimiceach d'Éadulaingt Lachtóis Overview: Fiosrúchán ar an bunús bithcheimiceach d'éadulaingt lachtós agus ar cad a chuirtear le gnáth báinne ionas gur féidir le daoine l'éadulaingt lachtós é a ól. School: Gaelcholáiste an Phiarsaigh County: Dublin Teacher: Miss Fionnuala Nic Giolla

1428 Title: To investigate the occurance

of Ehlers Danlos Syndrone-Hypermobility Type Overview: To investigate the occurrence of Ehlers Danlos Syndrome Type 3, as is suspected of being underreported. School: Coláiste Chill Mhantain County: Wicklow Teacher: Ms Denise Convery Student(s): Lhamo Fitzsimons, Ashleigh de Vreede, Adelaide Kane

1429

Title: Sun burnt Horse!! Overview: Our project is in relation to the sun burn horses get. We hope to raise an awareness of this and provide a possible preventive technique. School: St Joseph's College County: Tipperary Teacher: Ms Mary Gorey Student(s): Eimear Darcy, Rachel O Connell

1430

Title: An gcuidíonn peann aibhsithe(highlighters) leat staidear a dheanamh níos fearr Overview: Ta muid ag iarraidh fhail amach cen fath a cuidionn peann aibhsithe leat staidear a dheanamh. Agus cen dathanna a cuidionn is mo leat.

School: Coláiste Ailigh County: Donegal Teacher: Mr Shane Ó Breacáin Student(s): Aine Nic Diarmada, Aoibheann Ni Mhianain

1431

Title: An investigation into the effects different music can have on horses behaviour.

Overview: We'll be playing different types of music and monitor how they react. We know the horses that we're working with so we'll notice they're reactions.

School: Bandon Grammar School County: Cork Teacher: Ms Paula McGath Student(s): Alex McGeoghan Santry, Stephanie French

INTERMEDIATE GROUP

Title: Does growing and/or flexibility influence injury in growing adolescent Overview: Our project aims to study the epidemiology behind injury in relation to growing and in relation to flexibility in growing adolescent girls.

School: Loreto High School County: Dublin Teacher: Mrs Angela Benson Student(s): Aoibheann Murray, Hannah Macaulay

1501

Title: Dry Your Eyes Overview: To create a solution that stops us crying when cutting onions. We researched the biological reason why we cry and created a solution from this. School: Rathmore Gs County: Antrim Teacher: Mrs Clare Shuttleworth Student(s): Mark Conlon,

James Gallagher

Title: An investigation into the feeding habits of the red squirrels, which inhabit Mote Park co. Roscommon Overview: Our project investigates the population, hoarding and feeding habits of red squirrels, S. vulgaris, which inhabit Mote Park, a mature, mixed-woodland site in co. Roscommon. School: C.B.S. Roscommon County: Roscommon Teacher: Ms Louise Gallagher Student(s): Daire Byrne. Juan De La Campa, Emmet Quinn

1503

Title: Do Magpies Steal Shiny Objects? Overview: Our project aims to see whether magpies are actually interested in shiny objects, or is this something that has developed from myths. School: Coláiste Choilm County: Cork Teacher: Mrs Karina Lyne Student(s): Ciara O'Keeffe,

Ella McCarthy

Title: Plight of the Pearls: An investigation into factors affecting the distribution of Margaritefera margaritefera in the river Allow. Overview: To investigate the reasons why the freshwater pearl mussel is only found in certain stretchs of the river Allow in Co.Cork, and not others. School: Colaiste Treasa County: Cork Teacher: Mr. Derry O'Donovan Student(s): Darragh O'Keeffe, Riona Sheahan

Title: To investigate a farmers ability to estimate the weight of an animal when administering medicine Overview: For our Young Scientist we aim to investigate worm dosing practices on cattle in Ireland and whether farmers are complying with recommended dosing regimens. School: Coláiste Choilm County: Cork Teacher: Ms Lorraine Marron Student(s): Rebecca Maher,

1506

Title: The effect of poaching soil Overview: Investigating the effect of poaching on soil on the living organisms present School: C.B.S. Roscommon County: Roscommon Teacher: Ms Louise Gallagher Student(s): Jason Hoare, Ethan Connaughton, Daniel O'Neill

Title: An Investigation into the use

of Mycorrhizal Fungi to Mitigate Drought Overview: To investigate if plants that have been inoculated with mycorrhyzal fungi can withstand drought longer than other plants. School: Clonakilty Community College County: Cork Teacher: Mr Patrick O Keeffe Student(s): Clement Cunningham, Conor Carmody, Darren Keohane

1508

Title: Does Selective Breeding in cattle lead to a higher mortality Overview: This project sets out to find if selective breeding in cattle (AI) leads to a higher mortality rate in cows. School: St. Jarlath's College County: Galway Teacher: Mr. Clive Monahan Student(s): Shane Dunleavy, Kieran McDonagh, Conor Newell

1509

Title: To investigate if the addition of microalgae to the diets of dairy cattle will increase the omega-3 levels in their milk Overview: We are investigating the addition of micro algae into the diets of 15 cattle over 28 days. We hope to see an increase in omega-3. School: Coláiste Choilm County: Cork Teacher: Ms Lorraine Marron Student(s): Rebecca Okeeffe, Lisa Aylward

1510

Title: The effect of location on a shore and exposure on the shape of the shells of Patella vulgata Overview: We are looking at how shore exposure and location on a shore might influence the shape of the shell of limpets (Patella vulgate) School: Mary Immaculate Secondary School - Lisdoonvarna County: Clare Teacher: Mr John Sims Student(s): Claire Reilly, Hannah O'Brien

1511

Title: The Importance of Farming Habitats in Supporting Native and Migrant Birds/Wildlife Overview: Our project is about the importance of farmland as a habitat



Student(s): Niamh Ní Mhaonaigh,

Orlaith Ní Cheallaigh, Aimee de Rís





Ciara Daly, Aoife Lordan



Biological & Ecological Sciences

for wildlife and to analyse if the modern farm can provide a suitable habitat. School: Moate Community School

County: Westmeath Teacher: Ms Irene O'Sullivan Student(s): Eoin Shortall,

Callum Dunne

1512

Title: Growth of bean seeds in various nutrient substrata

Overview: We wish to investigate the effectiveness of varied fertilisers on the growth of pea seeds.

School: Gallen Community School

County: Offaly

Teacher: Mrs Alma Killian Student(s): Cathal O'Shea, Mark Dolan, Max Feehan

Title: Does a ladybirds' colour and pattern of its elytra deter a predator from preying on it? Overview: Does a ladybirds elytra pattern / colour affect a predators decision to prey on it. What species of bird in Ireland deter from eating ladvbirds. School: Coláiste Choilm

County: Cork Teacher: Ms Julie Gleeson Student(s): Ciara Forde,

Eoin Dineen

Title: An Investigation into how the digestibility of silage influences the milk yields and quality produced from a lactating cow

Overview: This project analyses the digestibility of silage being fed to animals on various farms and compares it with their lactating performance.

School: Desmond College - Limerick County: Limerick

Teacher: Ms Aoife Culhane Student(s): Jaimie Campbell, Niamh O'Connell, Mary O'Connor

Title: Effect of temperature on the turning ability of starfish (Asterias

Overview: We are looking to see how the ability of starfish (Asterias rubens) to turn the correct way up is affected by different water temperatures. School: Mary Immaculate Secondary

School - Lisdoonvarna

County: Clare Teacher: Mr John Sims Student(s): Jane O'Loughlin, Melissa Roche

1516

Title: Malignant Hyperthermia Overview: We want to raise awareness of this condition called Malignant

Hyperthermia which is when you are

allegic to an Anaesthetic. School: Coláiste lósaef County: Limerick Teacher: Ms Sharon Magner Student(s): Misha Noonan,

Jordan Heffernan, Faye Staunton

Title: A Study on the Cognitive Perception of Food Colours and

Overview: We investigate our subconscious correlation between the colour and flavour of a food, and see do we really judge a food by its

School: Loreto High School County: Dublin

Teacher: Mrs Angela Benson Student(s): Wisam Idris, Rachel Barrett

1518

Title: Colour me music – Can the use of colour on sheet music help dyslexic musicians sight read more efficiently? Overview: We are going to investigate if the use of colour on sheet music can make it easier for dyslexic students to sight read more fluently. School: Coláiste Chiaráin County: Limerick Teacher: Ms Edel Farrell

Student(s): Eve Butler,

Caitriona Brady Halmschlag

Title: The Incidence of Respiratory Disease in the Twin Towns Overview: A comparison between the rates of respiratory disease in two groups - populations in the valley and above the valley. School: St Columba's College County: Donegal Teacher: Mr Brendan O'Donoghue Student(s): Oisín Hughes,

1520

Alison Mulrine

Title: Cow Manure Briquettes Vs Non-Renewable Resources Overview: To make cow manure briquettes and then compare the calorific values and emissions released from cow manure briquettes with non-renewable resources. School: St. Clare's Comprehensive School County: Leitrim Teacher: Miss Edel McPhelim Student(s): Sylvia Dolan,

1521

Stephen Kelly

Title: Rewetted and degraded raised bogs: Carbon emissions and botanical composition Overview: An indept study into

the environmental differences of rewetted and degraded raised bogs on their carbon emission and botanical composition.

School: Athlone Community College County: Westmeath Teacher: Mr Leo Smith Student(s): Louise Egan, Sarah Denby, Fiona Molloy

Title: The effect of Bisphenol A on Drosophila Melanogaster Overview: Our project aims to investigate possible harmful effects of Bisphenol A (BPA), a chemical commonly found in plastic containers, using Drosophila Melanogaster. School: Dominican College - Galway County: Galway Teacher: Ms Aoife Fallon Student(s): Amy Keaney, Mairead Bell

1523

Title: To investigate the effectiveness of various substances in reducing or preventing algae blooms in fresh

Overview: Our project aims to find the optimum substance for reducing or preventing algae blooms in fresh

School: St Peter's College - Dunboyne County: Meath

Teacher: Ms Catherine Clair Student(s): Fionn O'Faoláin, Simon O'Brien

1524

Title: To investigate the production of cellulosic ethanol as a biofuel from grass clippings Overview: To investigate the production of cellulosic ethanol which could be used as a biofuel from grass clippings using cellulase and yeast School: St Aloysius College County: Cork Teacher: Ms Aine Hyland Student(s): Aoife McMahon, Clodagh Clery

1525

Title: NPK and Fertlizer: If You Can Measure It You Can Manage It Overview: Our project aims to investigate the use of Nitrates. phosphorus and potassium amongst farmers and complying with the Nitrates Directive in the Republic of Ireland School: Coláiste Choilm County: Cork Teacher: Ms Lorraine Marron Student(s): Michaela Sheehan, Emma Kearnev

1526

Title: Equine Colic Detector Overview: We are going to design a sensor that detects colic in horses and alerts the owner that the horse is in School: St Joseph's College County: Tipperary Teacher: Ms Mary Gorey

Student(s): Emily Meagher, Tara Mockler, Eimear Slattery

Title: Investigation of the effectiveness of the Environmental Management Plan during the upgrade of Portumna Marina on Lough Derg,

Overview: The marina on Lough Derg in Portumna Co. Galway is being upgraded. We plan to oversee the effects this has on the environment. School: Portumna Community School

County: Galway Teacher: Ms Niamh Barry Student(s): Saoirse Mullen, Ciara Lyons

1528

Title: Lovin' Lichen: A qualitative study into lichens and the properties of their dyes using our school's native

Overview: Using the lichens that grow on our school's native trees planted in 2006, we aim to extract and examine the properties of lichen dyes. School: Millstreet Community School County: Cork

Teacher: Ms Denise O Leary Student(s): Kate Buckley. Noelle Healy, Kaytlin Murphy

1529

Title: Comparative study of blue light and UV light for inhibiting microorganism development Overview: We intend to compare how effective a) blue light and b) UV light is at inhibiting microbial growth on food School: St Aloysius School County: Cork Teacher: Mrs Sarah O'Donovan Student(s): Emma Jane O'Donnell, Caoibhne McSweeney

1530

Title: Swimming: Do you take my breath away? Overview: Swimming involves adjustment to natural breathing. This is a study of breathing techniques and their affects on swimmers to reduce over-breathing (hyperventilation) and asthmatic symptoms. School: St Flannan's College County: Clare Teacher: Mr Michael Horgan Student(s): Ivana Pyne, Ruairí Power

1531

Title: Intelligence levels in different breeds of sheep Overview: Our project aims to investigate if different breeds of sheep have different levels of intelligence and if they are capable of learning at different rates. School: Castlecomer Community School





County: Kilkenny Teacher: Dr Robert Morris Student(s): Emma Wallace, Sophie Finn

1532

Title: An investigation into the ammonia levels present in chicken manure.

Overview: We aim to investigate the effect the diet of a chicken on its manure. This we will use as compost on a food producing plant. School: Loreto Secondary School -Kilkenny

County: Kilkenny Teacher: Ms Laura Heffernan Student(s): Muireann O'Connell, Hannah Kane, Meabh Ruane

1533

Title: An investigation into horse mortality in Ireland due to the consumption of Hypoglycin A in sycamore seeds.

Overview: Our project will be an immune system defence for horses in lick form and an onsite test for Hypoglycin A.

School: John The Baptist Community School

County: Limerick Teacher: Ms Michelle Buckley Student(s): Cormac Hanly, Patrick Gleeson

1535

Title: Protect your sight during a UFC fight Overview: In UFC, eye-poking is a problem. fighters can cause eye injuries to their opponent. We have decided to investigate, see how it effects eye injuries. School: John The Baptist Community School County: Limerick Teacher: ms Mariam larkin Student(s): Chelsea Collins, Caoimhe Lynch, Jake Thompson

1536

Title: Madraí Fólaíochta - Athraithe thar na Blianta Overview: Táimid ag féachaint ar na himpleachtaí sláinte atá ann maidir le madraí folaíochta i gcomparáid le madraí pór-mheasctha. School: Gaelcholáiste Cheatharlach County: Carlow Teacher: Ms Aine NicCraith Student(s): Craig O Nualláin, Seán Ó Gacháin

1537

Title: The feasibility of running anaerobic digester at a local level on waste materials only in an attempt to reduce our reliance on non-renewable energy sources

Overview: To prove that an anaerobic digester can run throughout the year on waste materials only in the hope

of offsetting our reliance on nonrenewable fuels.

School: St David's Secondary

County: Wicklow

Teacher: Ms Martina Doyle Student(s): Aoife Rainey, Niamh Daly, Sophie McDevitt

1538

Title: To investigate how farmers use the TAMS scheme to improve farm safety

Overview: Our project aims to investigate how farmers use the TAMS scheme to improve farm safety vs. farm production.

School: Portumna Community School County: Galway

Teacher: Mr. Paul Maguire Student(s): Denis Mclaughlin, Cathal Conroy, Oisin Donoghue

1539

Title: Comparisons and Effectiveness of Different Soaps and Drying Methods

Overview: Investigating and comparing the effectiveness of different brands of soap and drying methods using agar plates and observing the bacterial growth. School: St Marys College County: Wicklow

Teacher: Ms Joanne English Student(s): Shona Dillon, Doireann Kavanagh

Title: To investigate how the drainage of raised bogs affects the growth of sphagnum moss. Overview: We will carry out a qualitative and quantitative survey on the species of sphagnum moss found at increasing distances from agricultural drains in Clara bog. School: Moate Community School County: Westmeath

Teacher: Miss Mairead Cusack Student(s): Kate McLoughlin, Anna Parker

1542

Title: To Investigate the optimum conditions for extracting energy from woody plants using the fungus Phanerochaete Chrysporium Overview: We are investigating the optimum conditions of extracting energy from woody plants using the fungus Phanerochaete Chrysporium School: Rosmini Community School County: Dublin Teacher: Mr Michael Gavin Student(s): Octavian Tiolan, Isaac Hurley, Tony Panyachai

Title: An investigation into using Irish soils and peat for oil spills Overview: We are investigating using natural sources of local Irish soils and peat as an alternative to carbon

filters to clean-up oil spills in private households. School: Moate Community School County: Westmeath Teacher: Ms Margaret Mandal

Student(s): Cathal O'Brien, Ciaran Geoghegan, Dylan Lowry

1544

Title: An bhfuil nasc idir dath agus radharc na súile? Overview: Táimid ag iarraidh nasc a aimsiú idir dath agus caighdeán radhairc na súile trí trialacha radharc a dhéanamh ar shampla randamach de dhaoine.

School: Coláiste Iosagáin County: Dublin Teacher: Ms Karen Nic Aoidh Student(s): Niamh Ní Bhuachalla, Caitríona Ní Cheallacháin, Cara Ní Chondúin

1545

Title: An investigation into the level and cause of liver condemnations in co. Roscommon Overview: Our project looks at the number of livers been condemned and the reasons why School: C.B.S. Roscommon County: Roscommon Teacher: Ms Louise Gallagher Student(s): Mark Gleeson, Shane White

1546

Title: The differences in dynamic and static stretching. Overview: We're investigating whether dynamic or static stretching improves your flexibility more. 10 people will follow either program and improvements in their flexibility monitored and compared. School: Castlecomer Community School County: Kilkenny Teacher: Dr Robert Morris Student(s): Aidan Barry, James Buggy, Cathal Holland

Title: Investigating the air pollution around Lough Ree powerstation using Lichens as bioindicators Overview: Investigation using biological indicators the air pollution around the local power plant and it's effects it has on the surrounding area. School: C.B.S. Roscommon County: Roscommon Teacher: Ms Louise Gallagher Student(s): Aaron Casey, Miceal Hanly, Tristan Coyne O'Dowd

Title: A comparison of growth in suckler calves relative to those fed milk/milk replacements Overview: To investigate/compare the impact of different feeding structures including dry matter (nuts and hay)

and types/volume of milk has on the growth of calves.

School: Blackwater Community School

County: Waterford Teacher: Mrs Brigid Barrett Student(s): Megan Osborne, Tara Hickey

1549

Title: Do static stretches decrease performance before sport? Overview: We aim to find out if static stretches carried out before sport decrease or increase your overall sporting performance. School: St Patrick's Co-Ed Comprehensive Coll County: Londonderry Teacher: Mr Padraig Toner Student(s): Joanne Curry, Aidan Molloy, Anton Tohill

1550

Title: Foal sickness containment and prevention Overview: We will be creating a sensor that detects a potentially ill foal, alerting the owner, and preventing further illness or even death. School: Midleton College County: Cork Teacher: Mr Paudie Scanlon Student(s): David Byron, Cathal Mariga, Jim Moloney

Title: An Investigation into the Effects of Enzymes used in Animal Feed Additives on the Lifespan of Caenorhabditis Elegans Overview: We aim to investigate if the enzymes added to a large amount of animal feeds in industrialized farms decrease the lifespan of Ceanorhabditis Elegans. School: Loreto Secondary School -Balbriggan County: Dublin Teacher: Dr. Niamh Mc Nally Student(s): Maria Louise Fufezan, Diana Bura

Title: Healthy alternatives to high-

calorific ingredients in food for young children Overview: To highlight the need for healthy alternatives to high calorific ingredients in an attempt to increase the nutrition intake and reduce obesity in young children. School: St. Louis Secondary School County: Monaghan Teacher: Ms Caroline Finnerty Student(s): Simone Clerkin, Alison Mc Donnell

1553

Title: Developement of an indicator method for farmers to test for the presence of chlorine in rinsing water









Biological & Ecological Sciences

of milk plants. Overview: The problem which we wish to address is the lack of knowledge and lack of a technique to test for trichloromethane in milk. School: St. Brogan's College County: Cork Teacher: Mrs Karen Wood Student(s): Mark Shorten, Conor Lehane

Title: The Arklow Egg Heads: Cracking The Facts on Egg Quality Overview: By conducting this experiment we are testing if eggs produced by hens placed in varying environments and fed various feeds will differ in nutritional value. School: St Marys College County: Wicklow Teacher: Ms Joanne English Student(s): Sarah Shortall, Catherine Byrne, Lisa Hamilton

Cats and Dogs Overview: We have discovered some flea collars contain dangerous chemicals (amitraz). Our research focuses on the availability of these collars and to raise awareness to School: Coláiste Eamann Rís County: Kilkenny Teacher: ms Kate Stapleton Student(s): Chris McDonald, Andrew Gleeson

Title: Are Flea Collars Dangerous to

Title: To investigate the habitats of wild birds on REPS/GLAS farmlands and non-REPS/GLAS farmlands Overview: We want to compare the difference in bird populations and species on Irish farmland, some who are apart of GLAS and those who are

School: Scoil Mhuire Strokestown County: Roscommon Teacher: Ms Modwena Geoghegan Student(s): Rachel Flanagan, Jordan Lennon, Lauren Gallogly

Title: analysis of silage from one year to the next Overview: examine the difference in nutrients in the silage from the last two years and which one the cattle prefer. School: Coláiste Mhuire

County: Galway Teacher: Mrs Rita O'Connor Student(s): Robert Coyle, Cathal Crehan, Adam Farrell

Title: Do exercise levels have an effort on the quantity and quality of milk produced by a dairy herd Overview: To determine if excerise

levels in cattle have an effect on milk quality and quantity produced by a dairy herd. School: Salesian Secondary College, Pallaskenry County: Limerick Teacher: Mr John O'Flynn Student(s): Davida Shiels,

Sarah Meaney, Michelle Maher

1559

Title: Recycling coffee ground using plant and /or fungi Overview: This project shows how we can recycle organic waste by growing plants or fungi with recycled coffee grounds that would otherwise be thrown away.

School: St Kieran's College County: Kilkenny Teacher: Ms Eileen Hanrick Student(s): Owen Lynch, Conor Rowe, Brevin Benny

1560

Title: The nose knows... Biometric analysis of dog nose prints Overview: We investigate the possibility of using dog nose prints to identify dogs and the possibility of extending this idea to identifying sheep or other animals. School: Dominican College - Wicklow County: Wicklow Teacher: Mr John O'Brien Student(s): Rachael Millea, Saoirse O'Reilly

Title: Formulating a seaweed based skin cream using The North Clare seaweeds Fucus Vesiculosus and Fucus Serratus for potential use in the cosmeceutical industry Overview: We will formulate a seaweed based skin cream using The North Clare seaweeds for potential use in the cosmeceutical industry School: Scoil Mhuire County: Clare Teacher: Ms Sue-Ann Sheridan Student(s): Eleanor O Loughlin. Ramona Greene, Roisisn Callinan

1562

Title: Foot Shape and Motion in Ballerinas En-Pointe Overview: Ballerinas en pointe experience foot and ankle pain which may be due to differences in the alteration of their foot shape during dancing. School: Seamount College County: Galway Teacher: Ms Joanne Martin Student(s): Hannah Devitt, Hannah Piggott

Title: Can Your Eye Colour Effect How You See In Various Light Intensities? Overview: The aim of our project is to investigate whether or not your eye

colour has an effect on how you see in different light intensities. School: Coláiste Mhuire County: Galway Teacher: Mrs Rita O'Connor Student(s): Emer Kelly, Sarah Scott

1564

Title: The Science Behind Miniature Overview: We will be investigating

how miniature pigs are scientifically modified and if it"s possible to modify other animals, also surveying people's opinions to miniature pigs. School: Mount Anville Secondary

School County: Dublin Teacher: Mr Bernard Crampton Student(s): Phoebe Morgan, Ruth Hennigan

1565

Title: The effect of Irish Dancing on the ankle Overview: By analysing videos we take of irish dancers doing well known steps, we will find the effect of irish dancing on the ankles. School: Castlerea Community School County: Roscommon Teacher: Ms Yvonne Hanbury Student(s): Tara Muldowney, **Aoife Collins**

physical effort and perceived physical Overview: We investigate if there is a correlation between pupil dilation and physical effort or perceived physical School: Dominican College - Wicklow County: Wicklow Teacher: Mr John O'Brien Student(s): Rhian Drennan, Aoibhe Drennan

Title: An investigation in to the

correlation between pupil dilation and

Title: Is Technology giving us Tunnel Overview: An investigation of potential peripheral vision loss (tunnel vision) in adults and older teenagers through the widespread use of technology in recent years. School: St Colmcille's Community County: Dublin Teacher: Dr Des Murphy Student(s): Brittany Muller, Conor Barron

Title: Microplastics - Small Stuff, Big **Problems** Overview: An investigation into the presence of microplastics in household products and detrimental accumulation in marine and aquatic

environment. School: Coláiste Choilm County: Cork Teacher: Ms Julie Gleeson Student(s): Kian Hennessy, Denis Galvin, Robert Long

1569

Title: Cat nap concentration Overview: A study of how short power naps can affect ones ability to concentrate and for how long to nap. School: Wesley College - Ballinteer County: Dublin Teacher: Mr Seosamh O Braonain Student(s): Hector McCarroll, Danial Ahmed

Title: 1, 2, 3, 4 or 4, 3, 2, 1 - Do animals have a mental number line? Overview: We investigate the mental number sense in animals. Do animals, like humans, think of smaller numbers to the left or to the right? School: Dominican College - Wicklow County: Wicklow Teacher: Mr John O'Brien Student(s): Lauren Ryan, Lucy Phelan

Title: Hands: Washed and Dried, But Are They Clean? Overview: Our experiment is aimed at enlightening people as to what the most hygienic method of drying your hands is. School: Loreto High School County: Dublin Teacher: Mrs Angela Benson Student(s): Sarah Hickey, Ciara Leavy

Title: Seaweed Pellets Overview: Using compressed seaweed pellets as a sustainable fuel source for the future. School: Midleton College County: Cork Teacher: Paudie Scanlon Student(s): Max White, Julian Drennan, Liam Mariga

SENIOR GROUP

1600

Title: Tick Tack Tuberculosis Overview: An investigation into the conditions necessary for the growth and spread of tuberculosis in cattle, and a possible prevention method for tuberculosis in the future. School: Avondale Community College County: Wicklow Teacher: Ms Aoife Sullivan Student(s): David Fleming,

1601

Conor Windsor

Title: An Investigation using bull sperm into the biophysical factors that lead to conception in mammals





Overview: The aim of our project is to create a device that can assist in the treatment of infertility in mammals. School: Desmond College - Limerick County: Limerick Teacher: Ms Aoife Culhane Student(s): Cillian McMahon, Jack O'Connor, Conor Riedy

1602

Title: An Investigation into the Effects of Vermicompost on Tree Growth Overview: Our project aims to investigate the effects of vermicompost on the growth of three tree species, hopefully reducing artificial fertiliser use in environmentally sensitive areas. School: Schull Community College County: Cork Teacher: Ms Larissa Kelly Student(s): Elyssa Curran, Aishling Connolly

1603

Title: Edible and Environmental Friendly Bale Netting Overview: We are making an edible and environmentally friendly version of the white netting which surrounds bales of hay and silage. School: Coláiste Iósaef County: Limerick Teacher: Mr. Brian Clarke Student(s): David Carroll, Órla Daly, Marian Quaid

1604

Title: Concussion in Students. Is the Force of Impact a key factor? Overview: Testing the force of impact received by students aged 11-18 while the players are taking paper in sports like gaelic football and rugby. School: Laurel Hill Coláiste FCJ County: Limerick Teacher: Ms Caroline Clifford Student(s): Julianne Grehan, Clodagh Jones, Caoimhe Browne

Title: Biosecurity: A Case Study into Biosecurity measures to prevent the spread of Zebra Mussels (Dreissena polymorpha) to Lough Melvin Overview: We will investigate if the Zebra-mussel free status of Lough Melvin is due to biosecurity measures taken by anglers or environmental conditions in the lake. School: Magh Ene College County: Donegal Teacher: Ms Yvonne Higgins Student(s): Megan McGee, Rebecca Duffy

1606

Title: Trichoderma in plants Overview: To investigate how the effect of the fungus trichoderma improves the overall plant growth of barley when faced with stresses such as salinity in soil.

School: St Peter's College - Dunboyne County: Meath Teacher: Ms Catherine Clair

Student(s): Rose Connolly, Catherine Burke, Matthew Cojocaru

Title: Investigating the antibacterial effects of honey Overview: Investigation the antibacterial effects of raw, untreated honey in comparison to commercially produced honey. School: South Eastern Regional College - Bangor Campus County: Down Teacher: Mr Jonathan Cash

1608

Student(s): Jack Bryce,

Andrew Sturgeon, Emilio Torres

Title: Investigation to find if plants can decrease the levels of nitrates in water caused by pollution Overview: We wish to investigate if the use of flora can decrease levels of nitrates caused by pollution in our local waters. School: Mean Scoil Naomh Ioseph

County: Kerry Teacher: Ms Dayna Hurley Student(s): Gillian Hanifin. Tamara Horgan, Molly O'Callaghan

1609

Title: Identification of alterations in members of the 'Protein Tyrosine Phosphatase' (PTPs) gene family as novel therapeutic options for the treatment of Pancreatic Cancer Overview: In this project, we will identify mutations in the protein tyrosine phosphatase gene family and search for inhibitors by using various bioinformatic techniques. School: Loreto Secondary School -Balbriggan County: Dublin Teacher: Dr. Niamh Mc Nally Student(s): Khadija Gull, **Emily Tierney**

1610

Title: An investigation of Tinnitus in secondary school students Overview: The objective of this project is to examine tinnitus in secondary schools, to see if tinnitus is age or gender based & aggravating circumstances. School: John The Baptist Community School County: Limerick Teacher: Mr James Devereux Student(s): Niall Carew, Cain Carroll, Cathal Kirby

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Check the schedules on pages 63-65 for specific show times







Social & Behavioural Sciences

JUNIOR INDIVIDUAL

2100

Title: Adaptation to social changes Overview: Is a person who moved to a country better at adapting to changes than a person who lived in the same country their whole life? School: Colaiste Pobail Setanta

County: Dublin

Teacher: Mikey O'Sullivan Student(s): Otilia-Elena Boutiuc

Title: An analysis of obesity in Ireland using agent-based modelling Overview: My project aims to use agent-based modelling to better understand how to fight obesity in Ireland.

School: Loreto College - St Stephens

Green

County: Dublin Teacher: Louise Kerr Student(s): Claire Gregg

Title: A Thuismitheoirí "An Bhfuil Sibh Aireach Go Leor?" ("A Parental "Call of Duty")

Overview: Se aidhm an tionscadail ná eolas a fháil ó thuistí faoina dtuiscint ar ábhair agus iarmhairtí na gcluichí físe (18+) a n-imríonn a ndeágóirí leo. **School:** Kinsale Community School

County: Cork Teacher: Shaun Holly Student(s): Ryan O Sullivan

2103

Title: Airplane Ear

Overview: How ear works, surveying passengers and comparison against existing trials to prepare passenger information on the most efficient way to treat Barotitis aka Airplane ear.

School: Coláiste Rís County: Louth Teacher: Evan Markey Student(s): Niamh Maye

2104

Title: Scoliosis in Children Overview: My Project is to raise awareness of Scoliosis among young people and to inform sufferers about the benefits gained from the Schroth Method.

School: Presentation de la Salle

College County: Carlow Teacher: Sally Ronayne Student(s): Molly Nolan

2105

Title: A statistical analysis of the attitudes and awareness of secondary school students to breastfeeding. Overview: My project aims to investigate if attitudes to breastfeeding are formed in the teenage years and to examine awareness of breastfeeding in this

group.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly Student(s): Aoibhe Hurley

Title: Are electronic cigarettes as addictive as regular cigarettes and is their popularity growing among young people?

Overview: For my project I am going to investigate the addictiveness of e-cigarettes, and is the widespread availability of them encouraging more young people to smoke.

School: Bandon Grammar School

County: Cork

Teacher: Carena McCarthy Student(s): Avril O Leary

Title: A Statistical Study Into Whether People Have Become Desensitized To **Human Suffering**

Overview: My project aims to find out whether people remember other people's hardship as opposed to other items in the news.

School: Kinsale Community School

County: Cork Teacher: Shaun Holly Student(s): Conor Horan

2108

Title: Using mirrors to create artificial phantom sensations

Overview: I will use mirrors to reflect half of a person's body to find the parts of the body that phantom sensations are most common.

School: Loreto College - St Stephens Green

County: Dublin Teacher: Jamie Bain Student(s): Síofra O'Mahony

Title: The Application of Digital Technologies to enhance the Visitor Experience of Young People at Local Heritage Sites

Overview: Local People using Digital Technologies to enhance the Visitor Experience of Young People at Local Heritage Sites based on a woodland in Mote Park Roscommon

School: Roscommon Community

College County: Roscommon Teacher: Nuala Commins

Student(s): Michael Lough

2110

Title: Statistical Analysis of the Current Migrant Crisis

Overview: My project is to statistically analyse and assess the current patterns of Migrants arriving into Europe.

School: Kinsale Community School

County: Cork Teacher: Shaun Holly Student(s): David Daly

2111

Title: Why do boys and girls choose differently?

Overview: An investigation into gender imbalance in first year choice subjects.

School: Maynooth Post Primary

School County: Kildare Teacher: Tom Dixon Student(s): Dominic Murray

INTERMEDIATE INDIVIDUAL

2200

Title: Making Memories and Remembering Them. Overview: It is investigated how information is processed into our memory. It also explores memorization methods that help us remember information to its best extent.

School: Loreto College County: Westmeath Teacher: Fidelma Murphy Student(s): Arisha Ali

2201

Title: A study of Teenager Priorities and Over 65 Priorities and their difference in perception of each other Overview: I am investigating differences and similarities between the perception of older people and teenagers of each others priorities. Following a homework exercise in school about the needs of teenagers which was followed by a class discussion in school I wondered how teenagers and older citizens seemed to be different in their way of thinking about each other. So I decided to see just how wide the generation gap is in terms of prioritising everyday needs for each other and doing a comparison.

School: St Mark's High School **County:** Down

Teacher: Christine McKinney Student(s): Kerrie O'Hare

Title: Can our language think for us? Overview: To investigate whether or not our language influences our thoughts or even goes further into culture I will look at various languages from varied cultures.

School: Desmond College - Limerick

County: Limerick Teacher: Donal Enright Student(s): Ben Montgomery

2203

Title: Mapping changes in the population of Clare and Kildare between 1901 and 1911 Overview: I am looking at the changes in population at DED level in Clare and Kildare between 1901 and

1911 using census data. School: Mary Immaculate Secondary

School - Lisdoonvarna

County: Clare Teacher: John Sims

Student(s): Róisín O'Donoghue

Title: Quitting Smoking: Which Method is the Most Effective? Overview: I hope to study how different products to aid quitting smoking (gum, spray, etc) work and which is the most effective.

School: Scoil Uí Mhuirí County: Louth

Teacher: Anne Marie Kirk Student(s): Patrick Smyth

2205

Title: Dyslexia?

Overview: I hope to evaluate and compare both secondary and primary school teachers knowledge of dyslexia and link these finding to students

experiences. School: Scoil Ruain **County: Tipperary** Teacher: Margaret O'Neill Student(s): Joseph Mee

Title: The impact of being a musician on State Examination results Overview: Does playing a musical instrument improve/affect exam results? Conclusions will be drawn from survey results and research on correlation between IQ and musical ability.

School: St. Angela's College County: Cork

Teacher: Gillian Geraghty Student(s): Ciara Otway

2207

Title: Look Out! Stand Out! Overview: We are looking at the benefits of wearing high visibility vests and if it should be made umpulsory to wear one when walking or cycling.

School: Scoil Mhuire Strokestown

County: Roscommon

Teacher: Modwena Geoghegan Student(s): Chelsea Devine

2208

Title: An Analysis of Once A Day Milking, Less Stress More Success Overview: To highlight the benefits of once a day (OAD) milking to the farmer and find out why more farmers are not switching to OAD milking School: Scoil Ruain **County: Tipperary** Teacher: Vincent O'Dwyer Student(s): Lisa Millerick

2210

Title: Sexism:Still Alive and Kicking? Overview: My project is based around





the question of "Are feminists still needed in today's society?". I will do multiple tests to answer this question. School: Coláiste Muire - Crosshaven County: Cork

Teacher: Bridget Lehane Student(s): Kelly Williams

Title: Understanding the form of data input people gravitate towards and the implications it has on furtue technological evolutions.

Overview: This project is about understanding what types of data inputs people prefer and why. It is also about how people adapt to futue computing platforms.

School: St Gerard's County: Wicklow Teacher: Niamh Aylmer Student(s): Evelyn Clinton

2212

Title: An bhfuil tú chun bullaíocht a stopadh?

Overview: An bhfuil a fhios ag daoine céard atá i gceist le bullaíocht agus an déanfaidh siad aon rud chun é a stopadh?

School: Gairmscoil na bPiarsach County: Galway Teacher: Marianne Ní Thuama Student(s): Ciara Mellett

2214

Title: To investigate if experiences of frustration or disappointment reduces one's empathy.

Overview: The project aims to establish a link between frustrating or tough experiences and one's empathy towards others using experimental design.

School: Coláiste Muire - Crosshaven County: Cork

Teacher: Bridget Lehane Student(s): Eoghan Gethings

2215

Title: An Investigation into Mental **Health Attitude and Awareness** Among Farmers

Overview: I aim to examine causes of and attitudes towards mental illness among farmers and discover can awareness campaigns have beneficial effects on farmers mental health.

School: St. Leo's College County: Carlow Teacher: Fiona McManus Student(s): Ashlinn Flood

2216

Title: An investigation into the understanding & attitudes of youth towards Alzheimer's and analysis of this data. Subsequently developing an app aimed at teenagers to increase awareness.

Overview: To discover what knowledge of Alzheimer's exists among teenagers. To make an

app available to my peer group to enhance knowledge and awareness of Alzheimer's.

School: St. Louis Secondary School County: Monaghan Teacher: Caroline Finnerty Student(s): Isabel Doyle

2217

Title: Peer tutoring in maths: Do the figures add up?

Overview: How effective are same-year peer tutoring models in supporting students in learning and revising maths. What's the impact on the Tutor compared to the Tutee? **School:** Lanesboro Community College

County: Longford **Teacher:** Michael Lyons Student(s): Brian Lyons

2218

Title: What would it take: a study into the renewable energy needs of an Irish village

Overview: An investigation into the possibility of a small Irish town becoming self-sufficient in energy. School: Schull Community College County: Cork Teacher: Larissa Kelly

Student(s): Noah McCarthy Fisher

2219

Title: The Power of Suggestion: Are some minds more pliable than others? Overview: I aim to find out whether teenagers of a certain gender/age are more susceptible to suggestive powers, via tests of sensory, biological and mental suggestion. School: Community College

County: Meath Teacher: Claire Tuttlebee Student(s): Arno von Kietzell

2220

Title: Thorium and The Public Perception of Nuclear Energy Overview: My project's objective is to observe the public's view of nuclear energy and to persuade their opinions by informing them of safer, cheaper nuclear power.

School: De La Salle College County: Waterford Teacher: Mary McDonagh Student(s): Eoin Mullally

Title: "Caught or Taught": What's the best way of learning to play a musical instrument?

Overview: This project is a statistical analysis of the musical differences between formally taught musicians and musicians that self-direct their

School: Lanesboro Community College

County: Lonaford **Teacher:** Michael Lyons Student(s): Adam Farrell

2222

Title: A study into the effectiveness of spot creams using a placebo Overview: My project aims to find out the effectiveness of spot creams using a placebo with 3 different types of spot treatments.

School: St Marys College County: Wicklow Teacher: Joanne English Student(s): Helen Ryan

2223

Title: Vegan Food- The 'Naked' Truth Overview: A project aimed to make a detailed study on veganism's health benefits and prove whether or not it is as healthy as believed.

School: Ursuline College County: Sligo **Teacher:** Anthony Carolan Student(s): Tina Alexia Gheghici

SENIOR INDIVIDUAL

2300

Title: When I Grow Up - a Study into Whether Environmental Factors or Your Personality Influence Your Career Choice and How This Can Help Students Choose a Career. Overview: My project is to discover whether personality or environmental factors affect an individual's career choice and to design a program to

help people find out. School: Loreto College - St Stephens Green

County: Dublin Teacher: Jamie Bain Student(s): Jessica Commins

Title: An exploration of the influence of Parents on cigarette smoking among Irish teenagers. Overview: My project aims to

investigate the relationship between the smoking habits of teen smokers and their parents.

School: Coláiste Ailigh County: Donegal Teacher: Micheál Ó Giobúin Student(s): Peter Kelly

2304

Title: "Is co-payment really better than no payment? - a statistical analysis of the effects of the GMS charge'

Overview: The aim of my project is to determine the effect that the GMS charge has had on the health of medical card patients.

School: Lanesboro Community College

County: Longford Teacher: Mary O'Brien Student(s): Mark Lyons

2305

Title: Combination of TV Licence with the Electricity Bill

Overview: Combine/the/TV/Licence/ with/the/Electricity/Bill so people who have television at home or anywhere will feel obliged to pay and not to avoid it and consider it too.

School: Loreto College - Crumlin Road County: Dublin Teacher: Carol Higgins

Student(s): Rim Aboudinar

2306

Title: The attitudes towards Agricultural Science as a Leaving Cert Subject.

Overview: I wish to investigate the popularity of Agricultural Science as a Leaving Cert Subject in Ireland. I want feedback from those currently studying this subject and find out why they choose it.

School: Mary Immaculate Secondary

School - Lisdoonvarna County: Clare Teacher: John Sims Student(s): Deirdre O'Connell

2307

Title: The effects of High Intensity Interval Training on cognition and academic performance of female Leaving Cert students.

Overview: My project investigates if High Intensity Interval Training has the same positive effect on cognition skills and academic performance as general aerobic exercise.

School: Loreto Secondary School -Balbriggan

County: Dublin Teacher: Chris Garvey Student(s): Maria Wyzykowska

2308

Title: The demise of our regional accents - Globalisation or identity

Overview: An investigation into the cause of the loss of our regional accents and whether it is simply a globalisation phenomenon or shame of our backgrounds. School: Carrick-On-Shannon

Community School County: Leitrim Teacher: Sinead Donegan Student(s): Stephen Hughes

JUNIOR GROUP

2400

Title: Has the yes vote had an impact on education Overview: If and how children are

learning about gay relationships. School: Scoil Mhuire gan Smál -Blarney

County: Cork Teacher: Elaine Keane Student(s): Nicole O Leary, Dara Twomey, Amy Oconnell











Social & Behavioural Sciences

2401

Title: School League Tables - Fact or Fiction?

Overview: We would like to see how the general public respond to school league tables and see if we could create a more accurate formula. School: Bandon Grammar School County: Cork

Teacher: Carena McCarthy Student(s): Jordan Warren, Meadhbh O Brien

2402

Title: Having €10 off vouchers changed peoples shopping habits? Overview: We want to see if the €10 voucher wars between the multiples has had a lasting effect on the shopping habits of irish consumers School: Coláiste Phádraig - Lucan County: Dublin Teacher: Jacqueline Farrell Student(s): Adam Lynch,

2403

Adam Mc Eneaney

Title: Can nursery rhymes save lives? Overview: Our project is aimed towards saving lives of children through raising awareness of how to prevent diseases through nursery rhymes.

School: Bandon Grammar School

County: Cork Teacher: Carena McCarthy Student(s): Denise O Brien, Abigail Kadree, Clodagh Perrott

Title: That's the Emojis for you!! **Overview:** This project investigates the possible use of emojis to improve literacy amongst young Irish students in line with International standards School: Desmond College - Limerick **County:** Limerick Teacher: Aoife Culhane Student(s): Victoria Brouder, Ciara Brouder

2405

Title: Technology: Friend or Foe? Overview: Its about Technology affecting peoples minds and lives, we have done a survey on primary schools.

School: Avondale Community College County: Wicklow Teacher: Aoife Sullivan Student(s): Aaron Lee. Daniel Morley, Jude George

2406

Title: A Scientific Look at the Dangers of High Heels

Overview: Explore the damage high heels can cause and to investigate if girls would still wear them if they were aware of the damage being

School: Coláiste Bhaile Chláir County: Galway

Teacher: Eleanor Nolan Student(s): Ella-Rose McIntyre, Róisín Cellarius

2407 Title: A Comparative Study On

Subjects Offered In Secondary Schools In Ireland, England, Australia, Spain and Brazil Overview: We want to investigate subjects offered to students in secondary schools in various countries and how it effects students choices for University and future careers. School: Clonkeen College County: Dublin

Teacher: Maire Duffy Student(s): Ryan Noronha, Brennan Joe O'Driscoll, Ryan O'Connor

2408

Title: Statistical Analysis of Attitudes and Behaviours Surrounding Cyclists

Overview: We want to investigate the impact of the new traffic offences for cyclists safety. Do people believe they are beneficial and are people following them?

School: Clonakilty Community College County: Cork Teacher: Patrick O Keeffe

Student(s): Therese Mc Carthy, Stephen Sweetnam

2409

Title: The effect that the Media can have on Teenagers and young adults Overview: By carrying out a survey we will conduct what effect the media has on teenagers and young adults. School: Christ King Girls Secondary School County: Cork

Teacher: Denise Quilter Student(s): Amira Abbas, Paulina Dauksaite, Ieva Zaveckyte

Title: A Statistical analysis on whether or not the average Irish person exercise's enough and eats

Overview: This project is to investigate does the Irish person exercise and eat healthily. We plan to inform Irish people about risks related to not doing so.

School: Coláiste lósaef County: Limerick Teacher: Sharon Magner Student(s): Dylan Salter, Brian Daly

2411

Title: Energy Drinks- Adolescent Students' Knowledge and Consumption Habits Overview: Our aim is to establish Second Years' knowledge and consumption habits in relation to Energy Drinks. Those results will be compared to nutritional guidelines. School: Coláiste Choilm County: Cork Teacher: Lorraine Marron Student(s): Anna Callanan, Leigh McCarthy

2412

Title: What Makes a House A Home; A Statistical Study of the Importance of the Family Unit.

Overview: To test our hypothesis that "Families create homes" and to investigate if opinions vary or remain the same across different family units. School: Kinsale Community School County: Cork **Teacher:** Shaun Holly

Student(s): Alex Lordan, Aimee Mulcair

2413

Title: A statistical analysis on social media as apposed to reality. Overview: To show how different people act on social media behind a screen then how they act in reality to your face.

School: Coláiste lósaef **County:** Limerick Teacher: Sharon Magner Student(s): Eve Ryan, Katie Finn, Aisling O Rahilly

Title: The Affects of Technology on the Sleeping Patterns and Cognitive performance on Teenagers in our local area

Overview: The problem we investigated is the relationship between the use of technology by teenagers and the effect it has on sleeping patterns and cognitive performance.

School: St Mary's Secondary School - Mallow

County: Cork Teacher: Rory Coote Student(s): Niamh Creedon, Niamh O Shea, Jessica O'Donovan

Title: Investigating the effects of Bruxism in children with special needs Overview: Our project is to investigate the effects of Bruxism in children with special needs and how to potentially reduce the incidence School: Coláiste Choilm County: Cork Teacher: Valerie Ní Chochláin Down

Student(s): Mariah Sheehan,

Fiona Nagle

Title: An investigation into women's role in sport and the factors that influence that role Overview: We wish to raise awareness on this subject of gender inequality in sport and try to change people's attitudes towards women's sport.

School: St Mary's Secondary School - Mallow County: Cork **Teacher:** Rory Coote Student(s): Queensly Erhabor, Erin Murphy, Muirne Clarke

2417

Title: Fiosrúchán ar an éifeacht brú ama ar feidhmíocht scholairí meanscoile i rith scrúdu. Overview: Tá muid ag iarraidh fháil amach an bhfuil éifeacht brú ama ar feidhmíocht scoilairí agus iad ag deanamh scrudaithe síos go dtí hainstíocht ama. School: Coláiste Ailigh

County: Donegal Teacher: Shane Ó Breacáin Student(s): Amy McClintock, Sally Ní Annagáin

2418

Title: Are Irish adolescents being desensitised to the Holocaust? Overview: An investigation on the normalisation of the Holocaust and the events of World War II amongst Irish teenagers. School: Killorglin Community College County: Kerry Teacher: Kevin Foley Student(s): Donal Brennan, Peter Kyselica, Cian Lynch

2419

scoile troma? Overview: Is fadhb mór í na málaí scoile troma sna meánscoileanna. Táimid chun teacht ar réiteach ar an bhfadhb seo ag baint úsáide as iPadeanna. School: Gaelcholáiste Charraig Uí County: Cork Teacher: Pól Ó Drisceoil Student(s): Callum Barrett, Shay Curran, Nicholas O'Mahony

Title: iPad Air: Réiteach ar na málaí

Title: Exploring the Human Energy Field

Overview: Our project aims to demonstrate the existence of the Human Energy Field(HEF) and show the effect that positive/negative attention may have on it. School: Clonkeen College County: Dublin Teacher: Maire Duffy Student(s): Elvis Cooney Jack Georgieff

Title: A Statistical Study of the Effects of Photo Based Social Media on Body Image and if this is Dependent on Gender and Age Overview: In our project we want to establish if using Instagram negatively effects a person's body image and if this is dependent on gender and age.





School: Kinsale Community School County: Cork **Teacher: Shaun Holly** Student(s): Cliodhna Doyle, Freyja Hellebust

Title: Awarness of parasites in cattle and on farm practices to sustain herd health

Overview: We want to study the dangers of parasites in cattle, where farmers get their knowledge from and how they control parasites in their herd.

School: Ardscoil Phadraia County: Longford Teacher: Alice Magan Student(s): Brad Flynn, Killian Reynolds, Seán Farrell

Title: Scafanta Aclaí??? Overview: Tá ár tionscanaimh faoi déagóirí atá níos sine ná 15 i gCarraig Uí Leighin agus cé mhéad aclaíocht a fhaigheann said. School: Gaelcholáiste Charraig Uí

County: Cork Teacher: Pól Ó Drisceoil Student(s): Maeve Murphy, Leah McCarthy, Eimear O Mullane

Title: The Effect of Weather on Mental Health in Ireland Overview: In this project, we aim to investigate the effect of the weather on mental health in Ireland. School: Bandon Grammar School County: Cork Teacher: Carena McCarthy Student(s): Rory Galvin, Kyle Buttimer, Mark Lane

2425

Title: Pain vs. Pets Overview: Our project is an investigation of the effect of the presence of a pet on pain tolerance. School: Loreto Abbey Secondary School County: Dublin Teacher: Heather Merrick Student(s): Eve Brennan, Eva Cullen

2426

Title: Investigating why teenagers are more confident behind a screen Overview: We are investigating why teenagers are more confident using online chat rather than having face to face communication and the reasons that determine that preference School: Bandon Grammar School County: Cork Teacher: Carena McCarthy Student(s): Leah Wood, Clara Kingston, Maya Mukerjee

Title: Does screen time before bed

affect the quality of sleep for Irish teenagers?

Overview: Our project will investigate the effect on sleep when participants voluntarily use an app which determines if they have slept well with or without screens.

School: Lucan Community College County: Dublin

Teacher: Aisling Quirke Student(s): Gabriele Kolesnikovaite, Róisín Tuohy

Title: The Mechanics of pencil holding in Early Childhood Care & Education children (ECCE)

Overview: An investigation into the dexterity of ECCE children with regard to pencil grip and its improvement. School: St. Anne's Secondary School

County: Tipperary Teacher: Jeanne Dowling Student(s): Katie Kinane, Ali Ryan

2429

Title: There's no food like home cooked food! Overview: We want to investigate if there is a link between obesity in young people and the amount of convenience food they eat each week. School: Malahide Community School County: Dublin Teacher: Caroline Tighe Student(s): Tara O'Riordan Walsh, Lara Nolan

2430

Title: A Statistical Analysis into the knowledge and Attitudes towards the migrant crisis

Overview: We aim to find out peoples knowledge to immigration and asylum, if it has changed in the past six months and reasons for this change.

School: Kinsale Community School

County: Cork Teacher: Shaun Holly Student(s): Sean Hil, Leon Buckley, Connor O'Brien

2431

Title: Why are more and more people getting electric gates on their homes. Overview: We want to investigate why more and more people are getting electric gates on their and how it effects they're social lives School: Bandon Grammar School County: Cork Teacher: Carena McCarthy Student(s): Luka Bird, Tom Newcombe

2432

Title: Power Down to Power Up! Overview: Investigating how the use of electronic devices before bed disrupts sleeping patterns by monitoring cognitive development daily through the use of computerised cognitive training apps School: St Patrick's High School County: Armagh Teacher: Aine Jordan Student(s): Edward Gaffney, Cathal Rice, Ryan McKee

Title: Can measuring daily activity level with a pedometer cause people to be more fitness aware? Overview: We investigate if having and using a pedometer can cause people over 60 years to be more

fitness aware. School: Dominican College - Wicklow **County:** Wicklow Teacher: John O'Brien Student(s): Eva Phelan,

Molly Flood 2434

Title: "Céad Míle Fáilte, But is it?" :- Refugees Experiences of Settling in Ireland.

Overview: We will investigate experiences of refugees who have settled here over recent decades, how well they have integrated into and how they contribute to Irish Society. School: Bandon Grammar School County: Cork

Teacher: Carena McCarthy Student(s): Asha Egan McCutcheon, Emily Symington, Aisha Devoy

INTERMEDIATE GROUP

2500

Title: Does the prospect of no alcohol affect the decision for women to

Overview: Our project aims to investigate if the recommendation not to consume alcohol whilst breastfeeding influence women (and their partners) decision not to breastfeed.

School: Ballinamore Community School

County: Leitrim Teacher: Eamon Geoghegan Student(s): Aisling Quinn, Breege McGovern, Ciara McGoldrick

Title: Healthy Hands are Happy Hands-Irish Teenagers Knowledge, Attitude and Practice towards Hand Hygiene Overview: We wish to investigate

the levels of knowledge, attitude and practice among secondary school pupils, in relation to hand hygiene, while at school.

School: St Mary's Secondary School Macroom

County: Cork Teacher: Jennifer Butler Student(s): Kate Bradley, Isobelle O Mahony, Michelle Crowley

Title: Investigation of misconceptions surrounding GMOs and the poor portrayal of scientifically proven benefits

Overview: Using surveys to investigate misconceptions about GMOs among teenagers and adults, but also showing how scientifically proven benefits are poorly portrayed to the public.

School: Marian College County: Dublin Teacher: Alison Bird Student(s): Dorian Dederko, Ewan Jarvis, Dean Gleeson

2503

Title: Sexism in the Classroom Overview: An investigation into the perception and performance of gender roles and how this differs in co-educational and single sex schools. School: Loreto High School County: Dublin Teacher: Angela Benson Student(s): Órlaith Barry, Aislinn Carty

2504

Title: Dyscalulia: An investigation into the effects and awareness of it within the Irish Education system. Overview: We plan to investigate the effects of dyscalculia and the resources available within the education system to aid those affected by the learning disorder. School: Coláiste lósaef County: Limerick Teacher: Brian Clarke Student(s): Meadhbh O' Hara, Leia Hayes, Lauren O' Donoghue

2505

Title: Drive to Success, Take the test Overview: Our BT project is about which age group knows their theory of the road and to find the best ways to improve road safety awareness. School: St Mary's Secondary School - Macroom County: Cork Teacher: Jennifer Butler Student(s): Clodagh O'Sullivan,

Eimear Murphy, Rachel McCarthy

2506

Title: Is the Internet becoming the only platform for media and advertising? Overview: We will investigate how the popularization of the internet and its platforms is impacting traditional media and if traditional media will become surplus to requirement. School: Coláiste lósaef County: Limerick Teacher: Ann Hickey Student(s): Colm Clery, Gary O Donnell











Social & Behavioural Sciences

2507

Title: to investigate if the oldest child has the highest bmi and is the most

Overview: We are going to investigate if the eldest child in the family has the highest Body Mass Index and is the most obese child according to their ranking in the family.

School: Borrisokane Community

College

County: Tipperary Teacher: Rachel Ahern Student(s): Grainne Molloy,

Maeve Hogan

2508

Title: Reducing the flow of H20, is the way 2g0

Overview: The purpose of our project is to research whether the newly introduced water charges have changed peoples' behaviour and attitude towards their domestic water usage

School: St Mary's Secondary School

- Macroom County: Cork

Teacher: Jennifer Butler Student(s): Eimhin O Mahony,

Riona O' Connor, Kathleen McSweeney

2509

Title: To investigate whether academic target setting will improve the academic results and attitudes of second year students to education. Overview: We will investigate the effect of target setting on the attitudes of second year students towards schoolwork and the impact this has on their results. School: Moate Community School County: Westmeath Teacher: Mairead Cusack Student(s): Mairéad McCormack, Nicole McKenna

Title: Is Modern Technology Affecting our Sleep and Making us Fat? Overview: The aims of our project are to determine if modern technology such as laptops, phones and tablets affect the sleeping and eating habits of teenagers.

School: Coláiste Choilm County: Cork Teacher: Karina I vne Student(s): Rachel Moore, Aisling Crowley, Rosie Walsh

2511

with theirs.

Title: Take Care! Be internationally road aware. Overview: Our project is about tourists coming to Ireland and not having sufficient information about the rules of our road in comparisons

School: Colaiste Treasa County: Cork

Teacher: Derry O'Donovan Student(s): Mark Lynes, Aisha McAuliffe

2512

Title: A statistical analysis of Irish people's attitudes towards Transgender people Overview: We plan on investigating what Irish people know and think about the Transgender community and to differentiate the attitudes of different age groups.

School: Coláiste lósaef County: Limerick Teacher: Ann Hickey Student(s): Aaron Cronin, Jerry Casey

2513

Title: Artism- Art for Autistic Kids Overview: We decided to make an art book pointed towards autistic children. This helps children to express themselves and release stress through art therapy.

School: St Joseph's College **County:** Tipperary Teacher: Mary Gorey Student(s): Gillian O'Meara, Niamh O'Brien, Megan Tierney

Title: Factors that influence peoples opinion on the refugees. Overview: An investigation into what the main factors are that influence peoples opinions on the refugees and them seeking refuge in Ireland. School: Bush Post Primary School County: Louth

Teacher: Gary Galvin Student(s): Clara Lynch, Tara Duffy, Ciara Gregory

Title: The effects of the black card on Gaelic Football Overview: We are reviewing the

implementation of the black card in Gaelic football and its effects on the game.

School: Coláiste lósaef County: Limerick Teacher: Brian Clarke Student(s): Tim Mc Sweenev. Liam English, Andrew Finn

2516

Title: The Big T! -Exploring the effect of prenatal exposure to testosterone on the behaviour and interests of teenage girls.

Overview: We aim to assess the impact of prenatal exposure to testosterone (measured by using the digit ratio) on the interests and behaviour of teenage girls. School: Dominican College -Drumcondra

County: Dublin Teacher: Catherine Corry Student(s): Kate O'Hara, Aisling Smith, Ellen Stacey

2517

Title: The emotional effects of the withdrawal of social media from adolescents.

Overview: Our project aims to withdraw social media from the lives of adolescents and examine any emotional changes over a two week

School: Coláiste Choilm County: Cork Teacher: Lorraine Marron Student(s): Shaunagh McCarthy, Brian McCarthy, Grainne Mulcahy

Title: Hand Hygiene & Absenteeism Overview: We will investigate whether better hand hygiene in schools, will lead to improved attendance.

School: Schull Community College County: Cork Teacher: Larissa Kelly Student(s): Culann McCarthy. Andrew Cahier

2519

Title: Tomhais de dhiallais ar fhreagair eiticúil idir dhaoine le huathachas agus gan uathachas Overview: Chuspóir ár dtionscnamh ná chun tusicint a bhaint amach sa mhoráltacht de dhaoine le uathachas i gcomparáid le dhaoine gan uathachas, tríd úsáid díleamaí eiticeacha. School: Coláiste Pobal Osraí - Kilkenny County: Kilkenny Teacher: Lughaidh Ó Néill Student(s): Maeve Shaw, Éabha Slovan

Title: Following instructions, do girls and boys do it differently? Overview: Our project aims to identify the differences between genders in their ability to follow instructions, and the way in which they follow instructions best. School: Coláiste Choilm County: Cork Teacher: Karina Lyne Student(s): Ciara Ní Icí, Anna Duggan

2521

Title: Animal Communication and How We can Benefit From It Overview: This project is to teach/ show people that animals can communicate with humans, we only have to listen. School: Comprehensive School - Tarbert County: Kerry Teacher: Eimear Nolan Student(s): Alannah Brent, Katie Thornton

2522

Title: Dearcadh ar tromaíocht (Perception of Bullying) Overview: We are investigating what student and teachers perceive as bullving, we also want to find out how to decrease bullying. School: Pobalscoil Ghaoth Dobhair County: Donegal Teacher: Siobhan Ni Shearcaigh Student(s): Odhran Mac Roibeaird. Natasha Nic Giolla Easbuig, Ciara DeBarra

2523

Title: The Impact of a Social Learning Network on Teaching and Learning of Science in a Rural Secondary School Overview: We wish to investigate the impact of a social learning network on teaching and learning of science in a rural secondary school. School: Coláiste lósaef County: Limerick Teacher: Sharon Magner Student(s): Valerie Meany, Anna O'Riordan, Caitlyn O'Hanlon

Title: The impact of same sex marriage on the economy on both sides of the border in ireland Overview: To investigate what impact either positive or negative same sex marriage may have (if any) on the economy in both North and South of the Irish border. School: Bush Post Primary School County: Louth Teacher: Gary Galvin Student(s): Evan Cronin, Ryan Duffy

Title: "Hope For A Heart" Homeless Crisis Ireland Overview: This is the investigation and the attempt of tackling the family homeless crisis in Ireland. School: Patrician High School -Carrickmacross County: Monaghan Teacher: John O'Rourke Student(s): Aaron Quigley, James Carolan

Title: To investigate the damage caused by blue light on phones and how going on your phone at night affects your sleep quality Overview: We intend to discover whether or not blue light from phones affects the quality of your sleep. We'll use an app to detect sleep quality. **School:** Blackwater Community School

County: Waterford Teacher: Brigid Barrett

Student(s): Jane Murphy, Aoife Dowd

Title: Deductive Reasoning: Can video





games make you Sherlock Holmes? Overview: Our project aims to measure the effect of Video and Computer Games on a student's Critical Thinking and Problem Solving ability's, specifically deductive reasoning.

School: Patrician High School -Carrickmacross County: Monaghan Teacher: John O'Rourke Student(s): Conor Greene, Paul Mc Entegart, Colm Bermingham

2528

Title: Selfies and Self-Esteem...What is the Relationship? Overview: This project aims to investigate the benefits of posting selfies on Social Media Platforms amongst teenagers from Transition Year and 5th Year in Southern Ireland. **School:** Blackwater Community School County: Waterford Teacher: Brigid Barrett Student(s): Olivia Lennox, Ellie Anne Mason

2529

Title: Do you dislike it? Overview: Our project is aimed at teenager's attitudes towards the new dislike button that is being introduced to Facebook. School: Coláiste Choilm County: Cork Teacher: Lorraine Marron Student(s): Chloe O'Sullivan, Cliona Coughlan, Bronagh Daly

Title: Is Ireland Still the Land of "Céad míle fáilte"? - A Statistical Analysis. Overview: Our project is to investigate if the attitudes of Irish people towards their own homeless has changed due to racial prejudice towards incoming Syrian refugees. **School:** Blackwater Community School County: Waterford Teacher: Brigid Barrett Student(s): Gavin Moloney, Killian Bukulin, Kieran English

2531

Title: "Breaking the mould" Overview: Our project aims to identify whether pre-adolescents and young children occupational choices are determined or influenced by stereotypes of gender. School: Sacred Heart Secondary School County: Cork Teacher: Julie Hanlon

2532

Title: Na nósanna ag gnáth siopadóirí I gcomparáid le siopadóirí ar líne Overview: Tá ár tionscadal bunaithe

Student(s): Orla Fahey, Sicilia Smith

ar an difríocht idir caighdeán bia a ceannaíon gnáth siopadóirí I gcomparáid le siopadóirí a dhéanann a siopadóireacht ar-líne

School: Coláiste Pobal Osraí - Kilkenny

County: Kilkenny

Teacher: Lughaidh Ó Néill Student(s): Thomas Mcgrath, Seán O Laoghaire, Tadhg De Buitléir

2533

Title: Deception: Can Our Senses Be Manipulated? Overview: Our project is an investigation to see if one sense can be manipulated by another (e.g. does sight override the other senses) School: Sutton Park School County: Dublin Teacher: Catherine Tattersall Student(s): Oisin McCay, Jonathan Butler

2534

Title: Decision-making in sports players: Can we test it? Overview: To create an easy to use test that can be used to measure decision-making ability of players in team sports. **School:** Blackwater Community School County: Waterford Teacher: Brigid Barrett Student(s): Karen Looby, Naomi Leahy, Marie Willaims

2535

Title: A comparitive study of computer training requirements of senior citizens from carlow kilkenny with senor citizens from Lativia, Poland and Romania Overview: This is a comparative study examining the computer training requirements of senior citizens in Carlow / Kilkenny with respondents from Latvia, Poland and Romania School: Meánscoil na mBráithre Criostaí County: Kilkenny Teacher: Lisa Cosgrove

Student(s): Ronan McMorrow,

Dean Keily, Oskar Svalbe

2536

Title: Aindiúlaigh Aipeanna - Conas? Cén Fáth? agus Réiteach Overview: Táimid ag iarraidh féachaint an féidir le daoine bheith tugtha do cluichí/Aipeanna ar an fón mar atá daoine tugtha go alcól srl. School: Gaelcholáiste Reachrann County: Dublin Teacher: feargal mairtin Student(s): Ellen Ní Aoláin, Gemma Dáibhís, Aoife Nic Cába

Title: Should the GAA go professional? Overview: The general pulic, sports players and county boards opinions on GAA going to a professional sport or

twitter.com/BTYSTE

staying amatuer. School: Coláiste lósaef County: Limerick Teacher: Sharon Magner Student(s): Kelly Walsh, Maire O'Leary, Shannen Murphy

Title: Study the right way! Overview: We are using the circadian rhythm to determine the apt time for studying, and how to prepare to get the most out of studying. School: F.C.J.Secondary School County: Wexford **Teacher:** Damien Cloney Student(s): Ilsa Flynn, Roisin O Muiri, Bridget Gainford

2539

Title: Is your personality written in the stars? Overview: Our project aims to see if your star sign has an impact on your personality. **School:** Roscommon Community College County: Roscommon Teacher: Joanne Shea Student(s): Casey Kelly,

2540

Simon Leonard

Overview: We will be looking at the bonding effects of fear and the psychology behind why we create fear for ourselves ie haunted houses. **School:** Sacred Heart Secondary School County: Cork

Title: The Bonding Effects Of Fear

Teacher: Elaine Galvin Student(s): Mai Chan Alannadh FitzGerald, Casandra O'Sullivan

2541

Title: Forget-Me-Not: Does Age Affect Short-Term Memory? Overview: An investigation into the effects of age on a person's short term memory and to see if a person's shortterm memory "peaks" at any age.
School: Laurel Hill Secondary School

County: Limerick Teacher: Andrea Enright Student(s): Dearbhla Egan, Dara McDermott, Aoife McAuliffe

Title: Is the potential for dishonesty affected or determined by one's gender? Overview: We plan to build a lie detector and study a person lying and compare boys to girls to see how results differ School: St Wolstan's Community School County: Kildare Teacher: Louise Ward Student(s): Linda Toomey,

2543

a chuireann le múnlú inchinne. Overview: Déanfaimid fiosrú ar na héifeachtaí a bhíonn ag a)An Iarmhairt Placebo agus b)Teachtaireachtaí fothairseachúil ar dhaoine ag braith ar inscne, aois, IQ srl. School: Coláiste losagáin County: Dublin Teacher: Orla de Bhailís Student(s): Iseult Ni Cheallachain,

Maeve Nic Dhomhnaill, Chloé Ní Rodin

Title: Imscrúdú ar na tréithe i ndaoine

Title: A county by county happiness index for Irish teens Overview: We will develop a teenager happiness index for Ireland. We will then rank each county according to our formula, based on the international youth index. School: Millstreet Community School County: Cork Teacher: Shane Guerin Student(s): Jamie O'Connor, Lauryn Kiely, Dervla Murphy

2545

Title: Are Diesel Cars Affecting Our Health? Overview: We intend to find out if there is a correlation between the number of diesel cars driven in Ireland and the incidence of respiratory illnesses.

School: Our Lady's Bower County: Westmeath Teacher: Ethna Benson Student(s): Emma Clarke, Sarah O'Rourke, Natasha Jocher

Title: Diaibéiteas agus Déagóirí: An bhfuil an dainséar sna míthuiscintí nó san easpa eolais? Overview: Tabharfaimid ceistneoir do dhaltaí meánscoile faoi diaibéiteas. Tá súil againn freagra a fháil ar an gceist seo le hanailís staitistiúil. School: Coláiste Iosagáin County: Dublin Teacher: Orla de Bhailís

Student(s): Clare Ní Dhonnchadha, Niamh Ní Mhaoldomhnaigh, Annie Nic Gabhann

2547

Title: Investigating if pregnancy creates memory issues in expectant

Overview: We will study a group of sixty pregnant women and twenty non-pregnant women and see if their memory abilities differ. School: St Marys Secondary School

County: Dublin Teacher: Patricia Duffy Student(s): Beri Njolai, Lauren Barker, Whitney Lawal









Megan Byrne



Social & Behavioural Sciences

2548

Title: The Ro@d To COde Overview: Why are Irelands teenagers not coding? Is the Irish education system outdated? A study on the importance of technology and coding classes worldwide versus Ireland. School: Scoil Mhuire agus Ide County: Limerick **Teacher:** Rebecca Phillips Student(s): Lauren Haves. Sophie Gilbourne, Katie Sparling

2549

Title: Internet Killed the TV Star Overview: A look at the uncertan future of broadcast television, and the growing popularity of streaming and catch-up services.

School: Coláiste Na Mí County: Meath Teacher: Angela Woolley Student(s): Sean Reidy, Josh Roberts, Kennedy Odin

2550

Title: The effect of music on mathematical ability at post-primary level in Ireland

Overview: The aim of our project is to observe whether or not the playing of a musical instrument by a student affects their grades in mathematics. School: Laurel Hill Secondary School FCJ

County: Limerick Teacher: Andrea Enright Student(s): Aileen Dooley, Ornait O'Connell

2551

Title: Investigation into Teenage **Betting and School Subject Strengths** and Weaknesses

Overview: As part of our project, we wish to investigate teenage betting and examine whether there is a connection between teenage betting and school subject strength. School: St. Fintan's High School

County: Dublin **Teacher: Cathy Reilly** Student(s): Cathal Menton, Daniel Callen, Alex Macari-Kelly

2552

Title: Safety on farms: educating the youth of Ireland.

Overview: To create awareness and knowledge amongst children and teenagers of the safetey hazards on farms in Ireland by creating a farm safety gaming application.

School: John The Baptist Community

School County: Limerick Teacher: Michelle Buckley Student(s): Stephen O'Brien, Páraic Wixted, Thomas Kennedy

Title: Why do some Irish towns have high immigrant populations?

Overview: A geographical and statistical analysis of Irish towns and villages containing high percentages of Polish, Lithuanian and Latvian immigrants.

School: Millstreet Community School County: Cork

Teacher: Shane Guerin Student(s): James Cronin, Shane Hickey, Padraig Moynihan

Title: Refugees or economic migrants? Irelands attitude to the crisis in the mediterranean Overview: Does Ireland see the crisis in the Mediterranean as a humanitarian disaster, or has the recession hardened our attitudes to the plight of others? School: Coláiste Phádraig - Lucan County: Dublin Teacher: Jacqueline Farrell

Ross Quinn

Title: Mental Health-Knowledge or Awareness?

Student(s): Mark Lowry,

Overview: We will compile a survey among thirteen to eighteen year olds, assessing their ability to acknowledge the symptoms of anxiety in themselves and others.

School: Boherbue Comprehensive School

County: Cork Teacher: Joanne Hamilton Student(s): Aine Breen, Tara Collins, James Dennehy

Title: What Type Of Early Education Or Childcare Will Allow Your Child To Have The Best Start In Life? Overview: To identify what education and childcare service young children can access and which one would allow each child to achieve the best start in life.

School: Our Ladys Secondary School **County: Tipperary** Teacher: Rachel Kelly

Student(s): Amy Reynolds, Aine Moloney

Title: The Effects of Moving Country on a Teenager's Feeling of Identity and Belonging

Overview: We hope to discover the effects moving may have on the teenage emigrant academically, socially and emotionally. We hope our findings will differentiate between males/females.

School: Loreto College - Foxrock County: Dublin

Teacher: Carol Byrne Student(s): Ruth Crowe, Elisa de Patoul, Megan O'Neill

2558

Title: The effect that mobile phones have on young peoples literacy Overview: The aim of this project is to investigate the effect that the use of mobile phones have on young peoples literacy.

School: Colaiste Ide and Iosef County: Limerick Teacher: Joannah Kennedy

Student(s): Laura Murphy. Anna O'Connell, Laura Woulfe

Title: A study using statistical methods on the benefits and calming effects of Mindfulness within a school setting

Overview: A study on the impact of Mindfulness as a powerful tool in bringing calm, peace and quiet into our busy lives

School: Coláiste Pobal Bheanntrai

County: Cork

Teacher: James McSweeney Student(s): Caoimhe Harrington, Liam Coakley

2560

Title: The "Ag Flag" - A strategy to address Farm Safety. **Overview:** Modules informing primary school children and their parents of the dangers on farms. Upon completion of the modules the schools are awarded an "Ag Flag". School: Bandon Grammar School County: Cork Teacher: Maire Flynn Student(s): Chiara Rijks-Weidner,

2561

Title: To understand how and why teenagers in Ireland perceive themselves the way they do. Overview: With this project we will conduct a survey to try and understand some of the factors that effect the self-perception of teenagers in Ireland. School: Eureka Secondary School County: Meath Teacher: Mary Byrne Student(s): Lauren Cullen,

Robynne Shorten, Emma Stokes

2562

Mary O'Neill

Title: To investigate the attention span and learning ability of a specially designed cartoon for deaf children compared to the average children's cartoon.

Overview: To investigate why children's cartoons are actively bad for children with newly implanted cochlear implants and watch and compare with a newly designed cartoon.

School: Loreto College - Foxrock County: Dublin Teacher: Karen Young

Student(s): Karen Davis,

Aoife Colleran, Frances Bourke

2563

Title: Is the stigma worse than the

Overview: Our project aims to investigate if the stigma surrounding mental illnesses is worse than the actual illness for those who are battling a mental illness School: Dominican College -

Drumcondra County: Dublin

Teacher: Lorraine McCool Student(s): Ailbhe Conway, Ciara Chapman, Megan Blake

2564

Title: Ignorance is sweet. Overview: We want to investigate whether the foods we have been led to believe are healthy, have led to an increase in type two diabetes.

School: St Angela's County: Waterford **Teacher:** Grainne Enright Student(s): Iona Nevin Maguire. Hannah Jacob

2565

Title: Quality VS Quantity: An Investigation into the Cost and Quality Variation of Childcare in Cork Overview: To investigate variations of cost and quality within childcare facilities available in Cork. School: Bandon Grammar School County: Cork Teacher: Maire Flynn Student(s): Abby Morales,

2566

Katy O'Connor

Title: A Statistical Analysis to Investigate the Attitudes of Irish People Towards Refugees. Overview: Our project is to discover the attitude Irish people have towards the Syrian refugee crisis as well as Irelands role in relation to the refugees.

School: Coláiste Choilm County: Cork

Teacher: Lorraine Marron Student(s): Maria McCarthy, Eva O'Keeffe, Cliona Barry

2567

Title: The New Junior Certificate Science Curriculum - Students doing it for themselves Overview: Our project is about the Junior Certificate Science Curriculum, how resources aren't available to teachers and how we will make it more interesting for students School: Bandon Grammar School County: Cork Teacher: Maire Flynn Student(s): Clodagh Young, **Amy Buttimer**





2568

Title: Assessing and improving Mental Health literacy levels of the pupils within our school

Overview: Investigating the mental health literacy levels of pupils in a mixed-gender, rural school. The aim is for pupils to become more educated about the topic.

School: Bandon Grammar School

County: Cork Teacher: Maire Flynn

Student(s): Emily Hamilton-Foott,

Julie Giblin Perrott

2569

Title: A Programme to Prevent Neuromuscular Injury in Musicians. Overview: We aim to analyse the neuromuscular injuries occurring in musicians and develop a preventive strategy to reduce the risk of these iniuries later in life. School: Loreto Secondary School -Kilkenny

County: Kilkenny Teacher: Brendan Williams

Student(s): Ruth Delahunty, Tara Brett, Laoise Murray

2570

Title: Láidreacht i nGreidhm an Déagóra agus Cumas Acadúla agus Lúthcleasaíochta (Investigation into the link between grip strength and both athletic and academic ability Overview: In 2013 we began collecting data for this project.We aim to identify the links between grip strength and both academic and athletic ability in adolescents School: Gaelcholáiste Chiarraí County: Kerry Teacher: Róisín Ní Leidhin Student(s): Jeaic Mac Ginneá, Seán Ó Gealbháin,

2571

Title: Dream Team Overview: We are investigating factors that affect team efficiency. School: St Wolstan's Community School County: Kildare Teacher: Louise Ward Student(s): Shamira Bagnall Hare,

Pádraig Mac Ionrachtaigh

Jade Wolfe 2572

Title: Gambling: A Silent Epidemic Overview: To investigate the general attitudes towards gambling in adults living in the South-East region of Ireland - a cross-sectional study. School: St Angela's County: Waterford Teacher: Megan McCarthy Student(s): Karen Chandrakanth, Gopika Suresh, Kate Lawlor

2573

Title: Na Éifeachtaí de "likes" ar Facebook ar Déagóirí. Overview: chun a fháil amach na éifeachtaí de "likes" ar facebook ar déagóirí agus an fáth a caithfidh said a fháil na likes.

School: Ennis Community College, Gaelcholaíste an Chlaír

County: Clare

Teacher: Martina Mc Namara Student(s): Treasa Ní Chatháin,

Grace Mc Mahon

2574

Title: The reliability of a witness including the retention of information by witnesses

Overview: We plan to discover how reliable witnesses are. What factors help witnesses to remember? What is lost over time? What type of information is remembered? School: Eureka Secondary School

County: Meath Teacher: Mary Byrne Student(s): Clare Dolan. Niamh Yore, Una Carolan

2575

Title: A Study: Comparison of the typical Spanish mother to our Irish 'Mammy'

Overview: We are all familiar with the idea of the 'Irish Mammy' and in this project we want to see if this stereotype exists in Spain.

School: Bandon Grammar School County: Cork

Teacher: Maire Flynn Student(s): Camila Gras, Rachel Atkins

Title: Keep your child sharp(#) avoid those trebles!!!

Overview: We wish to investigate how music influences and forms an important component of childhood development through a series of examinations and extensive research. School: Loreto Secondary School -Kilkenny

County: Kilkenny Teacher: Laura Heffernan Student(s): Sarah Cudmore, Orlaith Moore, Leah Raggett

Title: Does the use of electronic devices before sleep effect secondary school student's cognitive ability the next day?

Overview: Does the use of electronic devices before sleep effect secondary school student's ability to perform the stroop test and digit span test the next morning?

School: St Mary's Secondary School

County: Dublin Teacher: Orla O Keeffe

Student(s): Zuzanna Bartkowska,

twitter.com/BTYSTE

Nicole Ledden

2578

Title: Is autocorrect and spellcheck affecting newer generations capability

Overview: We are trying to find out if older generations are better at spelling than younger generations due to younger generations having autocorrect and spellcheck.

School: Dominican College Drumcondra

County: Dublin Teacher: Glenn Webster Student(s): Aoife Griffin,

Bronach Monaghan, Sophie Hibbits

Title: Success, at what cost? Overview: Over-training puts great psychological stress on an individual. We believe there is a significant link between over-training and mental health that has gone unnoticed. **School:** Glanmire Community College County: Cork Teacher: Dan O'Sullivan Student(s): Shane Crowe, Jade Lagrue

2580

Title: Creating FRUIT-ful Futures Overview: Our project aims to investigate how pre-school children's food preferences can be positively influenced through the introduction of a reward based game. School: Schull Community College County: Cork Teacher: Larissa Kelly Student(s): Tarah Fleming,

Hollie Collins, Aoife Nash

2581

Title: An Investigation Into The Different Impact Mixed Schools And Single-Sex Schools Have On Student's Personal And Academic Development Overview: We aim to investigate differences in academic development and to compare interaction with the opposite sex of students in different school types through surveys. School: Kinsale Community School County: Cork Teacher: Shaun Holly Student(s): Katie Daly, Áine Cummins, Ellen Kelleher

Title: Study on the psychophysical impact of different genres of music in an exercise program Overview: We plan to discover if the genre of music you are listening to while exercising will effect your performance. School: Jesus & Mary Secondary School County: Mayo Teacher: Niamh Breheny

Student(s): Aisling Deegan Degui,

2583

Title: Do People's Attitudes to Refugees Vary With Age? Overview: My project aims to find out what people think about refugees and if people are more open to refugees depending on age. School: Comeragh College **County:** Tipperary Teacher: Sonia Crimmins Student(s): Ethan Devereau, Molly Coady, Kyah O'Toole

Title: Life After The All Clear Overview: Cancer: warning signs and the fight. Maybe there is more. Our project focuses on life after the allclear, which can be just as destructive. School: Presentation Secondary School - Thurles County: Tipperary Teacher: Olivia O'Brien Student(s): Rebecca Dooley, Aoife Murphy, Muireann Lloyd

2585

Title: Benefits of Equine Therapy on Autistic Children Overview: Our project is based on the bonds created through horses with autistic children and how the children can develop physically, mentally and socially from it. School: St. Joseph's Secondary School

County: Meath Teacher: Eileen Nertney Student(s): Laura Casserly, Abbie Lyons, Kerrie Doonan

2586

Title: An analysis of words used in articles about the refugee crisis. Overview: A look into what words are being written in association with Syrian refugees in newspapers. Are we being subconsciously being made think a certain way? School: St. Leo's College County: Carlow Teacher: Christopher Davey Student(s): Katie Doyle Byrne, Christiana Diyaolu

2587

Title: Does your brain work more efficiently when multitasking? Overview: My project aims to find out if multitasking rises the attention level and even gives the brain time to relax between challenging tasks. School: Ardscoil na mBráithre **County: Tipperary Teacher:** Dolores Powell Student(s): Niall Hoctor, Cathal Mckeown

2588

Title: Bigorexia: An investigation into male gym-goers self-perception Overview: Our project aims to investigate if male gym goers in Ireland have muscle dysmorphia and









Emma Loftus, Niamh Gill



Social & Behavioural Sciences

how this links to supplement abuse and further health issues. School: John The Baptist Community School County: Limerick Teacher: Michelle Buckley Student(s): Seán McCarthy, Peter O'Regan

2589

alcól faoin aois molta Overview: Imscrúdú a dhéanamh ar na cúiseanna a ólann déagóirí

Title: Cén fáth go n-ólann déagóirí

faoin aois agus na míbhuntáistí leis. Comparáid idir ól faoin aois i Meiriceá agus in Éirinn.

School: Gaelcholáiste Luimnigh County: Limerick Teacher: Clodagh Ní Chróinín Student(s): Jade Liddy, **Emmet Browne**

2590

Title: Stress of Sports Overview: Have you ever thought about how much stress sporty teenagers are under? Pressure to win the match while also having to achieve good grades! School: Meánscoil na mBráithre Criostaí County: Kilkenny Teacher: Caroline Mercer Student(s): Daniel Blackmore,

2591

James Bourke

Title: If breast is best, why isn't it the norm? Overview: We are investigating the reasons why breastfeeding numbers in Ireland are so low, and trying to promote breastfeeding to mothers and the general public. School: Davitt College County: Mayo Teacher: Fiona O' Connor Student(s): Maeve Walsh. Clodagh Hegarty, Aoife Parsons

2592

Title: The optimum physical Activity for better grades Overview: To measure the correlation between academic achievement and sporting achievement amongst senior cycle students in Ireland. School: St. Angela's College County: Cork Teacher: Gillian Geraghty Student(s): Molly Ryan, Leah Butler, Emma Kearney

2593

Title: OCD: How it affects teenage lives, how OCD is dealt with in Ireland and how we can help. Overview: To find out how OCD affects the lives of teenagers, to improve awareness and find out ways we could help improve lives of sufferers.

School: Coláiste Mhuire County: Mayo Teacher: Louise Ni Bhaoill Student(s): Julia Korzeniowska, Sarah Mc Donnell

Title: Investigating the impact on cognitive functioning before and after low intensity physical activity for teenage girls Overview: To test the cognitive functioning of females aged between

12 and 18 before and after 20 minutes of low intensity exercise. School: Loreto Secondary School -

Wexford County: Wexford Teacher: Pauline Finnerty Student(s): Sarah Shortle, Caoimhe Twomey, Clare O'Grady

Title: Road Rage at the School Gates Overview: Our project aims to investigate the problem of road rage involving parents/guardians transporting their children to and from school. School: Coláiste Ailigh County: Donegal Teacher: Micheál Ó Giobúin Student(s): Jenni Ní Chnaimhsí, Laura Pasoma,

Jamie Lee Nic Fhiontaí

Title: A comparative study of the attitudes towards religion among different generations. Overview: Our project aims to find out people's attitudes towards religion and if/how these attitudes changes among the generational gap. School: Scoil Mhuire gan Smál -Blarney County: Cork Teacher: Elaine Keane Student(s): Liam Ring, Jack Ring, lain Foley

Title: iDalta - an iad taibléadaí an slí is fearr le foghlaim? Overview: An bhfuil tionchar dearfach no diúltach ag iPadanna ar thorthaí scoile daltaí meanscoile? Is ceist an-conspóideach é seo. Tá muid ag iarraidh an cheist sin a fhreagairt. School: Gaelcholáiste Reachrann County: Dublin Teacher: feargal mairtin Student(s): Karl Ó Biatháin, Kevin Ó hAilpín

2599

Title: beards-lazy or stylish Overview: the project we are doing is to do with men growing beards and find out what people really think about beards. School: C.B.S. Roscommon

County: Roscommon

Teacher: Fiona Leavy Student(s): Lennox Musa, James Costello

2600

Title: Penniless: A study to see whether copper coins are redundant in today's society Overview: A study to see if 1c, 2c and 5c coins should be eliminated from the Irish/European economy for economic and social reasons. School: Sandford Park School Ltd County: Dublin Teacher: Keith McBain Student(s): Cathal McCabe. Jacob Evans

2601

Title: Have your say? Overview: We are investigating the change in answers due to social pressure between our written and oral questionnaires from 100 people ranging in ages and genders. School: Gonzaga College County: Dublin Teacher: Joe O Briain Student(s): Eoghan Quinn,

Charlie Goulding, Thomas Moore

Title: Imscrúdú a dhéanamh ar an dearcadh atá ag déagóirí i dtreo Overview: The purpose of this project is to investigate young people's views and awareness of violence and abusive behaviour towards women. School: Coláiste Ailigh County: Donegal Teacher: Micheál Ó Giobúin Student(s): Aisling Ni Fhionnáin, Laramie Ní Chiardha,

Cecilia Ní Cholgain

Overview: We hope to research the negative attitudes of people in Ireland towards people struggling with Mental Illness and hope to change these negative attitudes. School: Dominican College Drumcondra County: Dublin Teacher: Lorraine McCool Student(s): Aisling Garland, Olivia Cronin

Title: Changing the negative stigma

surrounding mental illness in Ireland

SENIOR GROUP

2700

Title: Cá bhfuil tú anois? - Where Are You Now? Overview: Our hypothesis is that our area is experiencing rural decline, supported by an observational study over 24 year period of the movement of school leavers. School: Pobalscoil Ghaoth Dobhair

County: Donegal

Teacher: Siobhan Ni Shearcaigh Student(s): Aoife Jackson, Niamh Ní Shearcaigh

Title: An Analysis of Our Ability to Detect Lies and How to Improve this

Overview: Are we a nation of Liars? Can we detect Lies? Is your neighbour, best friend a liar? These are the questions we intend to answer. School: Pobalscoil na Tríonóide County: Cork Teacher: Crona McCarthy Student(s): Tara Murphy, Kate Keane, Clodagh Tyrrell

Title: Beware of the Disney Effect!!! Overview: An investigative research project on young children's perceptions of body image based on stereotypical characters created by Walt Disney. School: Balbriggan Community College County: Dublin Teacher: Gemma Buicke Student(s): Sophie Thiesen, Megan Carson

Title: A statistical investigation into the factors in which influence refugee admittance to EU countries Overview: Using opinion surveys and statistical quantitative analysis to test the impact of various factors on the number of refugees EU countries are willing to accept School: Desmond College - Limerick County: Limerick Teacher: Aoife Culhane Student(s): Niamh Liston, Hannah Barrett

2704

Title: Effects of exercise on concentration: A study of teenagers Overview: we wish to investigate whether or not your concentration is better ten minutes after exercising for a period of thirty minutes School: Avondale Community College County: Wicklow Teacher: Aoife Sullivan Student(s): Orla Conroy, Louise Kingston

Title: Is knowledge obsolete? Overview: We will be determining if the concept of "personal knowledge" is an antiquated notion that is irrelevant in the Ireland of the 21st century.
School: St Nathy's College County: Roscommon Teacher: Oliver Brady

Student(s): Maggie Regan, Tara Phillips





2706

Title: Is the Credit Union for you? Overview: We aim to find out the attitude of young people towards Credit Unions and why they know so little about the services that they provide.

School: Carrick-On-Shannon Community School **County:** Leitrim Teacher: Jackie Walsh Student(s): Jordyn Mulvey, Aoibha Gardiner

2707

Title: The Feasibility and Popularity of a United Europe

Overview: An investigation into the viability and aggregate popularity of a federal amalgamation of European states, commonly known as a United Europe

School: Garbally College County: Galway **Teacher: Cathal Reilly** Student(s): David Coffey, Mark Burnell

2708

Title: Language - The Next Generation

Overview: A study to determine when the "idiom generation" were replaced by the "text-speak and emoticon generation'

School: St. Mary's College County: Galway Teacher: Anthony Carey Student(s): Mark Gilligan, Shane Hastings, Jeroen O'Flaherty

2709

Title: To investigate the correlation between second language study, higher academic performance and problem solving skills. Overview: This project will be investigating how the study of a second language affects academic performance and problem solving skills, on an assigned sample. School: St Marys Secondary School County: Dublin Teacher: Regina Hart Student(s): Alina Lucia. Ciobanu Luiza, Adelaida Istoc

2710

Title: A Statistical Analysis of the Public and Prison Populations' Opinion on the Irish Prison System Re-incorporating Offenders into the Workforce

Overview: We aim to statistically analyse the public and prison populations' opinion to our prison system and re-incorporating offenders into the workplace. School: Coláiste Choilm County: Cork

Teacher: Julie Gleeson Student(s): Pádraig McAuliffe, Adam Purcell, Eoin McCarthy

2711

Title: Crisis: An analytical study into the juxtaposition of societal perception in comparison to Syrian migrant reality.

Overview: A comparative study of public perceptions of Syrian migrants, contrasted by their reality by use of surveys, the information will then be juxtaposed by fact.

School: Seamount College County: Galway Teacher: Joanne Martin Student(s): Saoirse Hughes, Mairead Flanagan, Jack Linnane

Title: Ink Vs. Clicking The Link Overview: To compare traditionalstyle learning methods with technology-based learning methods. To investigate which gender and year group engages more with/is more interested in technology-based

School: Eureka Secondary School County: Meath Teacher: David Hurley Student(s): Beverly Genockey, Caoimhe Boyce, Danielle Farrelly

Title: To examine the Cyber Security awareness of different age groups and to educate the most vulnerable group about online safety. Overview: To analyse security measures taken by different age groups by conducting surveys and

develop educational aids to help people become more secure online. School: Moyne Community School County: Longford Teacher: Louise Killian

Student(s): Gabriel Drabik, Gary Sheridan

2714 Title: Farm safety - obvious yet

dangerous? Overview: We urge all farmers to think safety first and make safety a priority on their farms. We investigate common safety pitfalls on farms. School: Salesian Secondary College, Pallaskenry County: Limerick Teacher: John O'Flynn Student(s): Daniel Mc Sweeney, Jamie Fitzgerald

Title: Solve the Unsolvable Overview: Our project is based on Einstein's unsolvable riddle. We explored the differences in solving methods for boys and girls and applications of this in education. School: St Dominics College County: Dublin Teacher: Nigel Tierney Student(s): Clíodhna Peters,

Marcelina Szewc, Sonia Nietubyc

twitter.com/BTYSTE

2716

Title: Stay in the game! Overview: To investigate the benefits of sport aiding Youth development & help prevent childhood obesity. School: Salesian Secondary College, Pallaskenry

County: Limerick Teacher: John O'Flynn Student(s): Sophie Moroney, Eva Rushe, Helena Stewart

2717

Title: Staidéar a dhéanamh ar an dearcadh atá ag daoine i dtreo gaeilge Overview: What are the factors affecting attitudes towards, and use of, the Irish language among the adult population in the greater Letterkenny area.

School: Coláiste Ailigh County: Donegal Teacher: Micheál Ó Giobúin Student(s): Claire Nic Suibhne, Hugh Anthony Mac Suibhne

Title: Hope is the thing with feathers Overview: An investigation into what gives us hope and aspirations in the 21st century intertwined with the science of religion

School: Scoil Mhuire gan Smál -Roscommon County: Roscommon Teacher: Padraig Harlow Student(s): Barbara Wawrzynek, Aoife Donoghue

2719

Title: Does social media affect decision making? Overview: We intend to investigate the trend of affects that varying degrees of exposure to social media can have on our rationale and decision making. School: New-Bridge Integrated

College County: Down Teacher: Dara Morgan Student(s): Ronan Curran, Josh Morrison, Cameron Brush

2720

Title: An dtabharfaidh tú dídeanach isteach i do theach? - Fiosrúcháin ar tuarim daoine na hÉireann faoi na Dídeanaí

Overview: We hope to investigate the opinion of the Irish people on the refugees coming into the country and into their lives

School: Coláiste Ailigh County: Donegal Teacher: Shane Ó Breacáin Student(s): Niall Hannigan, Ruairi Lafferty

2721

Title: To investigate loitering on school grounds.

Overview: Investigating and

recording the prevalence of chewing gum, litter and graffiti, to determine the concentration of loitering in areas on school premises. School: Patrician Secondary School -

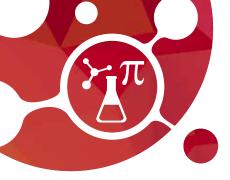
Newbridge County: Kildare Teacher: Colin Doheny Student(s): Jack Moore, Stephen Mollov











Chemical, physical & mathematical sciences

JUNIOR INDIVIDUAL

3100

Title: Which Ice Hockey Stick Is Best

Overview: An investigation into how the flexibility of an ice hockey stick affects the speed and accuracy of the

School: Mount Mercy College

County: Cork

Teacher: Mr Aaron O'Sullivan Student(s): Laura O'Sullivan

Title: Investigating the effect of various dietary supplements on the activity of lipase in digesting fat Overview: With childhood obesity becoming more common, this project investigates the effect of dietary supplements on the action of lipase in digesting fats.

School: St Mary's College County: Londonderry Teacher: Mrs Ann Blanking Student(s): Maeve Stillman

Title: Binomial Distribution Overview: Research into the equation and uses of Binomial Distribution as well as tests.

School: Blackrock College County: Dublin

Teacher: Mr Hugo Rowsome Student(s): Tom Dooley

Title: Maths Behind Music Overview: An investigation into the simulation of musical instrument timbres using discrete Fourier

School: Scoil Mhuire gan Smál -Blarney

County: Cork

Teacher: Mr Sean Foley Student(s): Sarah Sweeney

Title: pH Analysis of the Seas Around Ireland

Overview: Increased carbon dioxide is acidifying the worlds oceans. pH tests of seawater samples from around the country will determine the degree of acidification in Ireland.

School: Our Lady's GS County: Down

Teacher: Mrs. Deirdre Dunford Student(s): Eve Dunford

Title: Get a Grip with LEGO Overview: To find the little known science of LEGO and its locking mechanism that allows it to go together, stay together and come apart so perfectly.

School: St Benildus College County: Dublin

Teacher: Ms Carol Hewitt

Student(s): Daniel Fox

Title: What is the optimal angle to throw a javelin and shot-put and are the angles different?

Overview: Using a pneumatic air cannon to determine the optimal throwing angles of a javelin and shotputt and to find out if the angles are

School: Bandon Grammar School County: Cork

Teacher: Mrs Carena McCarthy Student(s): James Kirkby

Title: Investigating the affects of the draw weight and angle of trajectory of a crossbow on the speed and distance of the arrow

Overview: Investigating the affects of the draw weight and angle of trajectory of a crossbow on the speed and distance of the arrow used.

School: Tullamore College County: Offalv Teacher: Mrs Elaine Howlin Student(s): Luke Carson

3109

Title: modelling exoplanets using stellarium

Overview: I will be looking at a planet named kepler 10c on a star map School: Coláiste Phádraig - Lucan County: Dublin

Teacher: Ms Jacqueline Farrell Student(s): Joyal James

3110

Title: The Problem with Pentaguarks Overview: IN my project I will investigate and test the recently discovered pentaquarks. I hope to prove my theory in the duration of my project.

School: Blackrock College

County: Dublin

Teacher: Mr Hugo Rowsome Student(s): John Huggard

Title: Investigating the expiry dates of foods

Overview: Food is wasted because it's dumped once the date printed on the package is reached. But is it still fit to eat?

School: St Mary's College County: Londonderry Teacher: Mrs Ann Blanking Student(s): Miadach McSwine

3112

Title: A comparative study of the fractal dimensions of borders of continents and countries Overview: A comparative study of how indented the boundaries of countries and continents are, and how this relates to other aspects of the country or continent.

School: Our Ladys College - Drogheda County: Louth

Teacher: Miss Frances O'Regan Student(s): Ameerah Olubajo

3113

Title: Immediate Perceptual Apprehension - Intuitive Counting in Humans

Overview: We are all fundamentally the same! This project explores the shared ability of humans to intuitively count.

School: Jesus and Mary secondary school

County: Sligo

Teacher: Ms Louise Conlon Student(s): Gordon McHale

3114

Title: To Test the Optimum Environment For the High-Quality Preservation of the Fingerprint; A Study of Dactyliography Overview: The project asks does the quality of a fingerprint deteriorate over time and are some surfaces better than others to preserve the best fingerprint.

School: Ardgillian Community College,

County: Dublin Teacher: Theresa Gannon Student(s): Emily Cathcart

INTERMEDIATE INDIVIDUAL

3200

Title: The Environmental Impact of Weed Killer on Water.

Overview: My project investigates the environmental effects weed killer has on well water in rural areas. It analyses the potential health effects linked with weed killers.

School: Coláiste Choilm County: Cork

Teacher: Ms Julie Gleeson Student(s): Ellen Mc Donnell

3201

Title: An Investigation into Worker **Exposure to Harmful Chemicals** Overview: My project will compare workplace exposures to harmful isocyanates and formaldehydes in nail varnish, plywood and spray paints, and identify solutions to improve worker safety.

School: Avondale Community College County: Wicklow

Teacher: Ms Aoife Sullivan Student(s): Seán Byrne

Title: Parrondo's Paradox: A Reinvestigation of Game Theory with Markov Properties

Overview: My project will investigate if a combination of losing strategies can result in a victory in game theory. School: Coláiste Phádraig - Lucan County: Dublin

Teacher: Ms Jacqueline Farrell

Student(s): Dáire Byrne

Title: Modelling Irish Seismic Activity with the Poisson Process

Overview: I aim to develop a model of seismic activity using a Poisson process and past earthquake data, to mathematically investigate Ireland's potential for seismic disruptions.

School: Sacred Heart Secondary School

County: Cork Teacher: Mr Colm Kiely

Student(s): Kasia Mertuszka

Title: An investigation into the Koch curve and other fractals exploring the logical fallacies

Overview: I tend to explore the logical fallacies in various geometric fractals focusing on the Koch curve/triangle. School: Marist College - Athlone

County: Westmeath Teacher: Mr Cían O'Brien

Student(s): Darren O'Hara Duggan

Title: A Musical and Mathematical Analysis of Popular Songs Overview: To identify what popular songs have in common in terms of musical composition and to express this characteristic(s) as a mathematical formula(e).

School: St. Fintan's High School County: Dublin

Teacher: Ms Cathy Reilly Student(s): Naoise Cunningham

Title: Ramanujan's 'Amazing Identity' Overview: Ramanujan proposed an identity involving the coefficients of three different power series to solve a certain Diophantine equation. I investigate a new, related method.

School: Synge Street CBS County: Dublin Teacher: Mr Ger Davin Student(s): Haroon Hussain

Title: Diabetes and Me Overview: I am a diabetic type 1 . I would like to show an alternative for diabetics to regulate their blood sugar levels than using lucozade.

School: St Aloysius College County: Cork Teacher: Ms Aine Hyland

Student(s): Kelly Steele

3208

Title: Is Féidir le Ithir Olc Fós Maitheas a Dhéánamh

Overview: Táim ag fiosrú an féidir leictricheas a ghiniúint ó ithir dhighráidithe, ionas go mbeidh úsáid tairgiúil ag na tailte aigéadach. School: Coláiste Chilliain

County: Dublin





Teacher: Ms Ruth Ní Mhuirí Student(s): Aisling Ní Bhriain

3209

Title: An investigation of glitter paths formed by evening sunlight Overview: Glitter paths are associated with the sun reflected off water and are made up of a myriad of glints which are sunlight reflections. School: Our Ladys College - Drogheda

County: Louth Teacher: Miss Frances O'Regan Student(s): Aoife Leddy

3210

Title: Water sterilising water Overview: The project entails the development of a child steriliser which eliminates contact of the water/ apparatus being sterilised and an element.

School: Colaiste Phobáil Rós Cré **County:** Tipperary Teacher: Ms Sarah Kirwan Student(s): Jack Kirwan

3211

Title: How Realistic are Artificial Rugby Pitches?

Overview: To investigate the effects of factors on the bounce of a rugby ball and to see if artificial pitches are realistic compared to artificial pitches School: Gonzaga College

County: Dublin Teacher: Mr Joe O Briain Student(s): James O'Grady

3212

Title: Eifeacthulacht an Trebuchet (Efficiency of the Trebuchet) Overview: I will try to mathematically model the Trebuchet and then try to manipulate the design variables and the boundary conditions to maximise its efficiency.

School: Coláiste Eoin County: Dublin Teacher: Mr Proinsias dePoire Student(s): Fionn Ó Ceallaigh

Title: To investigate the transfer of the skills from hurling to golf and golf to hurling, a mathematical investigation,

Overview: This project considers the transferable skills of the golfer to hurling and the hurler to golf. Results are analysed mathematically. School: Ardgillan Community college County: Dublin

Teacher: Theresa Gannon Student(s): Rian Cathcart

SENIOR INDIVIDUAL

Title: A structural analysis of antimalarial molecules from natural

Overview: To analyse and compare

the chemical structures of different classes of compounds from natural sources active against malaria in vitro. School: Newpark Comprehensive

County: Dublin

Teacher: Ms Lynn Anderson Student(s): Jemima Turner

3301

Title: An Investigation of the Potential of Pine Needle Oil as a New Alternative Biodiesel Source Overview: A hands-on investigation of extraction methods and processing of pine needle oil and a scientific analysis of its viability as an alternative biodiesel source. School: Coláiste Raithín County: Wicklow Teacher: Ms Lís Ní Chíobháin

Title: Pricing Parisian Options Using Monte Carlo Simulation Overview: A Parisian option is a specialised form of barrier option. I propose a new, efficient method of pricing Parisian options using Monte

Carlo simulation. School: Synge Street CBS County: Dublin

Student(s): Lúc de Barra

Teacher: Miss Martha Nolan Student(s): Antanas Murelis

Title: The Mastitis-Meter Overview: This project aims early identification of a mastitis infection in a herd of dairy cows before the infected milk enters the bulk tank. School: St Joseph's College County: Tipperary Teacher: Ms Mary Gorey

Title: The Birch Swinnerton-Dyer Conjecture

Student(s): Jack O'Meara

Overview: An investigation of the Birch Swinnerton-Dyer conjecture through an algebraic and topological analysis of the Tate-Shafarevich aroup.

School: Gaelcholáiste Luimnigh County: Limerick

Teacher: Miss Deborah Ní Cheallaigh Student(s): Jack O' Callaghan

3305

Title: The development and testing of a range of natural sunscreen preparations

Overview: A range of natural substances are tested for their SPFs and used to make a range of sunscreen preparations with SPFs greater than 15

School: St Mary's College County: Londonderry Teacher: Mrs Ann Blanking Student(s): Megan Doherty

twitter.com/BTYSTE

3306

Title: A Chemical Investigation Into Water Quality In Our Irish Rivers **Overview:** This investigation chemically analyses river water samples from each province in Ireland and asks which province has the cleanest water. Data gathered is presented mathematically. School: Ardgillan Community College County: Dublin Teacher: Mrs Theresa Gannon Student(s): Amina Antonova

3307

Title: Investigating various salts for antimicrobial action Overview: This project arose from a previous project I did and investigates the possible antimicrobial properties of the salts; sodium chloride, potassium chloride and calcium chloride.

School: St Mary's College **County:** Londonderry Teacher: Mrs Ann Blanking Student(s): Erin Mc Philemy

Title: Water Film Motors **Overview:** This study assesses models of the water film motor effect. A series of experiments will be carried out to test and compare the models. **School:** Loreto College Coleraine County: Londonderry Teacher: Mrs Maeve Close Student(s): Daniel White

JUNIOR GROUP

3400

Observatory Satellite (SOHO) to Determine the Rotation of the Sun and to Measure the Motion of a Coronal Mass Ejection Overview: Gather data from the SOHO Satellite and analyse this data to calculate the differential rotation of the sun and the motion of Coronal Mass Ejections.

Title: Using the Solar & Heliospheric

School: Coláiste Chiaráin County: Limerick Teacher: Ms Mairead O Brien Student(s): Yasmin Sheehan, Amanda Moloney

Title: Coconut Oil Deodorant Overview: To investigate the antibacterial properties of coconut oil and compare coconut oil deodorant to branded deodorant. School: St Aloysius School County: Cork Teacher: Mrs Sarah O'Donovan

3402

Title: Investigating bioplastics **Overview:** This project makes

Student(s): Rameen Siddique,

Sarah Lane, Saoirse Brazil Kearney

bioplastics and tests their properties.

School: St Mary's College County: Londonderry Teacher: Mrs Ann Blanking Student(s): Jennifer Doherty, Sinead Ferreira

3403

Title: The effect of smog in rainwater Overview: Our project is to investigate the effect of smog in rainwater. We will test the quality of the rainwater from different areas and compare them.

School: Santa Sabina Dominican College

County: Dublin Teacher: Mr Matt Shea Student(s): Alexandra Kenny, Eve Healy

3404

Title: How Hot is Your Veg? Overview: We aim to investigate what is the optimum temperature to cook green vegetables to maximise the nutritional content in the vegetable. School: Loreto College - St Stephens Green

County: Dublin Teacher: Ms Louise Kerr Student(s): Anna Capra. Jessica McConkey

3405

Title: Variables for Resonance for Glasses with Stems

Overview: To investigate the variables that determine the resonating frequency of glasses with stems and derive a formula between frequency and these variables.

School: St Aloysius School County: Cork

Teacher: Mrs Sarah O'Donovan Student(s): Jasmine Odabi, Diamond Nzekwe

3406

Title: Get the Lead (Pb) Out! Overview: To establish if the lead content of drinking water from houses in Newcastle West conform to the minimum standards set by Department of the Environment. School: Desmond College - Limerick County: Limerick Teacher: Mr Donal Enright Student(s): Eve Montgomery, Sophie Leenders, Claire Nolan

Title: Is microwave cooking healthier and to what extent? A quantitative study of how microwave cooking affects Vitamin C concentration. Overview: We intend to carry out a quantitative study of the affect of microwave cooking and microwave cooking length on vitamin C concentration in food. School: C.B.S. Westland Row County: Dublin







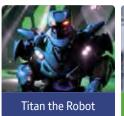




2016 EXHIBITION MAP



BT ARENA







WORLD OF ROBOTS



CONCERT HALL



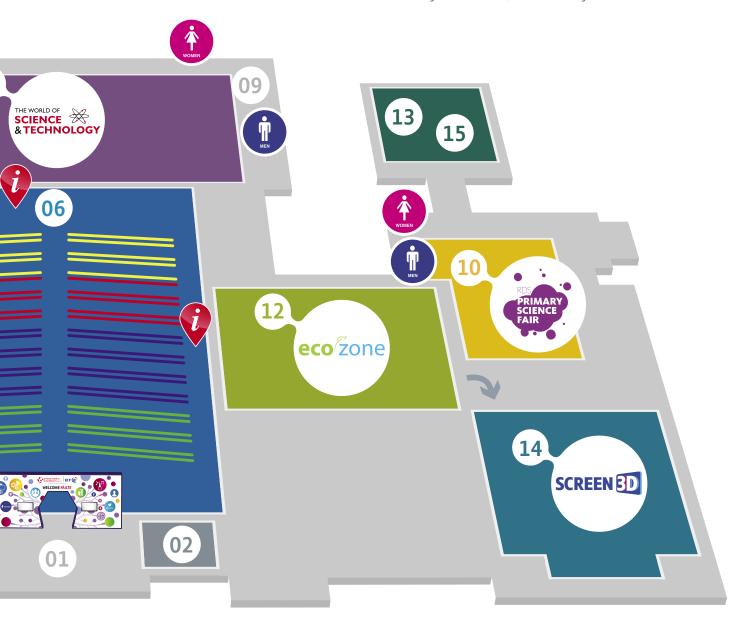
PACKED LUNCH AREA



Check the schedule for specific show times

















KEY TO EXHIBITION HALLS

- Information Desks
- 02 Organisers Office
- 03 Coffee Bar
- BT Arena
 - Opening Ceremony
 - Awards Ceremony
 - W5 Destination Space

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- David Meade Show
- Titan the Robot
- The World of Robots
- Wall of fame

- The World of Science & Technology
- 08 Ring Bistro
- Meeting Points 1 & 2 for coach party departure
- **Primary Science**
- STEM

- 12 Eco Zone
- 13 Packed lunch area
- Screen 3D Student Club
- "Bang the Drum" with Irish Aid - Drumming Workshop
- **RSA Interactive Shuttle**
- Food Court











Chemical, physical & mathematical sciences

Teacher: Ms Karoline Uhlemann Student(s): Safiyah Gopee, Kacper Jaroszynski

3408

Title: Domestic Reverse Osmosis Filtration Vs. Mains Water, Is There a Difference?

Overview: To find the difference in the water chemistry and taste between regular mains water and mains water further filtered by reverse osmosis.

School: Kinsale Community School

County: Cork

Teacher: Mr Shaun Holly

Student(s): Madi Hayes, Alicja Bakula

Title: Interference patterns in fabric Overview: When light shines through fabric colours or streaks can often be seen, which must be related to the fabric. We will investigate why. School: Bandon Grammar School County: Cork

Teacher: Mrs Carena McCarthy Student(s): Misaki Parbrook,

Shen Lester

3410

Title: EASY-Dose

Overview: To investigate a suitable colourant additive to mix with current cattle parasite doses to create a highlighter to identify those dosed successfully.

School: Salesian Secondary College,

Pallaskenry County: Limerick Teacher: Mr John O'Flynn Student(s): Amy Looney,

Niamh Cusack

3411

Title: An investigation into how foam reduces spillage in liquids

Overview: An investigation into the physics of liquids and more specifically how foam dampens liquid sloshing. School: St Patrick's High School County: Armagh

Teacher: Mr Paul Lavery Student(s): Tighearnán Mack, Annie Lee, Conal Kelly

Title: A Statistical Analysis of the correlation between the ECB marginal lending rate and the average variable mortgage interest rate in Ireland.

Overview: We aim to examine the relationship/correlation between the ECB marginal lending rate and the average of the standard variable mortgage rates for Irish 'Credit

Institutions.

School: Kildare Town Community School

County: Kildare

Teacher: Mr Rob FitzGerald Student(s): Callum Flynn, **Brandon Phillips**

INTERMEDIATE GROUP

3500

Title: An exploration of the Faraday paradox

Overview: How can faraday's laws on induction predict zero EMF but the observed results show an EMF School: Coláiste Phádraig - Lucan

County: Dublin

Teacher: Mr Kevin Carev Student(s): Paul Murtagh,

Cathal McManmon, Gareth Fitzgibbon

Title: A comparative investigation of the effect of various foods on the materials that cooking pots are

Overview: Investigating the effect of foods of different pHs on the materials that cooking pots are made of and the resultant health implications.

School: St Mary's College County: Londonderry Teacher: Mrs Ann Blanking Student(s): Caoishe Mc Laughlin, Kayleigh Doherty

3502

Title: DO U DV8?

Overview: A project to investigate how humans deviate off a straight path when deprived of a frame of reference.

School: Ursuline College County: Sligo

Teacher: Mr Anthony Carolan Student(s): Katie Mc Goldrick, Leah Rooney, Maeve Keaney

Title: A novel approach to the removal of nitrates and hardness from water Overview: Can simple polystryene beads be an effective treatment for hardness and nitrates in water? School: Coláiste Phádraig - Lucan

County: Dublin Teacher: Mr Kevin Carey Student(s): Cian Brannigan, Ian Crowley

Title: Investigating the effect of reheating pasta on the rate of digestion of it's starch by amylase Overview: Investigating the effect of reheating pasta on the rate of digestion of starch by amylase. Reheating is thought to lower starch's GI; important for Diabetics. School: St Mary's College County: Londonderry Teacher: Mrs Ann Blanking Student(s): Lauren Mc Callion, Rebecca Wright

Title: A mathematical model to investigate the optimal range for which a horse can clear a jump Overview: Investigating the optimal range of values for which a horse can clear a jump without faulting by means of algebra, calculus, coordinate geometry and trigonometry.

School: Coláiste Choilm County: Cork

Teacher: Mr Conor Crowley Student(s): Laura Clarke,

Angel O'Brien, Leah Mc Sweeney

3506

Title: I Ham The Greatest! Overview: An Investigation Into the

Differences Between each Brand of School: C.B.S. Roscommon

County: Roscommon Teacher: Ms Louise Gallagher Student(s): Liam Earley, Cian Gately, Cormac Miley

Title: An Investigation into the mathematical construction of the

Overview: We're going to investigate the most probable methods of the construction of the pyramids of

School: Clonakilty Community College

County: Cork

Teacher: Mr Patrick O Keeffe Student(s): Christy Tuck, Cormac Coleman

3508

Title: Investigating the rate of uptake of Nicotine by spearmint plants **Overview:** This projects investigates the rate of uptake of nicotine by spearmint plants both through the leaves from cigarette smoke and from tobacco through the roots.

School: St Mary's College **County:** Londonderry Teacher: Mrs Ann Blanking Student(s): Megan Kelly, Rachel Fisher

3509

Title: The sixth sense - an investigation into ultra sonic perception

Overview: An investigation into the human ability to react to sounds above the audible frequency of the human ear.

School: Ursuline College County: Sligo Teacher: Mr Anthony Carolan

Student(s): Laura Mc Guinn, Shauna Griffin, Denise Conlon

Title: Apollo 10D

Overview: The technology required to propel a rocket into space has been well researched, issues surrounding living in space continue to present problems.

School: Ballymena Academy County: Antrim

Teacher: Miss kathryn Wylie

Student(s): Callum Aiken, Matthew Petticrew

3511

Title: Córáil uisce liath le gairíodóireacht nua-aimsirthe: córas hidreaponaic i gcomparáid le aeroponaic

Overview: Iniúcadh ar éifeachtúla córas hidreaponaic vs aeroponaic, cén córas atá is éifeachtúla ó thaobh níotráite, fosfáite, BOD, suspended solids agus bactéir a bhaint ón uisceliath.

School: Coláiste Pobal Osraí - Kilkenny

County: Kilkenny

Teacher: Dr. Lughaidh Ó Néill Student(s): Katie Ní Fhaoileáin, Aindí Ní Snidire, Tomás Ó Muireas

3512

Title: Investigating the Biodegradability of Plastics using

Overview: We are investigating an environmentally friendly way of breaking down our plastic bottles. looking at fungi and UV light. School: Moate Community School

County: Westmeath Teacher: Ms Margaret Mandal

Student(s): Irene Shortall. Dearbhla Duignan

3513

Title: Preservation Of Water Supplies Using Hygroscopic Polymers Overview: We plan on reducing the effects of evaporation on the scarce supplies of hot countries using hygroscopic polymers to form solid gels.

School: Salesian College - Celbridge

County: Kildare

Teacher: Mr Jorge Andres Student(s): Ruaidhrí Jordan, Ben Conlon, Mason Scallan

Title: Uncovering Hidden Sugar in

Overview: Hyperglycaemia can lead to health problems. In digestion invertase converts sucrose to alucose. We want to see how much hidden glucose(sucrose)there is in food/drink.

School: Loreto Abbey Secondary School

County: Dublin **Teacher:** Ms Heather Merrick

Student(s): Cayla Rose O'Sullivan, Clara Drumm, Emily Price

Title: Roadside Blackberries, Friends or Foes?

Overview: We aim to investigate whether wild roadside blackberries have traces of car exhaust fume chemicals on them due to passing

School: Coláiste Choilm County: Cork





Teacher: Ms Julie Gleeson Student(s): Katie Tobin, Fiona McCarthy

3516

Title: An Investigation Into Systems With Chaotic Behaviour Overview: Through our project we wish to investigate systems with discrete chaotic behaviour using discrete logistic model of growth. we will then graph and analyse the results.

School: Sacred Heart Secondary School

County: Cork

Teacher: Mr Colm Kiely Student(s): Lola Folorunso,

Paulina Oramus

3517

Title: waterproof bioplastic bag Overview: We are going to make a bio plastic bag, measure the find out if bio-fuels can be made into plastics and the process is efficient.environmentally friendly. School: Portlaoise College County: Laois Teacher: Ms Julie Anne Behan

Student(s): Matthew Bride, Darragh Wright Twomey, Colm Greene

Title: Éifeacht dlús éisc ar an timthriall nitrigine in uisce aquaponics Overview: Feiceann ár dtionscnamh

ar an timthriall nitrigine in uisce i gcóras aquaponics i gcomhreir leis an dlús éisc atá ann.

School: Coláiste Pobal Osraí - Kilkenny

County: Kilkenny Teacher: Dr. Lughaidh Ó Néill

Student(s): Muireann Caomhánach, Emma Ní Ghruaigáin

3519

Title: Is Breast Best?

Overview: Comparing Breastmilk to formulated milk, to see how womens' diets affect their breastmilk and to analyse how breastmilk deteriorates over time when frozen and refrigerated.

School: Coláiste Choilm

County: Cork Teacher: Ms Julie Gleeson Student(s): Avril McSweeney, Emer Gleeson, Caoimhe O'Doherty

Title: Rowing... Sink or Swim? Overview: Our project is about creating an inflatable life support for rowers. There is currently no buoyancy device that allows full movement of the rowing stroke.

School: St. Mary's Secondary School **County:** Tipperary

Teacher: Ms Jane Cross Student(s): Annabelle Buttery, Aoife O'Halloran, Lauren Mulligan

3521

Title: Eiseapláinéid a Fhiosrú Overview: Mar sprioc d'foghlaim muid faoi eiseapláinéid agus teicnící a úsáidtear le teacht orthu. D'úsáid muid sonraí neamhfhoilisthe le feicéail an féidir linn teacht ar eiseapláinéad! School: St Catherine's College County: Armagh Teacher: Dr Caroline Pereira-Lynch

Student(s): Brid Hughes, Sarah Hanratty, Timera McGuigan

Title: What makes Sudoku puzzles vary in difficulty?

Overview: Identifying characteristics/ patterns present in Sudoku puzzles by constructing an algorithm to solve them. Then creating a mathematical formula to make Sudoku puzzles vary in difficulty.

School: Sacred Heart Secondary

School County: Cork Teacher: Mr Colm Kiely Student(s): Fionnuala Garvey, Niamh Kielv

3523

Title: An bhfuil luach cothaitheach agus líon na frithocsáideoirí i mbia orgánach níos airde?

Overview: Tá muid cun tastál a dhéanamh sa saotharlann ar bhia orgánach agus neamh-orgánach agus a luach cothaíoch a cur I gcompráid.

School: Coláiste Iosagáin County: Dublin

Teacher: Miss Orla de Bhailís Student(s): Anna De Blaca, Fiona Ní Mhóracháin, Ríona Marray

Title: An investigation into radon levels in privately owned water across

Overview: we are taking samples of privately owned water across Munster and testing them for radon, we can then notify people about this harmful gas.

School: John The Baptist Community School

County: Limerick Teacher: Ms Mariam Larkin Student(s): Adam Treacy,

Alan Hanley, John O Donnell

3526

Title: Material Efficient Carbon Capture System Overview: Acting on the recommendations of the judges

of BTYS 2014 we have designed a functional, heat activated, material and energy efficient Carbon Capture system.

School: St Marys College - C.S.Sp. County: Dublin

Teacher: Ms Aisling Kenny Student(s): James Clarke, Ruairi Shields, James Holden

3527

Title: To investigate if VO2MAX levels of teenage girls can be improved when part taking in a six week 'Couch to 5K' programme.

Overview: To investigate if there is a link between VO2MAX (lung capacity) levels and a six week 'Couch to 5K' programme.(improvement in aerobic respiration)

School: Loreto College - Foxrock County: Dublin

Teacher: Ms Louise Ryan Student(s): Annika Whelan, Katie Gosson, Alice Lynch

Title: An investigation of the effects of glute activation excercises during the warm up on the maximization of straight line speed

Overview: This project aims to investigate the effects of dynamic glute activation exercises in straight over the 100m distance with split times taken at 10&30m

School: St. Anne's Secondary School **County:** Tipperary Teacher: Ms Isabel Hogan Student(s): Niamh Richardson, Caoimhe Comerford, Ellen Hogan

Title: Development of novel test kit for rapid enviromental monitoring of

Overview: The project aim is to develop a rapid novel paper test kit for environmental monitoring utilizing a dry reaction medium with pre-coated test reagents

School: Coláiste Ailigh County: Donegal

Teacher: Mr Shane Ó Breacáin Student(s): Ultan Farrell, Katie Lawlor

3530

Title: Exoplanet Transit Timings with the Watcher Robotic Telescope Overview: We will identify and observe exoplanet transits visible during October to January using the Watcher robotic telescope located in South Africa. School: Dominican College - Wicklow

County: Wicklow Teacher: Mr John O'Brien Student(s): Jade Duffy,

Lauren Fahev

Title: What is in our makeup? **Overview:** Investigating the chemicals in commercial cosmetics, researching those chemicals to find out the effect those chemicals have on the skin. E.g. foundation. School: St Angela's

County: Waterford Teacher: Ms Aoife Maher Student(s): Molly May Powell, Liadain De Paor, Sophie Daniels

3532

Title: Water desalination by sapwood Overview: We investigate a novel natural technology that allows desalination of water using plant xylem.

School: Dominican College - Wicklow

County: Wicklow

Teacher: Mr John O'Brien Student(s): Nicole Devitt,

Aine Cahill

3533

Title: Sound Absorbing Paint. Overview: We are developing a sound absorbing indoor paint by mixing particles to standard paint. We are aiming our studies towards loud public spaces (e.g. restaurants /cafés). School: Sutton Park School

County: Dublin

Teacher: Ms Catherine Tattersall Student(s): Heather Murphy,

Naoise Tobin

3534

Title: An iniúchadh de ról na eití ar tuinnín agus cad a dhéanann siad difriúil ón a chéile

Overview: Ag úsáid gaoth-thollán, beimid ag iniúchadh an ról a bhfuil ag na h-eití difriúla ar dealramh an tuinnín.

School: Coláiste Pobal Osraí - Kilkenny

County: Kilkenny

Teacher: Dr. Lughaidh Ó Néill Student(s): Adam Ó Muireasa, Seanie Heddon

3535

Title: Exploring and Evaluating 3D Modelmaking as a Learning Technology for Simulated Experimentation of Abstract STEAM concepts in Geophysics and Astronomy.

Overview: Our project investigates the role of 3D modelmaking in generating data to answer science problems in Geophysics/Astronomy and evaluates the effectiveness of this learning technology.

School: Ardscoil Ris County: Limerick Teacher: Mr Jack Corrigan Student(s): David Hamilton, Paul Hamilton

3536

Title: Rainwater; an alternative water supply

Overview: Our project will involve the collection of rainwater in various environments and an investigation into the potability of these samples. School: Scoil Mhuire Strokestown

County: Roscommon Teacher: Modwena Geoghegan

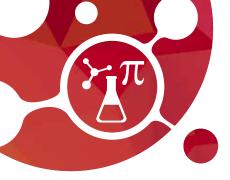
Student(s): Michael Feely, Mikey Kavanagh











Chemical, physical & mathematical sciences

SENIOR GROUP

3600

Title: Development of a natural PH indicator to detect spoilage in milk Overview: Spoilage bacteria produce acid as a by-product of their metabolic activity in milk. This project will develop a natural pH indicator to detect acid production.

School: Desmond College - Limerick

County: Limerick Teacher: Mr Donal Enright Student(s): Siun Ni Cheallaigh, Róisín Nolan, Alanna Slater

3601

Title: Spyked

Overview: We have designed an app to work with a mobile phone camera. This app will be used to measure the absorption spectrum of rohypnol.

School: Coláiste an Chraoibhin

County: Cork Teacher: Mr Simon Hill Student(s): DJ Cahill,

Aisling Nolan, Wiktoria Biedron

Title: Use of simulated annealing to find the maximum number of flips needed in a high "n" of the "Pancake Problem"

Overview: This project aims to find an approximation of the global optimum of the "Pancake Problem" using the process of simulated annealing.

School: Coláiste An Spioraid Naoimh County: Cork

Teacher: Mr. Tim Kerins Student(s): Joseph Dilworth, Dylan Morley, Allan Barry

Title: An Investigation of Erikson's Square Game using the minimax

Overview: We propose to use the minimax algorithm to examine optimal playing outcomes in Erikson's Square Game.

School: Coláiste An Spioraid Naoimh County: Cork

Teacher: Mr. Tim Kerins Student(s): Cormac Larkin. Nathaniel Grant, Conor McKeown

Title: Numerical Algorithms for Constrained Motion in Classical Mechanics

Overview: We have developed new techniques, inspired by algorithms used in molecular dynamics, for the numerical solution of problems in classical mechanics that involve constraints.

School: Synge Street CBS County: Dublin Teacher: Ms Kate Walsh

Student(s): Aleksander Kozina, Keshav Sapkota

3605

Title: Mycelium Insulation Overview: We aim to investigate the viability of mycelium from fungi as a cavity wall insulation, in comparison to existing traditional building insulation materials.

School: Ballyclare High School

County: Antrim

Teacher: Mrs Nikki Craig Student(s): Olivia Fleming, Bethany Petrie

3606

Title: Poison at street level: ambient and kerbside Nitrogen Dioxide levels Overview: Measure longterm NO2 levels at peak traffic flow under different atmospheric conditions using fixed and handheld monitors. Project builds on pilot work done last year.

School: St Louis High School County: Dublin Teacher: Ms Emily McCormack Student(s): Mathilde Lyons,

3607

Isabel Browne

Title: Walking on eggshells - a sustainable method of removing petrol and diesel from water Overview: An sustainable way to remove hydrocarbons from water by using crushed eggshells as an absorbent.

School: Our Lady's Bower County: Westmeath Teacher: Mrs Ethna Benson Student(s): Aisling Benson, Maeve Bass, Róisín Burke

3608

Title: A Mathematical Model of Coffee Rust

Overview: Coffee rust disease is a serious economic problem in Central America. We propose a mathematical model that suggests an effective way of limiting its spread.

School: Synge Street CBS County: Dublin

Teacher: Mr Shane Freeman Student(s): Gabriel Barat,

Adrian Wolniak

Title: An Additional Step in Sewage Water in Rural and Urban Areas in Ireland

Overview: Our project focuses on a cheap, effective sewage cleansing system to, in result decrease the levels of pollution and eutrophication in Irish waterways.

school: St Munchin's College

County: Limerick Teacher: Ms Sara McGeer Student(s): Andrew O'Connor, Aaron O'Callaghan, Aengus Mc Gill

Title: Has the frequency of river flooding increased in Ireland. A statistical analysis of the River Bandon Overview: A statistical investigation into changes in the frequency of floods on the river Bandon. We will review the influencing factors and considerations for flooding infrastructure

School: Sacred Heart Secondary School

County: Cork **Teacher:** Jim Hanely Student(s): Julie O'Donovan, Ellecia Vaughan

LOOKING FOR A SPECIFIC PROJECT?







Biological and **Ecological Sciences** Social and Behavioural Sciences

Chemical, Physical and **Mathematical Sciences**

Technology

1100 - 1610

2100 - 2720

3100 - 3610













Check the schedules on pages 63-65 for specific show times



Technology

JUNIOR INDIVIDUAL

4100

Title: A Fall Detector For The Elderly Overview: The aim of this project is to build a GSM enabled, GPS, MEMS accelerometer based fall detector to assist elderly people living alone. School: St Andrew's College

County: Dublin

Teacher: Ms Wendy Gilmore Student(s): Aaron Speer

4101

Title: Bird's Eye View

Overview: The aim of my project is to make ecology interesting for students everywhere. To do this I use a small computer called a 'Raspberry Pi'. **School:** Sacred Heart Secondary

School County: Offaly

Teacher: Mr Kevin Gallagher Student(s): Aisling Gallagher

4102

Title: iResponder

Overview: I have built an app to be used by first aiders while waiting on emergency response teams. Features include an ABC test and GPS location. School: Laurel Hill Secondary School FCJ

County: Limerick Teacher: Ms Andrea Enright Student(s): Aisling Daniels

4103

Title: Voice-Controlled Home-Automation with Raspberry Pi Technology

Overview: Client-Server networked system using voice commands from a wireless headset. A Raspberry Pi radio and a security system with camera and door-locking mechanism are included.

School: St. Leo's College County: Carlow Teacher: Ms Julie Egan Student(s): Eve McGlinchey

4104

Title: Family Minder Overview: For use in theme parks, supermarkets, hotels, hospitals. Allows families keep track on where younger or older family members are with danger zone proximity warnings. School: St David's Secondary County:

Teacher: Ms. Mary O' Doherty Student(s): Harvey Brezina Conniffe

4105

Title: Apple publishing challenges for a young game developer Overview: This project is about the challenges a 13 year old has sharing a game on the AppStore and trying to fulfill all of their requirements. School: Coláiste Choilm

County: Cork

Teacher: Ms Lorraine Marron Student(s): Alan Panayotov

Title: Bed Sensor Alert System Overview: A Raspberry Pi records button signals representing sensors, to notify a recipient of an alert via a web page. Commercial use, for the elderly/sick.

School: Skerries Community College County: Dublin

Teacher: Dr Katie Corbett Student(s): Cal Duncan

4107

Title: Learning Irish through an interactive website

Overview: I want to find out if using an interactive website helps primary school children learn Irish and enhances their enjoyment of the language.

School: Midleton College County: Cork Teacher: Paudie Scanlon

Student(s): Laura Cosgrave

INTERMEDIATE INDIVIDUAL

4200

Title: Designing a Multi-Role Stealth Aircraft and Testing its Viability Overview: Designing a military specification multi-role heavy stealth aircraft equipped with many new innovations and designs that can evade radar detection and increase fuel efficiency.

School: Sutton Park School County: Dublin

Teacher: Ms Catherine Tattersall Student(s): Omar Salem

4201

Title: 3D Printed Prosthetics Overview: Investigating the efficiency of 3D printed prosthetics including going into the depth of creation, mobility, cost and of course function. School: St Nessan's Community College

County: Limerick Teacher: Ms Mary O'Brien Student(s): Cian O'Donnell

4202

Title: Arrive Alive

Overview: Arrive Alive is an app that gives you the safest route to your destination using road accident data, other open datasets combined with machine learning.

School: St Joseph's College **County:** Tipperary Teacher: Ms Mary Gorey Student(s): John Ryan

4203

Title: PolyNanny Overview: An Internet of Things Automatic System to control your plants growth in a Polytunnel

or Raised Beds using emerging technologies. Focuses on Water Conservation.

School: East Glendalough School **County:** Wicklow

Teacher: Mr Adrian O'Connor Student(s): Donovan Webb

Title: Scoliosis discomfort solutions Overview: I plan on finding a solution for people who may suffer from discomfort in classroom due to scoliosis whilst sitting in stools and hard chairs.

School: Davis College County: Cork

Teacher: Ms Carol O Sullivan Student(s): Katie Healy

4205

Title: Moo Munch

Overview: My science project involves producing an edible silage cover which could replace the polythene and tyres which are used on farms at the moment.

School: Our Lady's Bower County: Westmeath Teacher: Mrs Ethna Benson Student(s): Tierna Maguire

4206

Title: "Cycle Sense" - Traffic Motion Sensor for bicycles.

Overview: Battery powered motion sensor to detect proximity of oncoming traffic to your bicycle whilst cycling suitable to be clipped onto the rear of the bicycle.

School: Comprehensive School -Tarbert

County: Kerry Teacher: Miss Eimear Nolan

Student(s): Roisin Noonan

Title: Velodrome: The Automated Logistics Fulfilment Platform Overview: Velodrome is a fully featured solution to automate the provision of logistics services through the utilisation of bespoke cloud, mobile and web software technologies.

School: Terenure College County: Dublin

Teacher: Mr Michael Shanahan Student(s): Shane Curran

4208

Title: Is technology the way forward for education?

Overview: I have set up a junior cert website in order to help students. I will both investigate whether their grades have improved or disprove. School: Moate Community School County: Westmeath

Teacher: Miss Mairead Cusack Student(s): Graham Turner

4209

Title: Muscular Dystrophy-Making life

a little bit easier

Overview: Technology in todays world is changing everyday but is lacking the basic needs for people with Muscular Dystrophy and other disabilities. School: Comprehensive School -

Tarbert County: Kerry

Teacher: Miss Eimear Nolan Student(s): Christopher Keane

4210

Title: Clash with Ash- Can hurleys be

improved upon?

Overview: My project aims to improve the standards of hurling by applying several altercations to the hurley in order to improve match play performance.

School: Ardscoil Ris County: Limerick

Teacher: Mrs Diane Condon Student(s): Matthew Stenson

4211

Title: Flushing money down the toilet Overview: To use rainwater as the source of water in radiators and toilets rather than paying for treated water only to be wasted in these devices.

School: St Kieran's College County: Kilkenny

Teacher: Ms Eileen Hanrick Student(s): Ben Lanigan

4212

Title: Cé chomh sláintúil is atá d'admháil bia?

Overview: Anailís a dhéanamh ar admháil bia agus faigh amach cé chomh sláintúil is atá an bia a cheannaigh tú.

School: Coláiste Pobal Osraí - Kilkenny County: Kilkenny

Teacher: Dr. Lughaidh Ó Néill Student(s): Liam Ó Lionáird

4213

Title: Neck Saver Overview: This project is meant

to help farmers and prevent major accidents on the road of Ireland and hopefully Europe.

School: F.C.J. Secondary School County: Wexford

Teacher: Mr Damien Cloney Student(s): Peter Kelly

4214

Title: A system enhanced app for improved two-factor authentication Overview: Develop a system for convenient and precise two-factor authentication for secure system login, using a remote server to communicate between test website and Android app.

School: Mount St Michael

County: Cork

Teacher: Mrs Alison McCarthy Student(s): Bebhinn Twomey











Technology

4215

Title: Testing Augmented Reality as a Learning Technology in Geometry' Overview: My project involves testing the effectiveness of the new AR technology on enhancing students' recall and understanding of key geometry concepts and facts. School: Malahide Community School

County: Dublin

Teacher: Ms Caroline Tighe Student(s): Luke Gibson

4216

Title: Drift Turbines

Overview: Drift Turbines generate electricity using an underwater current as its kinetic power source. School: Coláiste Bhréanainn

County: Kerry

Teacher: Ms Marie Vaughan Student(s): Armandas Bendarvicius

4217

Title: Farm Safely - Think Safety Overview: Safety device to be retrofitted to tractors, triggering a buzzer if the door/window is not shut correctly to minimise farm fatalities from machinery falls

School: Tullamore College County: Offaly

Teacher: Miss Jillian Browne Student(s): Mark Gorman

Title: Connect Shade: Development of a smart, portable, solar powered, USB charging, shading device.

Overview: Create a sunshade that charges any USB device (phones, tablets, fans, etc.) and includes an app that allows you to order items from your sun-lounger.

School: St Gerard's County: Wicklow Teacher: Mr John Reidy Student(s): Joshua Dargan Hayes

4219

Title: TimeForTown Overview: TimeForTown is an international Twitter platform developed in Python Programming language that provides real time information on public transport schedules for people around the world.

School: St Declan's College

County: Dublin

Teacher: Ms Yvonne Nolan Student(s): Stephen Cushen

4220

Title: NoteHub Overview: A simple school administration tool designed to be cheap to run and easy to maintain. School: St. Davids Secondary Co-ed School

County: Wicklow Teacher: Imelda Nolan Student(s): Sebastian Fulmer

SENIOR INDIVIDUAL

4300

Title: Early Health Indicator For Infants

Overview: Nappies that provide feedback on the health of the child to the parent using non-invasive wearable technology built into the

School: Desmond College - Limerick

County: Limerick Teacher: Mr Donal Enright Student(s): Emily Duffy

4301

Title: Search & Rescue Drone Overview: Producing a drone made with a 3D printer fitted with a GPS. Video and infa-red sensors to improve the efficiencies of search and rescue missions.

School: Malahide Community School

County: Dublin

Teacher: Mr Michael O'Sullivan Student(s): Joshua Murray

4302

Title: Machine Vision and Autonomous Systems, design and analysis of robot autonomy and flying robots

Overview: Robotics are the cutting edge of technology. this project is about designing and building an autonomous robot that can see, react, interact, plan and fly.

School: Castleknock College County: Dublin

Teacher: Mr Kieran Gallagher Student(s): Alec O'Brien

4303

Title: CareFriend - Smart Alzheimer's and Dementia Care Unit Overview: A smart, universal, technological solution offering a variety of features allowing easier independent living for people who require care, made mainly using a

Raspberry Pi. School: Colaiste Choilm County: Offaly

Teacher: Mr. Brendan McGlynn Student(s): Ciarán Ó hAoláin

4304

Title: To Measure the Viscosity of a Fluid Automatically, For Use in Patients with Dysphagia Overview: I hope to create a design which can measure viscosity automatically. This can be used for patients with dysphagia. I focus on

Motor Neuron Disease. School: Scoil Mhuire County: Cork

Teacher: Ms Shirley Breen Student(s): Ellie Hogan

4305

Title: Eye Opener: Helping Drowsy

Drivers Stav Safe

Overview: Production and testing of an app and wearable that utilises body temperature as a catalyst to notify the driver that they're about to fall asleep School: Ursuline College

County: Sligo

Teacher: Mr Anthony Carolan Student(s): Aoife Kearins

Title: Applying Real-Time Physiological Responses to a Virtual Classroom Environment

Overview: I am designing a computer mouse that senses heart rate and perspiration. This data is then used to optimise students' digital learning experience.

School: Mary Immaculate Secondary

School - Lisdoonvarna County: Clare

Teacher: Mr John Sims Student(s): Maghnus Hartigan

Title: An accessory to prevent wire stress and fraying in a mobile phone

charger

Overview: A ball and socket electrical connector to allow free movement at the head of the charger while in use to prevent fraying and wire breakage.

School: St Flannan's College

County: Clare

Teacher: Ms Teresa Considine Student(s): Colin McNelis

4308

Title: Radio frequency identification device (RFID) system to prevent misfueling of vehicles

Overview: A device that emits a visual

and audible signal in the event of attempt to introduce an incorrect fuel pump nozzle into a fuel port. School: Desmond College - Limerick

County: Limerick Teacher: Mr Donal Enright Student(s): Shauna Hallinan

JUNIOR GROUP

4400

Title: Farm Friendly Feeder Overview: We aim to design, make and test a cattle feeder that will save farmers time and money by reducing silage waste and collecting rainwater. School: Gallen Community School County: Offaly

Teacher: Mrs Catherine Hopkins Student(s): Joshua Dunican,

Adam Henry

4401

Title: Speed Alert Shamer Overview: Our Device lets everyone know when car speed limits set by police are broken by lighting RGB LEDs on a Shame Sign using a Pi&GPS. School: St Killian's College County: Antrim

Teacher: Mr Sean Connolly

Student(s): Annie McSparran, Chloe Mitchell

4402

Title: Dreamy Baby Prop Overview: A device that safely elevates a baby in a cot or crib as they sleep. A particularly useful device for babies that suffer from reflux. The entire base of the cot or crib will be elevated eliminating the use of extra pillows or other means of propping the baby.

School: Killorglin Community College

County: Kerry

Teacher: mr Anthony Griffin Student(s): Jack Nagle, Eoghan McKenna

4403

Title: Magic 8 Ball - Fortune Telling App

Overview: In this project we plan to develop an android app of a magic 8 ball using a variety of coding languages.

School: Douglas Community School

County: Cork Teacher: Mr Cian O'Mahony Student(s): Suneet Mahajan,

Lenny Hurley

4404

Title: Sensor Guide

Overview: In this project we have created a sensor stick to help the blind or visually impaired in every day life. We evaluate and improve the stick after testing it.

School: Coláiste Bhaile Chláir

County: Galway

Teacher: Ms Eleanor Nolan Student(s): Deirdre Hughes,

Alaidh Fox

4405

Title: Bee Cool Overview: A Self-Temperature Regulating Bee Hive Device which aims to improve the efficiency at which bees work and increase the yields of honey being produced School: Desmond College - Limerick County: Limerick

Teacher: Ms Aoife Culhane Student(s): David O Brien,

Danny Moriarty

Title: Zero energy car climate regulatory system designed to prevent heatstroke and suffocation in animals and children left in parked cars Overview: We believe that climate regulation in auto-mobiles is a necessary requisite for preventing heatstroke and suffocation in children and animals in parked cars. School: St Mary's Secondary School

- Mallow County: Cork

Teacher: Mr Martin Timmons Student(s): Ellie Bowen,





Roisin Palmer

4407

Title: HTML Raw Code Generator Overview: To create a Code Generator to make HTML Code for designing websites. This will make HTML easier and less time consuming.

School: Clonakilty Community College

County: Cork

Teacher: Mr Patrick O Keeffe Student(s): Ernie McCarthy,

Florrie McCarthy

4408

Title: Calving Caller

Overview: We have designed and made a device to text farmers when cows are coming near calving. It will use temperature and tail switches for activation.

School: St Killian's College

County: Antrim

Teacher: Mr Sean Connolly Student(s): Oran McDonnell,

Seamus Delargy

4409

Title: eQuiz, the online quiz platform for teachers

Overview: We aim to create a platform that allows teachers to create, share and assign quizzes to their classes. They can also share them online.

School: Sandford Park School Ltd

County: Dublin Teacher: Mr Ken Forbes Student(s): Keelan Daye,

Phin Godfrey

4410

Title: Your Computer Doctor Overview: Using a PC and the Microsoft Kinect Technology to establish and record basic biometric details for an individual - for use in primary care.

School: St Marys College - C.S.Sp.

County: Dublin

Teacher: Ms Aisling kenny Student(s): Aidan Dowling, Edward Cleary-Moylan, Jack Brady

4411

Title: Does Computer Coding Improve **Problem Solving**

Overview: To investigate if coding improves maths problem solving School: Portumna Community School

County: Galway Teacher: Mr. Paul Maguire Student(s): Stephen Conroy,

Eoin Gallagher

4412

Title: Building a mini weather station using Raspberry-Pi.

Overview: We will build a miniweather station using a raspberry pi. We will also code a website so that people can view the weather readings. School: Scoil Mhuire gan Smál -Blarney

County: Cork

Teacher: Mr Sean Foley Student(s): Anna O'Connor, Julianne Kenny

4413

Title: Eyespy

Overview: EyeSpy deters, identifies and helps prove bullying. As a secondary function it tracks student's whereabouts.

School: Colaiste Mhuire - Mullingar

County: Westmeath Teacher: Ms Eva Acton Student(s): Jack Kenny, Jack Hand, Sean Murphy

Title: A remote smoke alarm system Overview: We have developed a smoke alarm that will ring the home owner's mobile no matter where they are when the alarm is activated. School: North Monastery Secondary

School County: Cork

Teacher: Mr Kieran Ruby Student(s): Elvis Nzekwe, Harold Ibarlin, Filip Gajda

4415

Title: Distance Diagnostics **Overview:** Distance Diagnostics allows patients to be diagnosed via the internet at home. Doctors can monitor temperature, oxygen level, pulse, view patients live etc, without visiting.

School: St Killian's College

County: Antrim

Teacher: Mr Sean Connolly Student(s): Stephen Emerson,

Sean Martin

INTERMEDIATE GROUP

4500

Title: KidsCode

Overview: KidsCode is an online virtual world that combines multiplayer puzzle based gameplay with programming/coding in the hope to inspire children to get into programming!

School: De La Salle College County: Waterford Teacher: Ms Mary McDonagh

Student(s): Jordan Casey, Daniel Lye, Colm Smyth

4501

Title: Female Friendly Phone Alert System

Overview: Device that will alert you to incoming calls by adapting a handbag to vibrate and change colour whilst sending a signal to a key fob. School: Desmond College - Limerick

County: Limerick

Teacher: Mr Donal Enright Student(s): Leah Barry,

Aine Upton, Muireann Tobin

4502

Title: To design and manufacture a device that allows wireless interaction between car and trailer lights Overview: To design and build a wireless control for indicator lights on a trailer hitched to a car. with out the

School: Coláiste Chiaráin County: Limerick Teacher: Ms Edel Farrell

Student(s): Ciara Coyle, Kalin Foy

4503

need for a cable.

Title: A greywater recycling app Overview: We want to develop an app that monitors and optimizes the greywater usage in a house School: Coláiste Phádraig - Lucan

County: Dublin Teacher: Mr Kevin Carey

Student(s): David Grudzinskas, Mateusz Markiewicz, Jack Clarke

Title: S.A.L.T.S (Subterranean Automated Location Tracking System) Overview: Our project aims to accurately locate the position of underground ducts where other methods of location are not available. School: Glanmire Community College County: Cork

Teacher: Dr Dan O'Sullivan Student(s): Adam Murphy, James Walshe

Title: An investigation into using cannulated bovines to generate

Overview: We intend to investigate the potential of utilizing the biogas produced by cannulated dairy cows as a source of fuel for Irish farms and

School: Coláiste Choilm County: Cork

Teacher: Ms Julie Gleeson Student(s): Con Moran,

Donal Óg Coleman, Hugh O'Connor

4506

Title: Decoding the past Overview: We plan to create a computer programme to distuinguish between mulitiple authors of an ancient Irish text.

School: Gaelcholáiste Luimnigh County: Limerick

Teacher: Mr Michael Mc Carthy Student(s): Matt Lucey, Daragh Exton, Peter Clancy

Title: To determine the accuracy of an Ultrasonic Proximity Sensor vs. an IR **Proximity Sensor using Autonomous** Overview: Which form of sensor, IR or

Ultrasound, is the most accurate when

building an autonomous robot? School: Coláiste Phádraig - Lucan County: Dublin

Teacher: Ms Jacqueline Farrell Student(s): Ross Hoev. Adam Jordan

4508

Title: Safe Watch

Overview: A project to enforce age ratings on films and video games. School: St Joseph's College County: Tipperary Teacher: Ms Mary Gorey Student(s): Anthony Ryan, Nicky Cooney

4509

Title: Can't Touch This Overview: Our project is based around how the Theremin can be changed from it's traditional use as a musical instrument to a burglar alarm.

School: Ursuline College

County: Sligo Teacher: Mr Anthony Carolan Student(s): Eva Ryan, Ella Morrison, Maeve Rooney

Title: Tremor Controlling Glove Overview: This project has designed a glove that will help a person with parkinsons disease to perform everyday tasks without difficulty School: Desmond College - Limerick County: Limerick Teacher: Ms Aoife Culhane Student(s): Caoimhe Danaher,

4511

Title: Muck Yeah

Sophie Bridgeman

Overview: Our project is to develop a scraper/washer for scraping cattle sheds with ease School: Bush Post Primary School County: Louth

Teacher: Mr Gary Galvin Student(s): Conor McEneaney, Sami Miled, Jason Clarke

4512

Title: Battle Gum Disease using a UV light toothbrush Overview: Investigation into the

use of UV light in the detection and treatment of gum disease and the feasibility into incorporating this technology into a toothbrush. School: Magh Ene College County: Donegal

Teacher: Ms Yvonne Higgins Student(s): Michael Mcgloin,

Rory Sweeney, Oisin McGloin

4513

Title: Wake Up to Driver Fatigue Overview: This project aims to design and build a cost effective alarm system to detect driver fatigue, using open source systems. School: Marist College - Athlone











Technology

County: Westmeath Teacher: Mr Cían O'Brien Student(s): Ciarán McDermott, Joseph Reidy

4514

Title: Handbrake alarm Overview: To reduce farm accidents by alerting the driver that he/she has not engaged the handbrake, once put in neutral.

School: Bush Post Primary School County: Louth Teacher: Mr Gary Galvin Student(s): Mark Quinn.

Aaron Reihill, Paudi Ryan

4515

Title: Developing a school locker for people with disabilities to help with their organisation skills

Overview: The aim of our project is to develop a school locker that will accommodate the needs of people with disabilities helping with their organisation skills.

School: Davis College County: Cork Teacher: Ms Carol O Sullivan Student(s): Michael McMahon, Morgan Buckley

4516

Title: Can GPS replace Hawk-Eye? An féidir le GPS aistriú le HawkEye? Overview: Development of an onthe-ball GPS system to indicate wide or score? Chun fhorbairt 'Córas GPS ar an liathróid' chun fáil amach mas scór atá ann?

School: Coláiste Ailigh County: Donegal

Teacher: Mr Micheál Ó Giobúin Student(s): Eóin MacGaoithín, Ronan MacGaoithín

4517

Title: Tonnta seasta in abhainn Overview: Beidh an cruth is fearr a bheach ann do tonn seasta in abhainn á cruthú againn. School: Coláiste Pobal Osraí - Kilkenny County: Kilkenny

Teacher: Dr. Lughaidh Ó Néill Student(s): Roan White Ferris,

Robert Boyd

4518

Title: Your Health is your Wealth: A health check device that you can use at home to monitor your overall well-being

Overview: A stationary health device that measures health details such as weight, heart rate, and oxygen in blood and displays this information on a smartphone app.

School: Ardscoil Ris County: Limerick Teacher: Mrs Diane Condon Student(s): Pádraig Ryan, Diarmuid O'Hanlon

4519

Title: An Investigation Into the levels of Carbon Monoxide around Cork City Overview: We aim to investigate the levels of carbon monoxide around cork city using a carbon monoxide sensor and GPS interfaced with an Arduino micro-controller.

School: North Monastery Secondary

School County: Cork Teacher: Mr Kieran Ruby Student(s): Ice Ybanez, Linards Matvejevs

4520

Title: To investigate the feasibility of App-based identification Overview: We will investigate and record the possibility of an application for your phone being used as a legitimate form of ID. School: Mount St Michael County: Cork Teacher: Mrs Alison McCarthy Student(s): Ellis Wilson,

4521

Cian Hayes, Eli Unger

Title: Outdoor Retro-Reflective **Christmas Decorations** Overview: We want to provide an alternative to conventional outdoor Christmas lights for rural areas that save energy as they are made from retro reflective material. School: St.Brendan's Community School

County: Offaly Teacher: Ms Aisling Duane

Student(s): Annie Nichol, Laoise Murray, Jessica Fitzgerald

4522

Title: SenseMyStress Overview: Detect stress in teenagers using a pulse monitor which measures your heart rate and 'galvanic skin resistance' (GSR) sensor School: Maynooth Post Primary School

County: Kildare Teacher: Mr. Tom Dixon Student(s): Ally Hobbs, Maeve Hamilton

4523

Title: Bluemet Overview: Our project is a cycling helmet with a built in microphone and earpiece to make it easier to answer phone calls while cycling your bicycle School: Desmond College - Limerick County: Limerick Teacher: Ms Aoife Culhane Student(s): Amy Ryan,

4524

Title: The evolution of the sports

Mairéad Ryan, Amy Ryan

Overview: develop a sports bottle that eliminates some age old

problems. i.e not having real time data on heart rates, pool side. Difficulty reading pace clocks.

School: St Aloysius College County: Westmeath Teacher: Mr Keith Rowe Student(s): Conor Macken, Robert Powell, Paul McManus

Title: Hot Stuff: Determining the maximum efficiency of air and ground source heating systems, and whether they work best being used together or separately.

Overview: Analyzing the temperatures air source and ground source heat pumps work best and if they pay for themselves quicker separately or together School: Ardscoil Ris County: Limerick Teacher: Mrs Diane Condon Student(s): Luke Madden,

4526

Cianan Darcy

Title: D.C. Solar Powered Water producing back-pack. Overview: We plan to produce water from air using a thermo-electric peltier device powered by solar panels that are installed on back-packs. School: De La Salle College County: Waterford Teacher: Ms Mary McDonagh Student(s): Craig Mc Auliffe, Darragh Quinn

4527

Title: Mental Health, Our App Can Help

Overview: Our project is to create an App for teenagers to provide support and knowledge about mental health issues in this generation.

School: St Aloysius College

County: Cork Teacher: Ms Aine Hyland

Student(s): Sarah Hoare. Grace Willcock, Rebecca Crawford

4528

Title: FarmMate Overview: An app that records medical information for cows by scanning the barcode. It also records information on all the medicines that vou own. School: Meánscoil lognáid Ris

County: Kildare Teacher: Mr Larry Maguire Student(s): Michael Curran, **Emmet Morrin**

4529

Title: A Connected World – Remotely Gathering information from Smart Sensors at multiple locations and viewing this data from anywhere in the world.

Overview: Using a microcontroller to collect data from sensors and

display it on an online UI where it can be viewed by anyone, anywhere, on anything.

School: Ardscoil Ris County: Limerick

Teacher: Mrs Diane Condon Student(s): Sean Lynch, Neil Heffernan, Liam Mulcahy

4530

Title: Caonach Cliste

Overview: Our project involves using sphagnum moss as a natural filter on harvested rainwater to provide clean soft water for domestic use.

School: Our Lady's Bower County: Westmeath

Teacher: Mr Ciaran Mac Carthy Student(s): Ciara Mac Carthy, Claire Lemass, Ellen Finucane

4531

Title: B.S.T (Braiteoir seaicéad tarrthála) Overview: Unique life jacket that

notifies people on shore once it is immersed in water at sea. School: Salesian Secondary College,

Pallaskenry County: Limerick Teacher: Mr John O'Flynn Student(s): Áine Blackwell, Kate Fleming, Jack Mullane

4532

Title: Design and development of a fan containing egg membranes to remove carbon dioxide from the air Overview: This project involves the development of a solar powered fan containing egg membrane cartridges that can remove carbon dioxide from the air

School: St Mary's College County: Londonderry Teacher: Mrs Ann Blanking Student(s): Laura Mc Laughlin, Aine Gillespie

4533

Title: Coloured Glass Sorter Overview: A machine which will sort coloured bottles in hotels to drive down operating costs and make recycling more efficient. School: Salesian Secondary College, Pallaskenry County: Limerick Teacher: Ms Claire Sheehy Student(s): Robertas Petrosius,

4534

Evan Carey

Title: Device used to increase early detection of Testicular Cancer Overview: We will develop a product using a bio-chemical test which will detect testicular cancer at an early stage, therefore reducing the treatment process and affects. School: St. Gerald's College

County: Mayo

Teacher: Ms Cathy Freeley





Student(s): Rory Gaffney, Seán Gallagher, Tiernan Walsh

SENIOR GROUP

4600

Title: Braille Pad. An electric Braille **Display Using Solmoids**

Overview: Using solenoids we make a braille pad. This is beneficial to the blind because as of right now braille books are heavy, expensive, and infrequent.

School: Coláiste Phádraig - Lucan County: Dublin

Teacher: Ms Jacqueline Farrell

Student(s): Jemin Joseph, Joel Antony

4601

Title: Subsidence

Overview: Detect subsidence in buildings using fiber Bragg gratings. School: Coláiste an Chraoibhin

County: Cork Teacher: Mr Simon Hill Student(s): Kystian Winkler, Andrew Hill, Kevin Lewis

4602

Title: REFLEX a Startup Company Overview: REFLEX is a digital platform that allows users to bet

against each other while playing video

School: Malahide Community School County: Dublin

Teacher: Ms Orla Rooney Student(s): Paul Sheridan, Daragh Meehan

4603

Title: The Handy Guide to Sign

Language

Overview: We have designed, built and programmed an electronic glove that can be used in the home to learn Irish Sign Language using a computer

School: Coláiste Chiaráin County: Limerick Teacher: Ms Edel Farrell Student(s): Eoin Hayes,

4604

Adam Burke

Title: Farm Sense

Overview: Our project consists of fitting sensors to cover blind spots on sides of a tractor to try and reduce the death rate on Irish farms.

School: C.B.S. Thurles County: Tipperary Teacher: Mr Fergus O'Brien Student(s): Eugene Ryan, Conor Dunne, Michael Dillon

4605

Title: PTO Safety Shut-Off Switch Overview: To design and manufacture an emergency power cut off for a Power Take Off on a tractor. School: Scoil Mhuire agus Ide **County:** Limerick Teacher: Ms Rebecca Phillips Student(s): Brian Harnett,

4606

Roman Creedon

Title: An Investigation into Human-Robot Social Interaction using a sound localising Robotic Social Interface Overview: We are investigating human-robot social interactions through the use of a sound localising robotic platform featuring a social interface.

School: Scoil Chaitriona County: Dublin Teacher: Mr Brian Gallagher Student(s): Oran Donovan, Cian Donovan

4607

Title: Protection or Infection Overview: To investigate bacteria levels on gumshields, depending on methods of storage, during inactive periods of training and the possible affects on a players health. School: Tullamore College

County: Offaly

Teacher: Miss Jillian Browne Student(s): Katie Rabbitte,

Annie Browne

4608

Title: MediBands Overview: A silicone wrist band. containing personal medical information accessible by a smartphone via QR scanner, providing emergency responders with potential lifesaving information. School: Davitt College

County: Mayo Teacher: Mr Aaron Tonry Student(s): Benjamin Studnicka,

Callan Ouinn

4609

Title: Energy Monitor Overview: Our project is a device that measures energy consumption that is a cheaper alternative to smart meters.It may also record gas and

water usage. School: Coláiste Mhuire County: Kilkenny Teacher: Miss Claire Brennan Student(s): Andrew Mansfield, Ewan Hills, Kelly O'Brien

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DAVID MEADE SHOW

David Meade is the Million Dollar Mentalist who shot to fame five years ago with his ground breaking tv series.

Now after five years on BBC one, the man who can read minds has joined forces with the BT Young Scientist and Technology Exhibition to blow the minds of schools all across the country on the main stage of the 2016 event. Thousands of students will witness David do the impossible in front of their very eyes, and be challenged to work out how he makes the impossible seem possible. Does he use super powers? Psychic ability? Tricks? Or is science the secret behind some of his most amazing skills? David will blow the minds of the audience, and if they manage to guess some of his trade secrets, they'll be rewarded by learning one of David's most amazing feats to take away and perform themselves.

David Meade is a speaker, lecturer, author, and broadcaster, and has become one of the most recognisable faces in the country after a string of innovative projects on the BBC. He's developed amazing skills of memory, psychology, communication, and mentalism that has made him one of the most sought after performers in Europe.



DESTINATION SPACE



Join W5 as they take you out of this world with an interactive show specially developed with help from the European Space Agency and the UK Space Agency.

Explore what life is like for the entire space crew in our Destination Space Show celebrating astronaut Tim Peake's mission to the International Space Station (ISS) in December. With amazing demonstrations and supersonic science experiments including building rockets, launching astronauts and learning about life on the ISS, this awe inspiring show is an out-of-this world experience not to be missed!

Get ready for blast off, the countdown starts now – **five, four, three, two, one...**



CELESTIAL VOYAGE 3D

The International Space Station is mankind's outpost in space and stepping stone to other worlds.

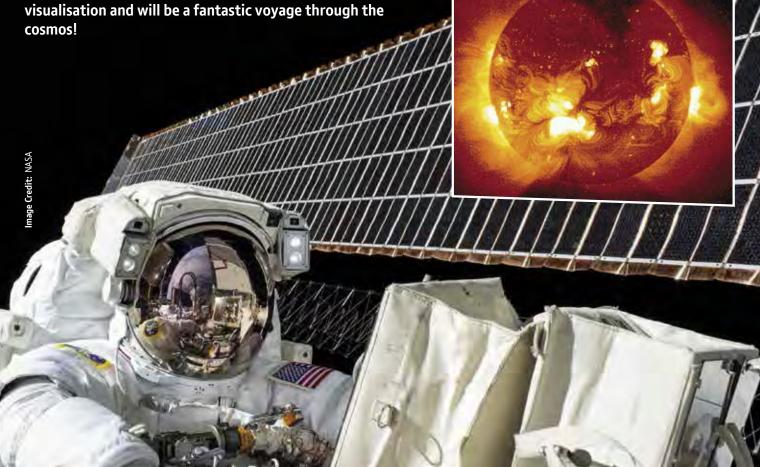
We will begin our celestial journey by visiting the Space Station and observing how astronauts live and work on board this incredible man made facility whizzing around Planet Earth.

We will then be transported back in time to see the beginning of the Solar System and witness our star, The Sun burst into life. Along the way we will see what resides at the very edges of the Solar System and how we as a species our exploring our place in space. As part of our Solar System voyage we will see how our knowledge of Planet Mars has grown and take a flight over the surface of the Red Planet using our latest knowledge and images as a guide for discovery.

Finally, we will look at where we fit into the cosmic puzzle and try to answer the question 'How big is big?'

The presentation will use the latest in 3D technology and







instagram.com/BTYSTE





TITAN

Making his annual appearance at the Exhibition this year due to incredible demand. A show to entertain both young and old alike - Titan is transported around the Arena on a docking station driven by Dave the Man in Black.

After some adjustments to the controls, Dave the Man in Black 'fires up' the equipment and brings Titan to life - much to the shock of the audience around! This performance is not to be missed. Seeing is believing!

Titan has now appeared in over 30 countries across the world including Australia, South Africa, China, Russia, Thailand, Vietnam and all across the Midddle East.













WORLD OF ROBOTS

The World of Robots is the biggest open robotics contest in Ireland. Presented by the Irish robotics company, Mechatrons, there are over 20 different competitive categories that anyone can enter.

All you need is a robot built to meet the specifications of your chosen challenge. Competitors come from all walks of life; individuals, engineers, schools and universities all battling it out.

Challenges include maze solving, sumo, artbots, robocup (soccer), boxing, wrestling, micromouse, rope climbing and heavyweight robot battles to name just a few.

Robot battling is a true sport of the future. It has all the right elements: mad science, gladiatorial combat, plucky garage inventors, and hi-tech machinery. Brutally effective, utterly vicious machines have now evolved from one based on an engineering challenge, to that of hi-tech operational challenge with space age materials.

The mechanical evil that is the combat robot consists of robots using arms and blades and blunt objects to bash and slash and break each other apart. One type of combat robot, the Wedge Bots now have enormous power that they can put into one simple, cunning attack: slide a wedge under another robot, flip all of its 100kgs over 2m into the air, and watch it flail about like a dying cockroach or smash its belly with 14 tons of axe power.

It's not just contests at the World of Robots though. There are robotic displays of famous robots such as R2-D2, Daleks and Skeletron. There is even a robotic Creeper from Minecraft!

Want to build your own to enter next year? Start your robot building career by talking to the Roboteers and finding out how to get started or visit www.mechatrons.com.

Robots are the future and the future is now. It's time you were part of it.







the RDS?

The RDS is one of the world's oldest philanthropic organisations. Founded in 1731 to support the cultural and economic development of Ireland, the RDS invests upwards of €1.5m each year in 15 different projects within the areas of Education, Transformation and Innovation. The RDS Primary Science Fair is a key project within our Science and Technology programme. It is underpinned by the RDS STEM Learning project, which aims to support primary school teachers to integrate science, technology, engineering and mathematics into their classroom practice.

RDS Primary Science Fair Limerick January 15 & 16 Mary Immaculate College



primarysciencefair@rds.ie +353 1 2407990 www.rds.ie/primarysciencefair

Dublin Thursday 7th January

How can Science explain the story of the Titanic?

Antrim Primary School, 31 Station Road, Antrim, Co. Antrim

Does curly hair produce more static electricity?

St. Malachy's P.S., Chapel Lane, Armagh, Co. Armagh

How do Electrical Appliances Work?

St. Brigids N.S., Killoughter, Redhills, Co. Cavan

What is causing the rapid decline of bees and how can Kinsale help combat this?

S.N. Chóbh Chionn tSáile, Summercove NS, Kinsale, Co. Cork

Why is Kinsale Marsh important to our locality? – Chíonn grúpa rud nach bhfeiceann duine amháin.

Scoil Naomh Eltin, Cionn tSáile, Co. Chorcaí, Co. Cork

Does drinking two litres of water a day improve your health and wellbeing?

Stramore national school, Glendowan, Letterkenny, Co. Donegal

Do Light and Temperature Have an Effect on the Growth and **Development of Plants?**

St. Andrew's NS, Church Rd, Malahide, Co. Dublin

Can ICT and fitness wearables really help our understanding about performance in sport?

Rathdown Junior School, Upper Glenageary Road, Glenageary, Co. Dublin

The Good, The Bad and The Germ?

Thornleigh Educate Together National School, Applewood Village, Swords, Co. Dublin

How clean are our pencils?

St. Patrick's Primary School Mullanaskea, 22 Feddan Road, Mullanaskea, Enniskillen, Co. Fermanagh

What affects our concentration in school?

St. Oliver Plunkett NS, Kilkerrin, Ballinasloe, Co. Galway

Is Social Media Affecting our Health and Wellbeing?

Corrandulla NS, Corrandulla, Co. Galway

Will a student-made motor work as efficiently in the classroom as a commercial motor?

Graignamanagh Boys' NS, Graignamanagh, Co. Kilkenny

A Bridge over Troubled Waters: Which type of bridge is the strongest? Maryboro NS, Portlaoise, Co. Laois

Can a few simple tasks make us happier?

An Fraoch Mor, The Heath, Portlaoise, Co. Laois

Invisibility, scientific fact or hopeless hocus pocus?

St. Patrick's G.N.S., Dublin Rd, Limerick, Co. Limerick

Can Practising Meditation Improve Test Scores?

Kilcolman, Ardagh, Co. Limerick

Just how much rain water could we collect from our school roof?

Carramore NS, Carramore, Swinford, Co. Mayo

Can we predict height based on hand and foot length?

Knockrooskey NS, Knockrooskey, Westport, Co. Mayo

Don't blame it on the weatherman! Are our seasons changing?

St. Attracta's NS, Lowpark, Charlestown, Co. Mayo

Dublin Thursday 7th January (cont.)

How effective are suncreams?

St. Marys NS, Racehill, Ashbourne, Co Meath

To Drink or not to Drink? - Can a sport drink improve endurance? St. Finian's NS, Killyon, Hill of Down, Enfield, Co. Meath

What are the consequences/dangers of a dripping tap? Gaelscoil Eois, Bóthar Ros Liath, Cluain Eois, Co. Monaghan

How do we see?

St. Josephs BNS, Carrickmacross, Co. Monaghan

How does this grab you? Look at a 3D printed hand - How does it work? St. Patrick's BNS, Patrick St., Portarlington, Co. Offaly

Can we create working hands from craft materials that demonstrates how real robotic hands work?

Scoil Chrónáin Naofa, Dromakeenan, Roscrea, Co. Offaly

How can we create the Digital School of the Future?

St. Francis Boys School, Clara, Co. Offaly

What type of liquid causes nails to rust the fastest? Glanduff NS, Glanduff, Kiltoom, Athlone, Co. Roscommon

Are potatoes a healthy food? What's the best way to make potatoes appealing to kids?

Waterford ETNS Carrickpherish, Waterford City, Co. Waterford

How high is the risk of developing Type 2 diabetes in primary school? Coosan NS, Castlequarter, Coosan, Athlone, Co. Westmeath

Sugar Rush - How are soft drinks affecting our health?

Scoil Naomh Bhríde, Emper, Ballynacargy, Co. Westmeath

What is Robotic Farming? Its advantages and disadvantages.

St. Tola's NS, Killulagh, Delvin, Co. Westmeath

Why are soap suds always white?

St. Manchan's NS, Tubber, Moate, Co. Westmeath

Does exercise improve memory?

Bunscoil Loreto, 3 Church Rd Grove, St Michaels Road, Gorey, Co. Wexford

Why is our local lake glowing green?

Scoil Mhuire, Our Ladys Island, Wexford, Co. Wexford

What is the best material to keep our pot of tea warm?

Sutton Park School, St Fintan's Road, Sutton, Dublin 13

Is the pH of tap water and rain water similar all over Ireland? Scoil Bhríde C, Church Road, Blanchardstown, Dublin 15

Rock and Run! Does a certain genre of music make us run faster?

St. Colmcille's SNS, Idrone Avenue, Knocklyon, Dublin 16

How do lorries lift heavy loads? How do hydraulics work?

St. Louis SPS, Williams Park, Rathmines, Dublin 6

How can light be manipulated to serve human needs?

Scoil Assaim, All Saints Drive, Raheny, Dublin 9

Dublin Friday 8th January

Why do crabs walk sideways?

Darrara NS, Cruary, Clonakilty, Co. Cork

How can we improve the visual experience of using the interactive whiteboard (IWB)?

Adamstown Castle ETNS, Station Road, Adamstown, Co. Dublin

Does the shape and material of a paper plane affect its ability to fly? Glasnevin NS, Botanic Avenue, Glasnevin, Dublin 9

Beach Ecology: Which beach in Skerries is most suitable for plant and animal life?

St. Patrick's Senior National School, Beau Piers Lane, Skerries, Co. Dublin

How do differential factors affect mould growth on various sample substances?

Scoil Éanna Bullaun, Bullaun, Loughrea, Co. Galway

What is the best way to dry our school uniform naturally after washing? Castleblakeney, Ballinasloe, Co. Galway

Why does the sanderling winter at Banna and how does it get here from Greenland?

Killahan NS, Killahan, Abbeydorney, Tralee, Co. Kerry

Are children consuming too much salt?

SN Colmcill Naofa, Moone, Athy, Co. Kildare

How does different wattage/coloured bulbs affect how much oxygen a plant produces?

St. Brigids Primary School, Kildare Town, Kildare Town, Co. Kildare

Could we build a speed ramp or bump outside our school? Ballyadams NS, Co. Laois

Which physical activity has the most positive influence on our overall fitness?

Naas CNS, Craddockstown Education Campus, Naas, Co. Kildare

Mindfulness & Mindful Eating - Food for Thought?

St. Aidan's NS, Kilmanagh, Co. Kilkenny

Will the colour of light affect plant growth?

Rath NS, Rath, Ballybrittas, Portlaoise, Laois, Co. Laois

Toothbrush Terror: What lies between the bristles of your brush? Scoil Mhuire Fatima, Timahoe, Timahoe, Co. Laois

How can different stimuli effect children's ability to retain information when studying?

Mell National School, Mell, Drogheda, Co. Louth

Does everyone taste the same?

Aston Village ETNS, Dunlin Street, Drogheda, Co. Louth

Does water source effect rate of grass growth?

Killasser NS, Killasser, Swinford, Co. Mayo

What affects do worms have on vegetative growth?

Lehinch NS, Lissatava, Hollymount, Claremorris, Co. Mayo

Do different bird feeders attract different types of bird?

Newport NS, Glenhest Road, Newport, Co. Mayo

What ways can solar power be used to benefit everyday life? Scoil Seosamh Naomtha, Dunderry, Navan, Co. Meath

Which crisps are the healthiest option?

Navan Educate Together NS, Commons Road, Navan, Co. Meath

Can the power generated by fruit or vegetables rival a battery? Scoil Naomh Barra, Wilkinstown, Navan, Co. Meath

Why does bread get hard and biscuits get soft when left uncovered? St. Ciaran's & St. Manchan's Mixed National School, Boher, Ballycumber, Co. Offaly

Can energy be converted from one form to another?

Scoil Mhuire Convent Primary School, Convent Road, Roscommon, Co. Roscommon

How effective are different types of helmets at preventing various head injuries?

Scoil Naomh Cualán, Pallas Street, Borrisoleigh, Thurles, Co. Tipperary

Indoor circuits or outdoor running - Which will improve our fitness the most?

St. Clare's NS, Tubberclare, Glasson, Athlone, Co. Westmeath

Burning Calories: How much energy is stored in different types of food? Ardnagrath NS, Ardnagrath, Walderstown, Athlone, Co. Westmeath

Does mould grow faster at higher temperatures?

Clologue NS, Clologue, Camolin, Enniscorthy, Co. Wexford

How do nettles sting and do dock leaves really cure them? St. Patrick's NS, Sion, Crossabeg, Co. Wexford

Why do flowers wilt? Can we prolong the life of a cut flower? Lacken, Blessington, Co. Wicklow

Which product is best at removing germs when handwashing? Does handwashing technique matter?

St. Vincent de Paul Girls' School, Griffith Avenue, Marino, Dublin 9







Dublin Friday 8th January (cont.)

Does eye colour have an effect on vision?

Greystones ETNS, Black Lion, Greystones, Co. Wicklow

Can we design, make, build and program a homemade robot?

St. Peter's Primary, Hawthorn Road, Bray, Co. Wicklow

Arches - Why are they used in so many structures?

Kilcommon NS, Tinahely, Co. Wicklow,

What effect does the size of blades have on the amount of energy generated?

Powerstown Educate Together National School, Powerstown Road, Tyrrelstown, Dublin 15

What is the link between sugar in baby food and the rise in childhood diabetes?

Scoil Mhuire, NS, Whitechurch, Ballyboden, Dublin 16

Which snacks make algae angry?

Our Lady Immaculate SNS, Darndale, Dublin 17

Does your eye colour make a difference to the quality of your eyesight? Scoil Mhuire, Lakelands, Gilford Rd, Sandymount, Dublin 4

Does age or gender affect the ability to multitask?

St. Matthew's National School, Cranfield Place, Sandymount, Dublin 4

Why are monkeys so good at climbing?

St. Catherine's Senior School, Ratoath Road, Cabra, Dublin 7

Dublin Saturday 9th January

Paper Towels in Our School: How to reduce usage and successfully dispose of them.

St. Gerard's Junior Sch., Thornhill Rd, Bray, Co. Wicklow

Does Fit4Skool a school based PE programme contribute to Fit4Life among school children?

SN Eoin Baiste Ballyvaughan, School Rd, Ballyvaughan, Via Galway, Co. Clare

How can Kilcoe N.S. use water to power our school?

Kilcoe NS, Kilcoe, Skibbereen, Co. Cork

How close to outer space can our class get?

St. Joseph's National School, Tivoli Road, Dun Laoghaire, Co. Dublin

What effect has sugar on our bodies?

St. Oliver Plunkett's NS, Balrothery, Balbriggan, Co. Dublin

Does Scoil San Treasa eat healthily?

Scoil san Treasa, The Rise, Mount Merrion, Co. Dublin

Can we use a pen filled with substances or liquids other than ink? Balscadden National School, Balscadden, Balbriggan, Co. Dublin

Do free range eggs have stronger shells than battery farmed eggs? Castle Park School, Castlepark Road, Dalkey, Co. Dublin

What are the best natural cleaners for our school uniform?

St. Raphaela's NS, Upper Kilmacud Rd, Stillorgan, Co. Dublin

Why don't you fall out of a rollercoaster while doing a 360 turn? Kill o'the Grange, Deansgrange, Blackrock, Co. Dublin

How do chemical changes and the addition of different ingredients affect the properties of materials?

St. Mary's NS, Garristown, Co. Dublin

Are "healthy food and drinks" really healthy?

Firies NS, Church Rd, Firies, Killarney, Co. Kerry

In designing the Super Lunchbox, what are the healthiest choices?

Two Mile House NS, Two Mile House, Naas, Co. Kildare

Paper Airplanes: What factors contribute to long flight distance? Newbridge Educate Together NS, Green Road, The Curragh, Co. Kildare

To what extent can talking and background noise interfere with driving? Scoil Bhride, GNS, Clane, Co. Kildare

How does an egg turn into a chick?

Scoil Bhríde, Stillbrook, Mountrath, Laois, Co. Laois

How does light intensity effect the process of photosynthesis?

Scoil Iósaf, Knockane Road, Newcastle West, Co. Limerick

An féidir linn méid uisce ár dteaghlaigh a mheas agus conas é sin a laghdú?

Scoil Aonghusa, Geata an Domhnaigh, Droichead Átha, Co. Louth

Can you change the colour of a plant by changing the colour of its water? Scoil Naomh Buithe, Tenure, Dunleer, Co. Louth

Does our smell and sight along with our mind alter our taste perception? Clooneyquinn NS, Elphin, Castlerea, Co. Roscommon

How much electricity is used unnecessarily when leaving devices on standby?

Nurtures Best, Main St, Tarmonbarry, Co. Roscommon

Does exercise make our brains work better?

Courtnacuddy NS, Courtnacuddy, Enniscorthy, Co. Wexford

Do Video Games have an impact on heart rate, reflexes and mood? St. Kevin's NS, Rathdown Road, Greystones, Co. Wicklow

Scoil Naomh Iosaf, Baltinglass, Wicklow, Co. Wicklow

Different opinions on food. Is it really to do with your tongue? Wicklow Montessori School, Ballyguile Beg, Wicklow Town, Co. Wicklow

Does background music affect childrens' concentration levels?

St.Mary's & St.Gerard's NS, Enniskerry, Enniskerry, Co. Wicklow

Can animals use non-visual methods to recognise each other? Bray School Project National School, Killarney Road, Bray, Co. Wicklow

At which launch angle will a rocket fly furthest?

Scoil Náisiúnta Phádraig Naofa, Avoca, Co. Wicklow Does mobile phone use affect driver performance?

Belgrove Senior Boys, Seafield Road, Clontarf, Dublin 3

Could Matilda have used static energy to make the items from Miss Truchbull's house move?

St. Ultan's Primary School, Cherry Orchard Avenue, Dublin 10

How much sugar is in your drink?

Scoil Choilm, Porterstown, Clonsilla, Dublin 15

Who do we think we are. Have our ancestors affected our appearance? Scoil an Chroí Ró Naofa Íosa, Huntstown, Mulhuddart

Is memory affected by age or gender?

Our Lady of the Wayside NS, Kilternan, Dublin 18

How does the Irish growing season compare with the growing season in South Africa?

St. Columba's NS, North strand, Dublin 3

How is vertical gardening an alternative to traditional gardening? The Teresian School, Donnybrook, Dublin 4

What causes Honey Bee Colony Collapse Disorder (CCD) and how can we overcome it?

John Scottus School, 74 Morehampton Road, Donnybrook, Dublin 4

Should we all brush our teeth before breakfast instead of after breakfast? Saint Conleths College, 28 Clyde Road, Ballsbridge, Dublin 4

What is the best formula for bouncy balls?

Kildare Place School, 96 Upper Rathmines Road, Rathmines, Dublin 6

Can smells help us learn and remember?

St. Clare's, Harolds Cross Rd, Harolds Cross, Dublin 6W

Luas - Tracht Scoile: Does traffic slow down passing our school? Gaelscoil Bharra, Ascal an Fhasaigh, Cabrach, Baile Atha Cliath 7



proud **display partner** of the BT Young Scientist & Technology Exhibition

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Supporting the BT Young Scientist & Technology Exhibition 2016

THE WORLD OF **SCIENCE** & TECHNOLOGY





Ireland

Stand W1: ARP

ABP Food Group Farm safety is an issue that just won't go away. ABP Food Group is the country's leading beef processor and we believe that we can play a role in helping create awareness about this problem and ultimately reduce the amount of accidents on farms. Through our association with the BT Young Scientist and Technology Exhibition we want to help change attitudes at school-age level and empower young people to be ambassadors for farm safety in their own communities across Ireland. Our stand, located in the Industries Hall, is focused on interactivity and highlighting the simple dangers that lurk around every corner of the farm yard.



Stand W2: Henkel

Henkel Henkel is a global leader of brands and technologies organised into three Business Units • Laundry & Home Care • Beauty Care • Adhesive Technologies Founded in 1876, Henkel holds leading market positions both in the consumer and industrial businesses, with brands such as Persil, Schwarzkopf and Loctite. Henkel employs about 47,000 people and reported sales of 16.4 billion euros in 2014, expected to grow to 18 Billion for 2015. Henkel Ireland Operations & Research Ltd, located in Tallaght, Dublin is a centre of excellence for adhesive technologies. New Innovative products are developed in the Dublin R&D centre where there are currently 120 employees, the majority of whom are science &engineering graduates. The technology centre is one of the primary locations of the Global Acrylics Technology, with a focus on fundamental & applied research in cyanoacrylate and acrylic technologies. The technology centre collaborates with universities and academic research institutes in many areas including composites, nanotechnologies and advanced material science.



Stand W3: CONCOS

Coláistí Samhraidh (An Gaeltacht)

Is é CONCOS an scáth-eagraíocht do formhór Choláistí Samhraidh na tíre. Tá na Coláistí Samhraidh lonnaithe i ngach Gaeltacht, chomh maith le roinnt Colaistí sa nGalltacht.

Tá fíor-thábhacht ag baint le Coláistí Samhraidh chun feabhas a chur ar labhairt, líofacht agus saibhreas na Gaeilge do dheagóirí a bheas ag iarraidh na marcanna is mó a bhaint amach san Árd Teistiméireacht. Tá 50% marcanna le fáil ar an Teanga Labhartha, sé sin, 40% don béaltriail agus 10% don cluastuiscint.

Bígí linn i Samhradh 2016 chun spraoi, spórt agus craic a bheith agaibh agus sibh ag cur feabhas ar bhur chuid Gaeilge!

Irish Language Colleges

Concos is the umbrella organisation for most of the country's Irish Language Colleges.

Irish Language Colleges are located in all Gaeltacht regions as well as some in non-Gaeltacht regions.

Irish language Colleges have a very important role to play in improving fluency and enriching the spoken Irish Language for teenagers who want to get the highest marks possible from the Leaving Certificate.

There is 50% of marks given on the spoken language, 40% for the Oral exam and 10% for the Aural exam.

Join us this summer (2016) for fun, sport and craic while improving your Irish!



Stand W5: ICHEC

The Irish Centre for High-End Computing (ICHEC) is a national technology centre that manages Ireland's fastest supercomputer, Fionn. Through high performance computing (HPC), we enable scientists and industry to carry out large-scale simulations and data analysis in a wide range of areas from nanotechnology, climate and weather, geology, astronomy to genetics. ICHEC also collaborates with many other HPC centres around Europe as a member of PRACE (Partnership for Advanced Computing in Europe), which offers some of the most powerful supercomputers in the world for researchers. This year the ICHEC stand will provide a variety of exhibits related to HPC and its applications, including how weather forecasts are done with supercomputers, engineering & physics simulations and a car racing video game where the player can tweak the design of the car. Visitors to the booth will experience hands-on demonstrations and informative presentations from ICHEC staff. There'll also be giveaways and competitions to be announced at the event.



Stand W6: Patents Office

The Patents Office is a statutory office and operates under the aegis of the Department of Jobs, Enterprise and Innovation. The role of the Patents Office is to provide an efficient and effective system of industrial property protection. This is to be achieved through the protection of industrial property rights in the fields of patents (for inventions, function), trade marks (name, logo, slogans) and designs (appearance, shape & configuration) and the dissemination of relevant information in conjunction with each of these activities. Come along and visit us at our stand to find out more about patents, trade marks, designs or copyright. Test your knowledge by taking part in our quiz and you could be the lucky winner of one of our prizes! We look forward to meeting you! For further information on the Patents Office you can check out www.patentsoffice.ie or follow us on Facebook.



Stand W7: TEAGASC - The Agriculture and Food Development Authority

Teagasc supports science-based innovation in the agri-food sector to underpin profitability, competitiveness and sustainability. It contributes to the national programme of innovation activities including the creation of commerciallyapplicable knowledge. Teagasc is committed to transferring its discoveries from the lab to industry for the benefit of the Irish economy. Developing partnerships and collaborations with industry is central to our strategy. Companies can engage with us by way of services and contract research, collaborations and commercialisation of intellectual property. We offer specific capabilities, services, know-how and specialised infrastructure and we have available technologies developed in-house for which we are actively seeking industrial partners for commercialisation. A critical element of our service offering is Moorepark Technology Ltd. (MTL), a modern plant containing pilot-scale processing equipment for the dairy industry. The meat industry is served by a meat technology centre, and specialised laboratories are available in support of the overall food industry.



Stand W8: Easonology

Easonology is an Eason developed zone in which Challenge, Creativity and Discovery inspire learning and fun with games, gadgets and science sets. Come visit our Easonology stand in the Science & Technology area where we will be demonstrating science based games and hosting fun challenges throughout the day. Join the "Lego Mixels Race" to see if you can beat the current record by building a Mixels model in the fastest time. Great prizes to be won for you and your school! You can also check out our range of Science games and gadgets available nationwide at the Easonology stand.

For more info on Easonology visit www.easons.com









Stand W10: The Psychological Society of Ireland

The psychological Society of Ireland (PSI) is the professional body for psychology and psychologists in Ireland. Our main aim is to advance and promote psychology as a discipline and practice. We do this by supporting research and development; the study of psychology at graduate and undergraduate levels; and making the results of our work available and usable by people who work in the area of human endeavour to enable them to enhance the quality of life for all our citizens.

We ensure that anyone who practices psychology works to the highest ethical standards and behaves in a professional manner at all times.

Come and see for yourself by visiting our stand.

This year we will show you the mysteries of the human perception...how your senses of smell and taste work. Can you tell what something is when blindfolded? Can you tell the difference between an illusion and reality; can you really believe your eyes?

Check your ability to identify strange sounds. Take a risk to explore our touch sensations and guess what they are! See you there!



Stand W11: The Maths Tutor.ie

Ireland's Leading Online Support System for Project Maths!

Want to improve your maths? Need some help with exam preparation? We're here to help!

We specialise in Project Maths support, and we'll help you to get on top of it, one topic at a time.

We provide you with Video Lessons, Online Support and Exam Preparation, all specially designed for Irish secondary school students. If you find it hard to learn maths from old-fashioned textbooks, you will love this new approach!

At themathstutor.ie, we've taken the grind out of maths! No need to waste time and money going to expensive grinds any more – learn and get support from home or on the move, any time of the day, on your laptop, tablet or smartphone. We're there for you, 7 days a week!

Remember, our system is the only one that fully covers Project Maths, with Irish teachers teaching the Irish syllabus, and supporting you every evening and at weekends. Don't waste your time on topics that aren't on the Irish syllabus – we've got you covered for your exams!

Our team literally "wrote the book" on exam technique and we'll show you how to maximise your maths grade. With all this support for Irish maths students, no wonder we were voted the top-rated e-learning system by The Irish Times!

You can try out themathstutor.ie with no obligation, and you can choose to upgrade to Full Membership at any time. We've had rave reviews from students, parents and teachers – so now it's your turn to try it out for yourself!

SPECIAL OFFER! We're running a very special offer during the BT Young Scientist Exhibition, so make sure to call to our stand and say hello. Looking forward to meeting you!



Stand W12: Centre for Talented Youth Ireland

The Centre for Talented Youth Ireland (CTYI) provides enrichment courses for students with high academic ability, as well as university style courses for students of all ages and aptitudes. Established in 1992 at Dublin City University, CTYI aims to allow talented students to reach their potential both academically and socially by providing relevant and interesting challenges based on ability and interest, rather than age. Once a student is identified, they are eligible to attend exciting classes in everything from Aeronautical Engineering to Zoology, in DCU and other institutions around the country. Since its establishment some 50,000 students have participated in classes run by CTYI.

For more information see www.dcu.ie/ctyi



Stand W12a: Studvclix.ie

Studyclix is Ireland's largest study website and is used by over 50,000 students and more than 80% of teachers. Studyclix breaks all the junior and leaving cert subjects into topics and for each topic gives you past exam questions, marking schemes and videos and sample answers. Come visit us at the Studyclix stand to get discount vouchers and loads of other free stuff. Teachers should also come see us to find out how you can get set up for free and get Studyclix for your class.



Stand W13: Institute of Physics in Ireland

There will be hands on action at the Institute of Physics stand as we put the fun into fundamental physics. Try your hand at light painting, explore colours, shadows and much more more. Along with exhibits and demos you won't leave empty handed as you can pick up plenty of posters, details on hundreds of physics career options and a guide to all the third level physics courses in Ireland.



Stand W14: Marie Keating

Following their mother Marie's death in 1998, the Keating family promised that they would do everything they could to bring an end to cancer. They committed to provide all families with the necessary information to prevent cancer or detect it at its earliest stages. Through its community information service, the Foundation's dedicated nurses have enlightened over 200,000 people of the causes and risk factors of cancer. The Foundation is continuing to expand its awareness campaigns on the most common cancers affecting both men and women in Ireland, at local level through its community outreach approach as well as through national campaigns. Through its Comfort Fund, the Marie Keating Foundation provides financial assistance to people who are currently receiving treatment for any kind of cancer and who, as a result, find themselves in financial difficulty. In 2015 alone, over 300 families received assistance from the Comfort Fund. The Foundation also provides support to cancer survivors and those who have completed their treatment through its Survive & Thrive programmes. The Foundation holds programmes wellness days for both men and women nationwide.



Stand W16: NUI Galway

The students and staff of the College of Science at NUI Galway maintain vigorous research activity across the full range of Science disciplines including Chemistry, Physics, Mathematics, and the Biological, Biomedical, Environmental and Marine Sciences. At our stand you can experience the thrill of scientific research by participating in Cell EXPLORERS activities. This programme is an initiative of science communication and public engagement run by the School of Natural Sciences at NUI Galway. Cell EXPLORERS promotes biological and biomedical sciences through practical discovery. Please visit our stand and participate in these activities, which represent only part of the wide range of opportunities for scientific study and research at NUI Galway. Find out more at our stand about opportunities to study at NUI Galway, whether your scientific interests are in biology, chemistry, physics, mathematics, health science, earth or marine science, environmental science or any combination of these.



Stand W17: University College Cork

Visit the exhibition of the College of Science, Engineering and Food Science, UCC, to experience the latest breakthroughs and amazing discoveries of our worldrenowned research scientists. Be amazed at our scale model of an industrial facility showcasing renewable energy sources. Or maybe you want to be fascinated by Fossils! UCC will have a variety of dinosaur fossils on display - even those of the feathered variety!





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UNIVERSITY of LIMERICK

Stand W18: University of Limerick (www.ul.ie)

The Faculty of Science and Engineering, University of Limerick's (www.scieng. ul.ie) stand provides you the opportunity to experience interactive activities in Engineering, Physics, Chemistry, Biology, Equine Science, Electronics, Architecture, Design, Mathematics, Computer Science, Gaming, Architecture and much more. The Faculty offers extensive teaching and research programmes in a wide range of industry relevant scientific and engineering disciplines. All programmes include periods of co-operative, industrial or teaching experiences. The Faculty carries out world-leading research which translates into practice and develops a broader understanding of the careers in the fields of Science, Technology, Engineering and Mathematics (STEM) disciplines. The University of Limerick is home to the Bernal Institute www.scieng.ul.ie/bernal-project, a €52 million investment, which builds on our significant strengths in applied science and engineering. The Institute has recruited six world-leading professors to-date and constructed a new 12,000m² research facility. The University utilizes its research expertise to lead large inter-institutional research centres in pharmaceutical materials, crystallization, pharmaceutical processing, composite materials and dairy processing technology. Our academic programmes in Science, Engineering, Technology and Mathematics are wide and varied, offering many unique and sustainable careers essential to the growth of the economy. Whether it's the study of cloud computing, the pursuit of renewable energy technologies, the development of innovative company solutions or pioneering scientific research, the study options within Science and Engineering at the University of Limerick are extensive. The University of Limerick invites you to visit the campus to experience our progressive and exciting facilities in our beautiful campus.



Stand W19: Coláiste na Rinne, Gaeltacht na nDéise, Co. Phort Láirge

Tá Coláiste na Rinne suite i nGaeltacht na nDéise i gCo. Phort Láirge. Bunaíodh Coláiste na Rinne i 1905 agus tá cúrsaí éagsúla idir lámha ann le breis is céad bliain anois. Bíonn Scoil na Leanaí ar siúl ó Mheán Fómhair go deireadh Bealtaine, bíonn Cúrsaí Samhraidh ann i mí an Mheithimh, i mí Iúil agus i mí Lúnasa. Eagraítear cúrsaí do mhic léinn, lucht ollscoile agus daoine fásta freisin i gcaitheamh na bliana. Tugann Gaelscoileanna, Gaelcholáistí agus scoileanna eile turais - 3 lá nó 5 lá - ar Ghaeltacht na nDéise freisin. Tá gach eolas maidir le Coláiste na Rinne ar fáil

Coláiste na Rinne has been promoting the Irish Language, the cultural and heritage of Gaeltacht na nDéise, for over 100 years. It provides many different courses in Irish and through the medium of Irish to a wide variety of students each year. See the College website for all information www.anrinn.com.



Stand W20: Coláiste UISCE

Coláiste UISCE is a unique activity based Irish Language College and Adventure Centre situated in the heart of Mayo's Gaeltacht, where the teaching of Irish is intertwined with the enjoyable experience of modern exhilarating adventure and water sports. 'Learning Irish is fun' is our motto at Coláiste UISCE. We now have over 21 years' experience in providing safe, educational and enjoyable Irish and Adventure courses. The teaching of Irish through the thrilling medium of adventure sports helps students develop a positive attitude towards learning Irish. We believe that changing a child's attitude towards Irish is the most important step towards learning the language. We are extremely proud of our excellent teacher to student ratio of 1:6 during water sports. The 1:6 ratio ensures that each student receives quality instruction and personal attention which is unparalleled in any other Irish college. Outdoors our experienced instructors put into practice what students have learnt in the classroom. Learning Irish and changing student's attitudes is much easier in the outdoor class room. Students from Coláiste UISCE's not only return from the Gaeltacht speaking Irish with increased ease but they will also have a greater understanding of the language as a result of our practical approach to teaching the language



Stand W21: Sightsavers

Sightsavers is an international organisation working with partners in more than 30 countries to prevent and cure avoidable blindness in the developing world, and to support blind and disabled people to live independently. 80 per cent of blindness in the world is avoidable or curable. 90 per cent of people who are blind live in developing countries. This is incredibly unfair. In developing countries, just as health care is more difficult to access, so too is educational and occupational support for those who lose their sight. Most people who lose their sight can no longer work. They become dependent on their families. People with disabilities deserve the same opportunities as everyone else. Every year, we support our partners to carry out millions of eye examinations and refer people for treatment to prevent blindness and restore sight. Through community volunteers in developing countries, we enable the distribution of medication to prevent blinding diseases. We fund operations for people who need them, and train eye care workers and surgeons. We work with national governments, strengthening systems that tackle the problems at the root of avoidable blindness - the sorts of things most of us take for granted, like access to clean water, sanitation facilities and education. We make changes for the long term, and help change systems from the inside to ensure support continues to be given to the people who need it. We work with partners to train specialist teaching staff; supply glasses, Braille kits and other learning tools; and educate communities to reduce stigma around visual impairment and blindness. Because of Sightsavers, people who are visually impaired or have other disabilities are supported to live independently, get an education and earn an income. Sightsavers change lives for the better, for the long term.



Stand W22: W5

W5 is an award-winning science and discovery centre in Belfast, home to over 250 interactive exhibits that let you explore flight, weather, sound, levers, pulleys and so much more. As one of the top visitor attractions in Northern Ireland, W5 has been engaging visitors and educational groups with science, technology, engineering and mathematics for over fourteen years. Part of their achievements over that time is to have developed creative demonstration shows that really bring science to life! Why not drop by our stand to try out some of our favourite science tricks? Visit the W5 website at www.w5online.co.uk



Stand W22a: Bell Time Magazine

Bell Time Magazine is a free nationwide interactive digital lifestyle magazine and on line information resource promoting positive life choices for the education sectors in Ireland. Bell Time Magazine is accompanied by a number of social media channels. It is also available as an ibook and app free to download on the Apple Store and Play Store. We also distribute print publications in hard copy format to every school in Ireland.

Our magazines and website are lifestyle in nature covering a wide and varied spectrum of topics that are of significant interest to teachers, students and parents alike. Our platforms allows school communities access to high quality, engaging. focused articles and materials which comes to them completely free of charge either in print or digital format.

We have some exciting prizes to give away with our "Vote for Your School Campaign" including a top of the range computer for your school and laptop for

We are looking for Brand Ambassadors and Writers also! Come Visit our Stand for more information. We look forward to meeting you!



Stand W23: IBEC

PharmaChemical Ireland, and the Irish Medical Devices Association the two Ibec groups which represents the pharmaceutical, chemicals, the medical devices and diagnostics sectors respectively, are delighted to have Royal Society of Chemistry.







Eli Lilly and Stryker Ireland joining us on the stand this year. The representatives on the stand will showcase how science and technology play an integral role in our daily lives. Visitors to the stand will be delighted by a range of interactive demonstrations from exciting chemistry experiments, to demonstrating an innovative access airway medical device and keyhole surgery using innovative medical technology instruments and cameras. This is a great opportunity to find out about the range of careers in both the biopharma and medtech sectors. The pharmaceutical, chemicals and medical technology sector is vital for Ireland's economy. These growth sectors generates over 58 % of the country exports employing over 50,000 people, and represent significant and exciting career opportunities for future graduates.



This year we've brought the BT Technology stand to BT Young Scientist event. It's an exciting time for telecoms with the demand for faster broadband speeds growing and the applications of high speed internet access endless. Were passionate about technology. Our stand tells the story of the innovation history of BT and where the internet comes from; from the network to your home. Our smart home section show the amazingly clever ways that internet can be used. We're running an 'Internet of Things' competition. The best idea for making use of superfast broadband connectivity will win a Raspberry Pi; a computer the size of a

Remember to tweet us at #BTYSTE to see your tweet on screen in our BT 'Smart



Stand W25: Analog Devices

Analog Devices is a world leader in the design and manufacture of analog, mixedsignal, and digital signal processing (DSP) integrated circuits (ICs) used in a broad spectrum of electronic equipment. Our products play a key role in translating real-world phenomena like motion, sound, temperature, pressure and light into electronic signals and back again. Thomson Reuters list Analog Devices among the world's 100 most innovative organizations. Impactful innovation has always been a hallmark of Analog Devices, who this year celebrate a 50th Anniversary globally and 40 years in Ireland. Headquartered in Boston, USA, Analog Devices' European base are its development centers in Limerick and Cork which employ over 1200 people solving our customers' toughest problems and enabling important new discoveries that bridge the physical and digital worlds.

Analog Devices is proud to support the BT Young Scientist & Technology Exhibition and view our support as added encouragement to students in 2nd level education to consider areas in Science and Technology when considering choices for 3rd level education. Irish Engineers working with Analog Devices hold the largest number of US patents in Ireland because we just love to invent and innovate! Our engineering team would like to welcome you to our stand in the Technology Hall where our engineering team will open your mind to the fun, interesting and downright weird applications of science and technology in everyday life. Come and test your skills, knowledge and scientific understanding with some of the new demos which we have on display this year. Can you escape from the Laser Vault and avoid breaking the laser beams? What's new in our technology corner? Find out how our RGB ball uses persistence of vision to create a cyclic multi-colour effect. Test your brainpower with our interactive Mind Boggle Quiz but most of all visit our stand to stimulate your interest in the amazing world of Science and Technology.



Stand W29: School Digital Champion

The School Digital Champion programme was launched in 2015 in line with the Government's Digital Strategy for Schools and the National Digital Strategy. Schools and students are invited to become involved in this exciting programme by completing a project showing how digital technology skills can be used to make an impact in the school, local business or the wider community.

Employers are placing increasing value on 21st century skills. It is more important than ever that learning becomes something that happens inside and outside of the school. School Digital Champions will be recognised as leaders and role models in the development and use of digital technologies within their school. They will get the opportunity to participate in a skills training day, meet with leading technology companies and network with other Champions and the Digital Youth Council. Come to our stand and learn more about the benefits and opportunities provided

by participating in 2016/2017 School Digital Champion programme.



Stand W30: Science Foundation Ireland

Science Foundation Ireland (SFI) is the national foundation for investment in scientific and engineering research. SFI invests in academic researchers and research teams in the Higher Education Institutions in Ireland, who are most likely to generate new knowledge, leading edge technologies and competitive enterprises. SFI Discover, the education and public engagement programme of SFI, aims to increase interest in science, technology, engineering and mathematics (STEM) among students, teachers and members of the public. The mission is to contribute to Ireland's continued growth and development as a society - one that has an active and informed interest and involvement in STEM. SFI Research Centres help link scientists and engineers in partnerships across academia and industry to address crucial research questions, foster the development of new and existing Irish-based technology companies, attract industry that could make an important contribution to Ireland and its economy, and expand educational and career opportunities in Ireland in science and engineering. SFI supports the BT Young Scientist and Technology Exhibition in order to promote the benefits of investing in scientific and engineering research to young people and the general public and to encourage young people to consider undertaking a career in science and engineering. Come visit our stand in The World of Science & Technology. Science Foundation Ireland Wilton Park House, Wilton Place, Dublin 2 Website: www.sfi.ie



Stand W31: European Union

Join us for an unforgettable experience - there'll be slime, plasma balls, elephant toothpaste, mini smoke cannons, energy sticks, a hurricane in a bottle and, as if that wasn't enough there'll also be a Van Der Graff generator to make your hair stand on end! We've teamed up with scientists from the Junior Einsteins Science Club who will demonstrate how these fun experiments relate to real life research and explain the many exciting careers you could have as a scientist in areas like: astronomy, medicine, genetics, palaeontology, or criminology to name but a few. And don't forget to check out our fun selfie board - take a photo and share it with your friends. Free resources on the European Union will be available for all visitors and Information Officers will be available to assist you with questions about EU policies. The Joint Research Centre (JRC), the European Commission's in-house science service, will also be on hand to provide information on their activities. We look forward to meeting you at the EU Stand!

Contact us: The European Commission Representation in Ireland Tel: 01 6341 111 Website: www.eurireland.ie Facebook: @EUIreland Twitter: @eurireland #EUIrl



Stand W32: CODERDOJO

Giving kids and young people all over the world better access to the Magic behind the technology that surrounds us and touches almost everything that we do in our lives, CoderDojo is a global community of free programming clubs for young people. The CoderDojo community is at BT Young Scientist for another year of fun! CoderDojo helps young people in 850+ locations across 63 countries to learn how to code, everything from apps and websites to robots that can bring you a cup of tea. This year at the BT Young Scientist, the CoderDojo booth will be showcasing the creativity inspired and encouraged at CoderDojos across the world. Don't miss it and make sure to drop by!



Stand W33: ICON plc

ICON is a global provider of drug development solutions and services to the pharmaceutical, biotechnology and medical device industries and is one of Ireland's most successful indigenous companies. The company was established in Dublin in 1990 with 5 employees and has since grown to over 11,700 employees operating from 77 locations in 38 countries. ICON employs over 1,000 employees from its global headquarters in Dublin and from an office in Limerick. ICON's





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mission is to help customers accelerate the development of drugs that save lives and improve the quality of life. The company does this by conducting studies on behalf of pharmaceutical, biotechnology and medical device companies to test the safety and effectiveness of new drugs and treatments. ICON works with all of the world's leading pharmaceutical, biotechnology and medical device companies and manages clinical trials across all therapeutic areas.

More information is at www.iconplc.com



Stand W34: Veterinary Council of Ireland

Vets care for animals and people Veterinary medicine is a hugely important profession, dealing not just with animal welfare but with food safety, new food sources, livestock healthcare, medical research, and environmental protection. The stand, which will feature posters explaining the broad scope of the profession, has been put together with the help of the UCD School of Veterinary Medicine. It is staffed by UCD students who will answer all your questions about veterinary medicine. There will even be a life size cow that you can milk!



Stand W35: Junior Cycle for Teachers (JCT)

Junior Cycle for Teachers (JCT) is a continuing professional development (CPD) support service of the Department of Education and Skills. JCT supports schools in their implementation of the new Framework for Junior Cycle through the provision of appropriate high quality CPD for school leaders, whole school groups and teachers of specific subjects. The JCT Science team will be at the exhibition stand. They will be able to answer questions about the new Junior Cycle Science subject specification. It will be introduced in schools from September 2016. The team can discuss the CPD for teachers of science which begins in January 2016. They will also have plenty of ideas and exemplars of innovative science teaching and learning that will be sure to engage students, parents and teachers. JCT is delighted to be at the BTYSTE 2016.







Stand W36:

BetterExaminations

BetterExaminations.ie is a user friendly way for second level students to access past State Examination material. A substantial problem in the the studying process is the factor of time wasted. After two years of market research, we have discovered that a large proportion of time wasted is found in the preparation time - collecting the necessary date before the student actually studies. With BetterExaminations, we aim to greatly reduce this problem through a number of our BetterExaminations Features.

By using our site, we offer students the ability to locate past exam material that is 8 times faster than any other method. Our BetterExaminations Search Engine allows students and teachers to quickly find particular topic questions. In addition, we provide statistical data on four years of grade distribution, iOS app and much more. BetterExaminations.ie takes the burden out of studying papers and allows for a 'Better' studying experience.

FenuHealth

FenuHealth came into being as a result of the 2015 BTYSTE. Founded by sisters Kate [14] and Annie Madden, both students in Loreto College, St Stephen's Green, FenuHealth will be celebrating it's first birthday in February and what an amazing year they have had! Their project was about adding a flavour to horse feed to encourage horses to eat and 70% of horses prefer it...a simple idea that has led to their business being listed in the Irish Independent's "Top 30 Start-up Companies of 2015" and in The Sunday Independent's "Top 30 Companies for the under 30 year olds". Horse Racing Ireland gave the sisters a Race Day in Leopardstown last July where almost 200 of their customers from several countries attended.

The sisters are selling through their website FenuHelath.com and also on their Facebook page together with exports throughout Europe, The Middle East, Hong Kong and New Zealand with plans to expand into the USA and beyond this year one of the leading equine surgeons in the world, based in the USA has offered to help with the expansion into the states.

R & D continues, one of the positive side effects which is being currently investigated is the possible benefit of FenuHealth with Equine Gastric Ulcers - success here would increase their market over one hundred fold as over 90% of race horse have such ulcers! The product has already been tested for Naturally Occurring Prohibitive Substances [NOPS] to parts per billion and has passed all tests. FenuHealth meets the standards required by the Olympic Council, Federation Equestre Internationale, The Turf Club and the Jockey Club.

Work is at an advanced stage in gaining all the approval and licenses required to conduct a full clinical trial which the Madden sisters intend to fund through retained earnings and from private investors.

For further information, please PM FenuHealth on Facebook.

Project Zilkr

Project Zilkr is a one stop shop for young innovators 13 to 20. Upon creating an account, young people will receive access to the advice and information required to complete a step by step process for developing startup ideas.

From market research to financials, the site can be used to work through the process of disciplined entrepreneurship. Users can set their own goals and complete missions to gain rewards and watch their ideas grow and consult and online mentor if they need any help along the way. When a project has been brought through each stage of Zilkr curriculum it can be posted to the 'completed projects' section where angels and investors will be able to view the details of the projects and, if interested, invest. In this way the site also becomes a platform for crowdfunding of youth led ideas.

Restored Hearing

Restored Hearing is a company born out of a Young Scientist project and whose products treat tinnitus and noise pollution. Restored Hearing is the inventor of two patented acoustic technologies - Sound Bounce and Sound Relief.

Sound Bounce is a patented, highly cost-effective, advanced material for absorbing sound. It can be configured to attenuate sound depending on frequency and amplitude. Sound Bounce allows low-level sound such as speech to pass through, dramatically improving the communication potential of hearing protection, while blocking harmful noise levels.

10% of the global population experiences tinnitus, with around 2-3% having a serious debilitating problem. Sound Relief is a clinically proven, CE marked, online sound therapy for tinnitus. Sound Relief uses low frequency sound to achieve therapeutic benefit by modifying neurological signals associated with tinnitus. The treatment is made available via the web, and mobile apps.



Stand W37: Deer Park Schoolwear

Deer Park is Ireland's leading School Jumper manufacturer. For over 32 years now they have being manufacturing the highest quality school knitwear. Apart from creating much needed employment in Ireland, they can ensure first-hand that only quality raw materials and standards of production are used. This gives you the longest lasting School Jumper on the Irish market. There is no comparison when it comes to generic imported jumpers. In fact unlike most of their competitors, Deer Park actually knit their jumpers still in Ireland. This creates over 50 Irish Jobs in their local community in Kildare. Deer Park invites you to call to their stand and see first-hand the product collection they offer. They will explain the major differences between a true Irish quality brand - Deer Park and other imported jumpers. They will dispel the myths over pricing and explain why the school jumper is the one item of the uniform they feel should be maintained. Also check out their new range of Irish Made School Scarves not to mention that large range of Softshell School Jackets - the smarter alternative to the traditional school jacket that students much prefer to wear! Is your School Jumper Deer Park? If so, pop along to the stand where they will also be having giveaways throughout the week. Follow us on Facebook www.facebook.com/DeerParkSchoolwear or check out www.deerpark.ie



Stand W38: EMC

Do you have a natural talent or a passion for maths, science and technology? Do you want to be involved in the next big wave in information technology; storing and analysing huge volumes of structured and unstructured data? Well, so do we! Come along to the EMC stand to learn more about the Internet of Things and how we are Redefining Software. Talk to our employees about the unique culture and working environment that has won EMC Ireland a "Great Place to Work" every year since 2010. We're waiting to meet you. EMC, the world's leading developer and provider of information infrastructure technology and solutions, celebrates 28







years in Cork and its sixth year as a Centre of Excellence (COE). With 30+ business functions, it is the largest EMC manufacturing site outside of the US and EMC now employs over 3,000 people in Ireland.



Stand W39: Science and Technology in Action

Have you ever wondered how the science taught at school links to what is practised in our leading organisations? Would you like to learn more about how the school curriculum relates to science and technology in the workplace? Science & Technology in Action (STA) is an innovative teaching and learning resource which brings industry and education together. For use by second level teachers and students, all the resource materials across the editions are available on www.sta.ie and the latest 11th edition of the hard copy pack was delivered to each school free of charge during November 2015. Each lesson in the pack relates to the activities of the participating organisations whilst also linking with the curriculum. In this way, the lessons help to enhance the relevance of science and technology to our everyday life. This grounding in reality is designed to engage students in the real world of science and technology.



Stand W40: Irish Science Teachers' Association / Eol Oidí na hÉireann

The Irish Science Teachers' Association is the professional association of science teachers in the Republic of Ireland. It is over fifty years in existence and is the longest established provider of CPD for science teachers in Ireland. ISTA is a voluntary organisation and works in close collaboration with international organisations such as ASE NI, UK & Scotland and EU via Scientix. It is a founder member of ICASE (International Council of Associations for Science Education). ISTA is one of the pioneers of collaborative learning, linking in with DES, NCCA, SEC, IoPI, BTYSTE, SciFest, industry and Third Level institutions. Many organisations communicate their outreach initiatives via our association as we have an extensive communication network. www.ista.ie @IrishSciTeach & Facebook.

ISTA organises events at regional and national levels. The ISTA Annual Conference is a very popular event and internationally renowned speakers are invited to present frontier science to teachers. "Science Education in Ireland - New Frontiers!" will be held in Limerick Institute of Technology on 8th-9th April 2016. All welcome!

INTELLECTUAL VENTURES®

Stand W41: Invention Investment Ireland – Intellectual Ventures

Invention Investment Ireland (III) is the management company for Intellectual Ventures newest Intellectual Property (IP) investment fund, providing a full range of asset management and licensing services. III manages our investors' funds and uses the capital to invest in the acquisition and development of a wide variety of U.S. and international IP in existing and emerging markets. Our goal is to create an international market for the efficient transfer of invention rights, providing the highest value possible for our investors and customers through the license and sale

Historically the majority of invention investment funds have resided in the United States. III identified an opportunity to increase access to international investment capital and enable broader geographic reach across markets for IP acquisition and monetization. Dublin is the ideal location to base our operations: Ireland has a flexible and open economy, a deep pool of talented people from which to build our team, and a strong tradition of supporting knowledge based industries and innovation. Business Model To create an international market for invention rights, the III team in Ireland will utilize their vast experience to develop the fund's investment strategy, build a patent portfolio, and monetize through licensing and selling activities. III will also leverage Intellectual Ventures' North American and Asian based operations to grow the global IP market. Buy We acquire inventions from individual inventors, small to large sized companies, universities, start-ups, and brokers, and then develop and compile the IP assets into highly relevant industry-focused portfolios. License and Sell We engage with companies around the world, of all sizes, to minimize their Invention Gap™ exposure—the difference between the invention rights they have and the invention rights they needacting as a strategic partner for present and future intellectual property.



Stand W42: Central Statistics Office

The Central Statistics Office (CSO) is responsible for the collection and dissemination of official statistics in Ireland. We measure all of the country's activities from Births, Deaths and Marriages, to where and how people live and travel, how our Government collects and spends money and the activities of our businesses and the wider economy. We publish our figures (data) on our website, www.cso.ie, to help people make sense of what's happening in our country. Lots of people use the data that we publish to help them make important decisions. Being able to use the figures that the CSO publish is a skill and it is important that individuals and organisations can use this information effectively. The CSO has a number of projects to encourage young people to use our products. At our stand you can test your statistical knowledge by taking part in a statistical quiz. You can learn about our exciting John Hooper poster competition, the Apps4gaps app design competition and our annual school.



Stand W43: Health Products Regulatory Authority (HPRA)

We are the Health Products Regulatory Authority (HPRA) and our role is to protect and enhance public and animal health by regulating medicines, medical devices and other health products. We are a state agency that puts the health of people and animals at the core of everything we do. We use our scientific and clinical expertise to review and monitor health products available in Ireland or exported abroad. Our aim is to make sure that health products we regulate are as safe as possible and do what they are intended to do. Formerly known as the Irish Medicines Board (IMB), we became the HPRA in July 2014. Our new name better reflects our broader remit and regulatory functions which have expanded over a number of years to include: • Human medicines • Veterinary medicines • Clinical trials • Medical devices • Controlled drugs • Blood and blood components • Tissues and cells • Cosmetic products • The protection of animals used for scientific purposes • Organs intended for transplantation



Explore the RTÉ set at this year's BT Young Scientist & Technology Exhibition! Join us for an exciting line up of activity across television, radio and digital services. RTÉ will broadcast programmes live from the set, so there promises to be lots of lights, cameras and action! RTÉ 2fm's Tracy Clifford, The Nicky Byrne Show with Jenny Greene, and Rick O'Shea will broadcast live from our radio studio. Raidío na Gaeltachta and RTÉ Pulse will also broadcast from there. Two Tube's Stephen Byrne and Blathnaid Treacy will be filming on the set each day and the weather team will broadcast live from our weather studio. Visitors to the set will have a chance to try their hand at presenting the weather forecast too and plenty of surprise visitors will be dropping by. You might even get a chance to interview your favourite presenter! Be sure to come along and enjoy lots music and entertainment or have a go at the RTÉ Player interactive game PhysiQuiz. Check in at the RTÉ stand or follow RTÉ on Twitter, Facebook and Instagram. Keep up to date #rtebtyste



Stand W45: Intel Ireland

instagram.com/BTYSTE

Intel Ireland joins the BT Young Scientist and Technology Exhibition again this year with its usual mix of high technology, interactive exhibits and exclusive giveaways! Intel Security will make sure you are safe to surf online with fun quizzes and a crack the code challenge. Intel's Communications and Intelligent Systems division from Shannon will showcase some very attractive communications demos sure to generate much interest over the 3 days. Try out the Oculus Rift goggles and have a go at playing the Elite Dangerous, Close Quarters Combat (CQC) game. Check out the Lenova B5030 with the built in Intel® RealSense™ Technology 3D F200 camera, which enables users to interact with the Lenovo all-in-one device through hand gestures and facial expressions. Also on show will be the fully functioning PC that not only fits your performance needsâ€"it fits in the palm of your hand. Our stand will be staffed with many of our young Intel engineers who will be able to tell you what it's like to work in one of the most technologically advanced companies in the world. We look forward to welcoming you to our stand in the Industry Hall and showing you the power of Intel inside!

















Call to the Ecozone where you can discover the wonders of science and technology, the ingenuity of engineering and the magic of maths in a fun and interactive way at the ever popular Waterford Science Region stand. Explore microbes and macroinvertebrates and meet Bengie and other robots. You can also have some fun with the Maths Week Ireland displays and you might even meet 17th century Irish scientist, Robert Boyle. Shows will take place throughout the day.

The stand is coordinated by leading STEM centre, Calmast from Waterford Institute of Technology in cooperation with leading Waterford based pharmaceutical and healthcare companies Bausch & Lomb, Teva and Genzyme along with Waterford Council, who are all working together to make Waterford a Region of Science. We are delighted to support the terrific BT Young Scientist and Technology Exhibition for the 14th year.

www.calmast.ie



Stand 2: Geological Survey of Ireland

The Geological Society of Ireland (GSI), is the National Earth Science Agency. It is responsible for providing geological advice and information, and for the acquisition of datafor this purpose. GSI produces a range of products including maps, reports, and databases andacts as a knowledge centre and project partner in all aspects of Irish Geology. It is a division ofthe Department of Communications, Energy & Natural Resources (DCENR) and has about 40multi-disciplinary staff. Geological Science is the science of the earth and geologists are those scientists who studythe earth. Geoscience makes a big contribution to our lives and this stand will help promoteknowledge of that contribution. The partners in the stand are showcasing, earthquakes, water and minerals as well as Ireland's rocks. Projects highlighted include Tellus Border and INFOMAR.

Joining the Geological Survey of Ireland on the stand are the Exploration Mining Divisions alsofrom the Department of Communications, Energy and Natural Resources, and we are working in association with the Dublin Institute for Advanced Studies, Natural History Museum, Geological Survey of Northern Ireland, and the Marine Institute, with representatives from Irish Geological Association, Institute of Geologists of Ireland and Earth Science Ireland.



Stand 3: Irish Aid, Department of Foreign Affairs and Trade

Department of Foreign Affairs and Trade: Ireland, through Irish Aid, the Government's overseas aid programme, is a leader in the fight against world hunger and poverty. Irish Aid is hosting an exhibition in the EcoZone at this year's BT Young Scientist and Technology Exhibition. Come and view our displays, farming tools and produce, which allow visitors to learn about life for farming communities in Africa. Visitors to the Irish Aid stand can also sign up for African Drumming workshops, take part in a quiz and learn more about the work of the Irish Aid programme and how you and your school can get involved.





Stand 4: GM Opel Ireland

The Opel brand is defined by its emotional appeal and advanced engineering, with pioneer innovations that bring class-leading technologies to the range. The evolution of Opel's design philosophy "Sculptural Artistry meets German Precision" ensures that the fleet is future-oriented, and continues the brand's award winning tradition of introducing features previously only known from higher segments. With over thirty five Opel Dealers and service centres nationwide, you are never far away from an Opel model that will suit your needs and surpass your expectations. German engineering and design is renowned throughout the world and the current Opel range contains the very latest in innovative technology. Opel OnStar, your personal motoring assistant providing Automatic Crash Response, Destination Download, Vehicle Diagnostics to name but a few, and soon to include WiFi Hotspot for up to 7 devices is just one example. There is a model to suit every driver, whether you are looking for a small City Car like the Adam or the Karl, the

Corsa (recently voted small car of the year) or the all new Astra, which has the latest innovative IntelliLux® LED Matrix headlights allowing you to see objects up to 40 meters further than conventional headlights. Looking for comfort and style on a larger scale? Perhaps the Opel Insignia is the car for you. Opel Ireland is a division of General Motors Group and along with providing private motor vehicles also provides fleet sales and leasing to a wide circle of industries. Popular commercial vehicles include the Corsavan, Mokkavan, Combo, Vivaro and Movano.





Stand 5: National Parks & Wildlife Services

The National Parks & Wildlife Services (NPWS) is responsible for the protection of Ireland's natural heritage and Notice Nature is Ireland's public awareness campaign on biodiversity. The NPWS stand in the Ecozone will have exhibits, information and other materials available on why biodiversity is so important and why you should protect it. This will help halt the damage being done to our plants and animals and the landscape, waters, and habitats in which they live. See www.noticenature. ie for more information. NPWS Education & Visitor Centre at the NPWS operate a number of Education & Visitor Centres around the country offering various activities and learning opportunities aimed at teachers and students alike. Our education Officers have designed a range of school programmes aimed at promoting awareness of, knowledge and an appreciation of our native flora, fauna and their habitats our biodiversity. Education Officers will be on hand to discuss activities and school programmes available from the NPWS. Further information is also available on www.npws.ie



Stand 6: Order of Malta

The Order of Malta Ambulance Corps is a voluntary ambulance and first aid organisation with over 4,000 volunteers involved in over 80 units across the Island of Ireland. We are a major provider of excellence in first aid training, ambulance cover at large events, patient transport, community care, nursing services and assistance to other charities in most of the major cities and towns across the island of Ireland. - Caring for the community The Ambulance Corps is committed to providing caring services in a Christian, caring and non-discriminatory manner, to 'Our Lords, the Poor and the Sick'. Order of Malta Ambulance Corps, providing excellent standards of first aid training, community care facilities and services, delivered by people who care, with quality assured standards of training. We operate over 165 ambulances, rapid response 4's, mobile accident and emergency suites, support vehicles, medical bikes and command centres. Our headquarters also houses a command and control centre to coordinate vehicles and personnel in the event of a major incident. We are an entirely voluntary organisation and we receive no state funding. Should you have any queries or would be interested in joining us, come along and visit us at our stand.



Stand 8: Petroleum Infrastructure Programme

Indigenous clean gas is the preferred transition fuel to a de-carbonised energy future, that compliments intermittent renewable energy. The Petroleum Infrastructure Program is a government/industry/academic research initiative that promotes hydrocarbon exploration and development activities offshore Ireland by:

- Developing Irish expertise in hydrocarbon exploration
- Funding hydrocarbon exploration research in Irish universities and other third level institutions
- Encouraging collaboration between the hydrocarbon exploration industry and Irish researchers

The objective of our participation in the BT Young Scientist and Technology Exhibition is to promote the exciting activities and career opportunities in earth science, in particular in earth science research and the petroleum industry. At our stand you will find rock samples recovered from 10,000ft below the seabed offshore Ireland; samples of crude oil and oil reservoir rocks; seismic sections of Ireland's offshore geology; and plate tectonic animations.

Young Irish graduates will be on the stand to explain why they studied geology and describe a typical day in the life of a petroleum exploration geologist.









Stand 9: Young Scientists Tanzania

Young Scientist Tanzania (YST) is an innovative initiative to transfer the successful BT Young Scientist & Technology Exhibition (BTYSTE) to Tanzania. YST is supported by the Young Scientist & Technology Exhibition and the Tanzanian initiative will be based and developed on the Irish model. YST was launched in Tanzania on 8th November 2011 and the first YST Exhibition was held in Dar-es-Salaam from 24-25th October 2012. The winning YST project from the 2015 Exhibition will be exhibiting in the RDS, so do try and pay them a visit.



Stand 10: WorldWise Global Schools & Gorta-Self Help Africa

WorldWise Global Schools and Gorta-Self Help Africa: The Science for Development Award Irish Aid and WorldWise Global Schools sponsor the Science for Development Award, which was initiated in 2005 by Gorta Self Help Africa. The award is presented every year at the BT Young Scientist & Technology Exhibition. The award encourages teachers and students to develop ideas in response to global issues of poverty, inequality and injustice. Students may decide to explore attitudinal and behavioral aspects of the root causes of poverty, or choose to utilise specific technology or materials that will meet the needs of communities in the Global South. The award is intended to give students a greater insight into the globalised world we inhabit through the medium of science, playing their role as informed, engaged and active global citizens. This Science for Development Award is open to any entrant (individual or group) who has been accepted in the Intermediate or Senior sections of the BT Young Scientist & Technology Exhibition. The BTYS judges will examine every relevant project during the normal judging procedure. The award provides a bursary for one student and one teacher to travel on a study visit to a country in sub-Saharan Africa, in association with Gorta-Self Help Africa. Irish Aid's WorldWise Global Schools (WWGS) is the national programme for Development Education at post-primary level in Ireland. Through grant funding, tailored school visits, the Global Passport Award Scheme and an annual programme of events and training, WWGS works with schools across the country to embed Development Education into their teaching and learning, and to encourage students to understand and challenge the root causes of poverty and injustice. Gorta-Self Help Africa (GSHA) has a Development Education programme in Ireland. For 15 years GSHA have been supporting secondary schools across Ireland with interactive workshops, seminars, and learning activities on a range of topics, including global justice, fair trade, gender equality, poverty eradication and climate change. These activities are all designed to improve knowledge and understanding of the interdependent and unequal world in which we live. More information can be found at www.worldwiseschools.ie and https://selfhelpafrica. org/ie/education/



Stand 11: Environmental Protection Agency

Environmental Protection Agency Come visit our stand and learn all about radon gas. Did you know that it occurs naturally and that high levels can affect people's health? Find out what levels are like where you live, how you can test for radon and what can be done to reduce high levels of radon. The Environmental Protection Agency's mission is to protect and improve the environment as a valuable asset for the people of Ireland, and to protect our people and the environment from the harmful effects of radiation and pollution.



Stand 12: Road Safety Unit, An Garda Síochána

Road Safety Unit, An Garda Síochána The Garda Road Safety Unit The Road Safety Unit's overall aim is the reduction of road deaths and serious injuries and the improvement of road safety generally. The Unit is based in the Garda National Traffic Bureau and was established in 2001. The Unit delivers presentations on Road Safety to a number of groups in the community including: - • Schools and colleges • Youth Clubs • Senior Citizens • Local organisations • Industry groups The Unit's presentation, It won't happen to me, is mainly delivered to Transition Year students but can be adapted to cater for all audiences. It is a stand alone road safety presentation covering all the road safety ingredients including speed,

alcohol, seatbelts, fatique, distractions and consequences. It is delivered in a shock/ humorous manner and is designed to change attitudes and behaviour. It also includes a very poignant interview with a mother who lost her 17 year old daughter in a fatal road traffic collision. The Unit also provides Road safety information in the "Traffic Watch" segment of the CrimeCall programme and at major public exhibitions such as The Young Scientist Exhibition, The National Ploughing Championships and a variety of car and motorcycle shows.



Stand 13: 112

Imagine you are visiting an EU country or even at home and you need to contact an ambulance, the fire brigade, the police or the coastguard. Would you know which emergency number to call?

As Europeans are increasingly travelling for business or leisure, millions of people could be faced with this problem. Fortunately, there is no need to look up and remember the emergency numbers for each EU country you are visiting. Just remember 112!

112 is your pan-European number to access the Emergency Services whilst travelling within the EU.

In Ireland, 999 and 112 exist equally and run in parallel. Regardless of which number you call in Ireland, there will be no difference and the call will be handled in the same manner Further information regarding the background to the 112

A full list of the EU countries where 112 is accessible is below: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.



Road Safety Authority (RSA)

The Road Safety Authority (RSA) is a statutory organisation created by the Road Safety Authority Act 2006. It was established in September 2006 and its functions were transferred from the Department of Transport (DoT), the National Roads Authority (NRA) and the National Safety Council (NSC). The aim of the Road Safety Authority is to save lives and prevent injuries by reducing the number and severity of collisions on the road. Working to Save Lives is the stated goal adopted by the Board of the RSA.

Key functions The RSA works to improve road safety in Ireland by: -Developing and implementing information and education campaigns to increase awareness of road safety and promote safer driving. • Improving vehicle standards. • Establishing and monitoring a standard for driver instruction. • Delivering the the driving licence and learner permit service. • National Driver Licensing Service (NDLS). • Working with stakeholders to ensure a co-ordinated strategic response and ensure our collective resources are used wisely and efficiently. • Undertaking collision and road safety research in order to develop measures and recommendations to improve road safety. • Advising the Minister for Transport on road safety policy. • Overseeing the implementation of the Government Road Safety Strategy 2013 – 2020.



STEM Module

The STEM Module visits schools and delivers stimulating and challenging courses that augment the curriculum in STEM, providing incentives to pupils to develop their interest and enthusiasm for these subjects.

Some of the courses developed are based on forensic science, biotechnology, data capture and sensing, CAD/CAM, 3d scanning, micro-routing and laser cutting. Pupils can compare finger prints and event compare DNA profiles.

They can design and make model racing cars that can be treated on a racetrack against models constructed on a world-wide basis.

Using modern light microscopes with the high resolution cameras pupils can investigate the fascinating world off cell life and microscopic structures or using a Scanning Electron microscope study the fine details of insects and parasites.





twitter.com/BTYSTE





OVER FIFTY YEAR



1965 John Monahan



1966 Máire Caitríona Ní Dhomhnaill / Mary Finn



1967 Walter Hayes



1968 George Andrew Reynolds



1969 Luke Drury



1975 Noel Boyle



1976 Mary Kelly-Quinn



1977 Micheal Og O'Briain



1978 Donald P McDonnell



1979 Jervis Good



1980 Karen Ruddock



1987 Emma Donnellan, Henry Byrne



1988 Siobhan Lanigan O'Keeffe



1989 Grace O'Connor, Sinead Finn



1990 Anna Minchin-Dalton



1991 Barry O'Doherty, **Daniel Dundas**



1992 Elizabeth Dowling, Jean Byrne R.I.P.



1999 Sarah Flannery



2000 **Thomas Gernon**



2001 Shane Browne, Peter Taylor, Michael O'Toole



2002 **David Michael** O'Doherty



2003 Adnan Osmani



2009 John D. O'Callaghan, Liam McCarthy



2010 Richard O'Shea



2011 Alexander Amini



2012 Eric Doyle, Mark Kelly

S OF INNOVATION





1970 Maria Edgeworth



1971 **Peter Short**



1972 Seán Mac Fheorais



1973 **Tadgh Begley**



Richard Elliott



1981 **Catherine Conlon**



1982 Martynn Sheehan



1983 William Murphy, Gareth Clarke, Turan Mirza



1984 Eoin Walsh



1985 Ronan McNulty



1986 Breda Maguire, Niamh Mulvaney



1993 Donal Keane, Rodger Toner



1994 Jane Feehan



1995 Brian Fitzpatrick, **Shane Markey**



1996 Elsie O'Sullivan, Rowena Mooney, Patricia Lyle



1997 Ciara McGoldrick, Emma McQuillan, Fiona Fraser



1998 Raphael Hurley



2004 Ronan Larkin



2005 **Patrick Collison**



2006 Aisling Judge



2007 Abdusalam Abubakar



2008 **Emer Jones**



2013 Ciara Judge, Emer Hickey, Sophie Healy-Thow



2014 **Paul Clarke**



2015 Ian O'Sullivan, **Eimear Murphy**



2016 Winner announced Friday 8th January

instagram.com/BTYSTE









Become a Member of the RDS

Ireland's Philanthropic Society

philanthropy n.

- 1. a love of mankind.
- 2. practical benevolence.

rds *n.* (Royal Dublin Society) established 1731, one of the world's oldest philanthropic organisations.

The RDS was founded in the age of the enlightenment with the aim of making the world a better place, of helping Ireland to thrive both culturally and economically. Today, the RDS continues with the work begun nearly 300 years ago.

The elegant environs are now an ever-changing hub of exciting events, endeavours and activities. It's an up-to-the-minute facility where contacts are forged and progress made; where our Members promote the aims of the Society while benefitting personally and professionally from a stimulating environment in the heart of the city.

To find out more or arrange a tour of the RDS Members' Club contact:

Catherine Jordan

Membership Development Manager on 01 240 7280 or email catherine@rds.ie



Some of the benefits of Membership

- Access to the elegant RDS Members' Club
- Discreet & confidential environment
- Elegant & well-appointed meeting rooms
- Unique & tranquil work space of the RDS Library
- Free parking in Ballsbridge for you and your guests
- Superb catering & dedicated Wi-Fi
- Opportunities to meet other Members
- Networking opportunities
- Complimentary 5-day entry to the Dublin Horse Show
- Practical business seminars
- Sponsorship opportunities
- Support for RDS philanthropic work
- Access to reciprocal clubs worldwide

The cost of RDS Membership

Membership - €380 per year Including €50 Food & Beverage Credit

Corporate Membership - €1,700 per year For 4 colleagues - including €500 Food & Beverage Credit

Country Membership - €300 per year Including €50 Food & Beverage Credit

Overseas Membership - €250 per year Associate Membership - €85 per year

(All Memberships have a once off joining fee)







SCHEDULE OF EVENTS

THURSDAY 7TH JANUARY











00.45	BT ARENA	WORLD OF ROBOTS	CONCERT HALL	PACKED LUNCH AREA
09:45	1/5 2 1 1 2			
10:00	W5 Destination Space			Downson - Washahaa
10:15 - 10:30 -		World of Robots		Drumming Workshop
10:30 =	David Meade Show	world of Robots		
11:00	David Meade Snow			
11:15			Celestial Voyage 3D	Drumming Workshop
11:30 -	Titan the Robot	World of Robots	Celestial Voyage 3D	Druinning Workshop
11:45 -	ritari trie Robot	World of Robots		
12:00				
12:15	David Meade Show		Celestial Voyage 3D	Drumming Workshop
12:30 -	David Medde Silow	World of Robots	G0.030.01.137.030.02	Stallming Horizone
12:45 -		Horid of Robots		
13:00	Titan the Robot			
13:15 -		World of Robots	Celestial Voyage 3D	
13:30 -				
13:45 -	David Meade Show			
14:00		World of Robots		
14:15 -			Celestial Voyage 3D	Drumming Workshop
14:30 -	Titan the Robot			
14:45 -		World of Robots		
15:00				
15:15 -	W5 Destination Space		Celestial Voyage 3D	
15:30 -				
15:45		World of Robots		
16:00				
16:15				Drumming Workshop
16:30 -				









SCHEDULE OF EVENTS













	BT ARENA	WORLD OF ROBOTS	CONCERT HALL	PACKED LUNCH AREA
09:45	Titan the Robot			
10:00		World of Robots		
10:15 —			Celestial Voyage 3D	Drumming Workshop
10:30 —	David Meade Show			
10:45				
11:00		World of Robots		
11:15 —	Titan the Robot		Celestial Voyage 3D	Drumming Workshop
11:30 —				
11:45		World of Robots		
12:00	W5 Destination Space			
12:15 —			Celestial Voyage 3D	Drumming Workshop
12:30 —		World of Robots		
12:45 —	Titan the Robot			
13:00				
13:15 —			Celestial Voyage 3D	
13:30 —	David Meade Show	World of Robots		
13:45 —				
14:00				
14:15 –	Titan the Robot		Celestial Voyage 3D	Drumming Workshop
14:30 —		World of Robots		
14:45				
15:00	David Meade Show			
15:15 —			Celestial Voyage 3D	Drumming Workshop
15:30 —		World of Robots		
15:45 —	W5 Destination Space			
16:00				
16:15 —				Drumming Workshop
16:30 —				







SCHEDULE OF EVENTS

SATURDAY 9TH JANUARY











	BT ARENA	WORLD OF ROBOTS	CONCERT HALL	PACKED LUNCH AREA
09:45	W5 Destination Space			
10:00		World of Robots		
10:15 -			Celestial Voyage 3D	Drumming Workshop
10:30 -	David Meade Show			
10:45				
11:00		World of Robots		
11:15 -	Titan the Robot		Celestial Voyage 3D	Drumming Workshop
11:30 -				
11:45				
12:00	David Meade Show	World of Robots		
12:15 -			Celestial Voyage 3D	Drumming Workshop
12:30 -				
12:45	Titan the Robot			
13:00		World of Robots		
13:15 -			Celestial Voyage 3D	
13:30 -	W5 Destination Space			
13:45		V. II. 65 I .		
14:00		World of Robots	C 1 1: 1V 2D	
14:15 -	5		Celestial Voyage 3D	Drumming Workshop
14:30 -	David Meade Show			
14:45		W 11 69 1		
15:00		World of Robots		Di M. I.
15:15 -	Ti. II. B.L.			Drumming Workshop
15:30 -	Titan the Robot			
15:45		World of Publication		
16:00		World of Robots		
16:15 -				
16:30 -				







THE BT YOUNG SCIENTIST BUSINESS BOOTCAMP B1



Driven by innovation, delivered by BT

BT'S SEVENTH BUSINESS BOOTCAMP PROGRAMME FOR STUDENTS.



A number of the exhibiting intermediate and senior students from the 2016 BT Young Scientist & Technology Exhibition will be invited to take part in a BT Young Scientist Business Bootcamp in March next year where they will experience the world of technology commercialisation and entrepreneurship.

We have created this programme to provide a critical link in the innovation process to provide our young scientists with commercialisation skills to carry forward into their careers and lives. The bootcamp will be held at University College Dublin (UCD).



The Bootcamp experience has been life changing. I feel it has really opened up doors for me in regards to career options, developing my project and communicating better with people. I have met and heard from some amazing and inspiring people and I feel I have become more creative and innovative in the way I think.

Expanding Business Leadership

As an extension of the BT Young Scientist & Technology Exhibition the BT Young Scientist Business Bootcamp have enabled BT to take a national leadership role in economic development. BT is collaborating with key private and public-sector organisations to create an opportunity to mentor the next generation of Irish innovators and entrepreneurs.

Igniting Entrepreneurial Spirit

We at BT believe that the BT Young Scientist Business Bootcamps help to bridge the gap between the worlds of education and business and mentor the next generation of young innovators and entrepreneurs.

A short video of the Bootcamp can be watched here: www.btyoungscientist.com/2014-video-archive



in association with NovaUCD





Perrigo Company plc is a top five global over-the-counter (OTC) consumer goods and leading specialty pharmaceutical company, offering patients and customers high-quality products at affordable prices. From the Company's beginning in 1887 as a packager of home remedies, it has grown to become the world's largest manufacturer of OTC healthcare products and supplier of infant formulas for the store brand market. The Company is also a leading provider of generic extended topical prescription products, and it receives royalties from sales of the multiple sclerosis drug Tysabri®. The Company provides "Quality Affordable Healthcare Products®" across a wide variety of product categories and geographies, primarily in North America, Europe and Australia, as well as in other markets, including Israel and China. Visit Perrigo online at http://www.perrigo.com.



Bringing it all together



with a direct line of descent from the first national telecommunications undertaking in the world. Incorporated in 1846, it was the first anywhere to develop a nationwide communications network exploiting leading edge telegraphy technology. Within ten years an international network had been developed, making communications possible within minutes and hours instead of days and weeks. The consequences for every aspect of society were dramatic and profound.



FAST FORWARD TO TODAY

and technology is more central to BT's business than ever before as it builds on the foundation of the digital era to create the information age. Innovation - the combination of technical know-how and commercial acumen becomes even more crucial in a competitive world.



BT has gone on to become one of the world's leading communications services companies.

Every day we touch the lives of thousands of people on the island of Ireland, helping them communicate, do business and be entertained and informed.

In Northern Ireland, we continually lead the way in bringing exciting new services to our customers - everything from TV to high speed fibre broadband to IT services for some of the largest organisations in the market.

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IN THE REPUBLIC OF IRELAND, BT HAS GROWN FROM A CHALLENGER BRAND TO A HIGHLY SUCCESSFUL COMPANY WITH A BREADTH OF SERVICES THAT WE BELIEVE IS UNRIVALED.

We operate the 999/II2 emergency call answering service on behalf of the Irish State, connect ATMs for banking institutions, build networks for other communications companies, process millions of transactions through our data centres, train thousands in our ICT Training Centre – and the list goes on.

IN 2013, BT LAUNCHED BT SPORT

its very own TV sports channels, covering sports such as soccer, rugby, motorsport and more.
Irish rugby legend Brian O'Driscoll joined BT Sport as a rugby presenter in 2014.

AND THEN THERE IS...

Our role in the community

We're committed to using the power of communications to create a better future – from connecting people digitally, to making sure BT does more environmental good than harm, to using our skills and technology to support good causes.

OVER THE PAST YEAR, BT VOLUNTEERS SPENT

COMMUNITIES AND CHARITIES, ACROSS THE ISLAND OF IRELAND.

Our biggest event is the BT
Young Scientist
and Technology
Exhibition, which we've been
proud to organise for the past 16 years.

Find out more at

www.btplc.com/betterfuture and www.btireland.com



