



**BT YOUNG SCIENTIST
& TECHNOLOGY Exhibition**



Driven by innovation, delivered by BT

2017

EXHIBITION GUIDE

12th – 14th January 2017 – RDS, Dublin



www.btyoungscientist.com

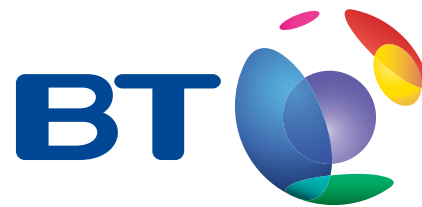
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Bringing it all together



BT YOUNG SCIENTIST & TECHNOLOGY Exhibition



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Social Networking at BTYSTE 2017

Keep in contact with what is going on at BTYSTE through Twitter and Facebook, why not put some comments up there yourself!

Twitter

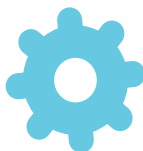
<http://www.twitter.com/BTYSTE>

Facebook

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Go to www.btyoungscientist.com for direct links to all of our social media platforms.

Please use the hashtag #BTYSTE



Get the app

Get all the latest information about the exhibition, events and updates direct to your mobile, absolutely free!

Features include Interactive Exhibition Map, Getting Here, Search Student Projects, Schedule of Events, Social Network, Awards, History, Past Winners, Photo Gallery and more...





Welcome to the 2017 BT Young Scientist & Technology Exhibition Fáilte chuig Taispeántas Eolaí Óig agus Teicneolaíochta BT 2017

We believe that this exhibition is exceptional – an exceptional formula that has attracted 4,591 students to enter projects this year; exceptional support from thousands of organisations and individuals who believe in the importance of youth education and development; and an exceptional impact on those who take part.

This is the 53rd annual exhibition, and it continues to grow, a clear testament to the exciting vision that the founders Dr. Tony Scott and the late Fr. Tom Burke had when establishing it in 1960s Ireland. As you'll see from the 550 projects on display this week, science, engineering, maths and technology (STEM) are critical to the world around us and by engaging young people in these subjects we are helping them build a better future. And this exhibition isn't just about STEM skills, it is also about being creative, being innovative and being inclusive to find new ways to address the rapidly changing times we face.

Wrapped around the core competition here in the RDS we have a festival of science and technology for you to enjoy. You'll get to meet our special acts, entertainers, and exhibitors, including BT Young Scientist & Technology Exhibition alumni who are showcasing the businesses that they have set up.

I would like to thank you for coming to the BT exhibition – your support shows thousands of young exhibitors that we value and recognise their ideas and are investing in our home-grown talent in Ireland.



Creidimid gur sárthaispeántas an taispeántas seo – sárimeacht é a mheall 4,591 dalta chun tionscadail a iontráil i mbliana; fuarthas olltacaíocht ó na mílte eagraíocht agus duine aonair a chreideann go mbaineann tábhacht le hoideachas agus le forbairt óige; agus imrítear olltionchar orthu siúd a ghlacann páirt.

Seo an 53ú taispeántas, agus leanann sé ag dul i méid, agus déanann sé léiriú soiléir ar an bhfís spreagúil a bhí ag na bunaitheoirí, an Dr Tony Scott agus an tAthair Tom Burke, a d'éag, nuair a bhunaigh siad é in Éirinn sna 1960idí. Faoi mar a thabharfaidh tú faoi deara i measc na 550 tionscadal atá ar taispeáint an tseachtain seo, baineann rithábacht maidir leis an domhan timpeall orainn leis an eolaíocht, an innealtóireacht, an mhataimic agus an teicneolaíocht (STEM) agus trí dhaoine óga a spreagadh chun tabhairt faoi na hábhair seo, táimid ag cabhrú leo chun todhchaí níos fearr a chruthú. Agus ní bhaineann an taispeántas seo ach le scileanna STEM, baineann sé le bheith cruthaitheach, bheith nuálach agus bheith uileghabhálach chun bealaí nua a aimsiú chun dul i ngleic leis an tráth amach romhainn atá ag athrú go tapa.

Tá féile eolaíochta agus theicneolaíochta curtha ar siúl againn anseo san RDS fite fuaite sa chroíchomórtas. Beidh deis agat casadh lenár ngníomhanna, siamsóirí, agus ár lucht taispeántais, alumni Thaispeántas Eolaí Óig agus Teicneolaíochta BT ina measc a bhfuil na gnólachtaí a bhunaigh siad ar taispeáint acu.

Ba mhaith liom buíochas a ghabháil leat as cuairt a thabhairt ar thaispeántas BT – taispeánann an tacaíocht a thugann tú do na mílte de lucht taispeántais óg go léirimid luach agus aitheantas ar a smaointe agus go bhfuil infheistíocht á déanamh againn sa tallann atá forbartha anseo in Éirinn.

Enjoy your visit
Bain sult as do chuairt

Shay Walsh

Managing Director, BT Ireland

Proud organiser of the BT Young Scientist & Technology Exhibition.

Eagraí bródúil Thaispeántas Eolaí Óig agus Teicneolaíochta BT

The **BT Young Scientist & Technology Exhibition 2017** is proudly sponsored and supported by;



RTE



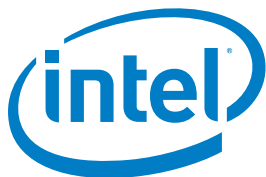
Department of
Education

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RDS



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In Ireland

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An Roinn Ealaíon, Oidhreachta,
Ondúcháin Réilínachta, Tuisithe agus Gaeltachta
Department of Arts, Heritage,
Regional, Rural and Gaeltacht Affairs



BT YOUNG SCIENTIST & TECHNOLOGY Exhibition



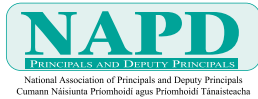
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OIFIG NA bPAITINNÍ
IRISH PATENTS OFFICE



IRISH RESEARCH COUNCIL
An Chomhairle um Thaighde in Éirinn



NOKIA Bell Labs



An Phríomh-Oifig Staidrimh
Central Statistics Office



UCD Social Sciences



UNIVERSITY of LIMERICK
OILSCEOLA LUMINIGH



The awards

Main awards

BT Young Scientist & Technologist(s) of the Year 2017

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 2017 in Tallinn, Estonia.

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 BT Young Scientist & Technologist of the Year is awarded to an Individual, a Best Group Award will also be made. If the BT Young Scientist & Technologist(s) of the Year is awarded to a Group, a Best Individual Award will also be made.

Special awards

We are 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 with a focus on innovation in technology, physics, chemistry, sustainability, recycling, the environment, research or improving awareness of medical conditions. Each award is industry-sponsored and details of each organisation and the awards can be found on the Awards section of our website www.btyoungscientist.com

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:



Chemical, Physical & Mathematical Sciences

e.g. chemistry, physics, mathematics, applied mathematics, geology, engineering, computer programming, meteorology, astronomy.



Technology

e.g. communications, electronic systems, robotics, computing, control technology, applications of technology, biotechnology, automation.



Biological & Ecological Sciences

e.g. agriculture, anatomy, biochemistry, biotechnology, ecology, horticulture, physiology, medical science, veterinary science.



Social & Behavioural Sciences

e.g. economic, geographical, psychological or sociological studies of human behaviour, nutrition, social anthropology, political science.

The prizes, for both Individual and Group projects, are:



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.



Travel awards

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 the USA 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 Los Angeles, California, May 14-19, 2017. The teacher/mentor of the winner(s) of this award will also receive an all-expenses paid trip to ISEF.

Perrigo Student Award

Perrigo will present 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 present 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.

Rev Dr Tom Burke bursary

Fr Tom was one of the co-founders of the exhibition and sadly passed away in 2008. In memory of his contribution to the exhibition, a €1,000 bursary is awarded in his name to an individual participant who is deemed by the judges to be the best communicator. This will be paid on application 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.

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 all-expenses paid trip to the USA.

Perrigo Educator of Excellence - Biological and Ecological Sciences

The winner receives a bursary of €2,000 and a Perrigo Trophy.

BT Educator of Excellence - Social and Behavioural Sciences

The winner receives a bursary of €2,000 and a BT Trophy.

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 Los Angeles, California, May 14-19, 2017.



Special awards

We are pleased and proud to have a fabulous range of Special Awards at this year's Exhibition. 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

This year Special Awards will be 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.

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



UCD Social Sciences





BT Young Scientist & Technology Exhibition Judges

Chemical, Physical & Mathematical Sciences



Prof Stephen Connon
Prof Seán 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 Martina Nolan-Jones

Dr Fergal O'Reilly
Dr Rachel Quinlan
Dr Tony Scott
Dr Emma Sokell

Technology



Ms Julie Byrne
Mr Bernie Capraro
Dr Sarah Jane Delaney
Prof Linda Doyle
Prof John Dunnion
Dr Carol Gibbons

Prof Jim Greer
Mr Leonard Hobbs
Mr Barry Kennedy
Mr Aaron McCormack
Dr Diarmuid O'Brien
Mr Tom O'Dwyer

Mr Brian O'Mara
Ms Ann O'Sullivan
Prof Mary Shire
Dr Peter Taylor ★ 2001

Biological & Ecological Sciences



Prof Ann Cullinane
Prof Sarah Culloty
Prof Michael Doherty
Prof Evelyn Doyle
Mr Hubert Fuller
Prof Marie Guidon
Dr Tom Harrington
Prof Des Higgins

Dr Colin Kelleher
Prof Mary Kelly-Quinn ★ 1976
Prof Grace McCormack
Prof Jennifer McElwain
Prof Deirdre McGrath
Dr John Monahan ★ 1965
Prof Niall Moyna
Dr Kathy O'Boyle

Prof John O'Halloran
Dr Richard O'Hanlon
Dr Padraig O'Kiely
Prof Donal O'Shea
Prof John Quinn
Dr Fiona Wilson

Social & Behavioural Sciences



Mrs Siobhán Aherne
Prof Joe Barry
Dr Barry Brunt
Ms Annette Cahalane
Prof Catherine Comiskey
Prof Regina Connolly
Ms Verena Cornwall
Mr Conor Faughnan
Dr Domnall Fleming
Dr Yseult Freeney

Dr Jones Irwin
Dr Mary Ivers
Dr Angela Leahy
Ms Roisin Lyons
Mr Eoin MacCuirc
Dr Maeve Martin
Dr Des McCafferty
Mrs Michelle McCarthy Severs
Mrs Lynda McSweeney
Dr Elizabeth Nixon

Dr Eoin O'Mahony
Mr Aidan Ryan
Mr David Silke
Dr Victoria Simms
Dr Sinead Smyth
Prof Anthony Staines
Dr Joanne Stuart

BT Chairperson

Ruth Murphy

Special Awards Chairperson

Prof Eoin O'Neill

★ Young Scientist of the Year past winner

2017 Projects – quick search



Project category

Chemical, Physical and
Mathematical Sciences

1100 - 1605

Technology

2100 - 2605

Biological and
Ecological Sciences

3100 - 3611

Social and Behavioural
Sciences

4100 - 4713

School name/County

Antrim

Ballyclare High School	1210, 2604
Ballymena Academy	2304, 3514
Fort Hill College	3606
St Killian's College	2402, 2404

Armagh

St Catherine's College	3407
St Patrick's High School	1413

Carlow

St. Leo's College	1113
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Cavan

Bailieborough Community School	2505, 3601
Colaiste Dun an Ri	1110, 4110, 4113, 4116, 4407, 4410
Loreto College – Cavan	4572

Clare

Mary Immaculate Secondary School – Lisdoonvarna	1102, 2208, 3103, 3106, 3210, 3403, 3411, 4303
Meánscoil Na Mbráithre	3424
Scariff Community College	1602
Scoil Mhuire	3570
St. Joseph's Secondary School	2502, 3583, 4511, 4534

Cork

Ardscoil Uí Urmoltaigh	1530, 3563
Bandon Grammar School	1418, 1527, 3110, 3215, 3303, 3420, 3554, 3559, 4120, 4417, 4550, 4608
Carrigtwohill Community College	3417
Christ King Girls Secondary School	3104, 4101
Clonakilty Community College	2409, 2508, 2518, 2521, 3522

Colaiste An Phiarsaigh	1534
Coláiste An Spioraid Naoimh	1301, 1601, 2307, 4200
Coláiste Choilm	1507, 2416, 3304, 3402, 3410, 3517, 3525, 3529, 3533, 4201, 4507, 4513, 4520, 4528
Coláiste Chríost Rí	3108
Colaiste Daibheid	4576
Coláiste Muire – Crosshaven	1204, 4207, 4304, 4702
Coláiste Na Toirbhirte	1417, 4215, 4586
Coláiste Pobal Bheanntair	3541, 3543, 4552
Colaiste Treasa	3521, 4104, 4211, 4402
Davis College	2520
Gaelcholáiste Mhuire	4547
Kinsale Community School	3419, 3524, 4100, 4103, 4105, 4108, 4111, 4114, 4117, 4118, 4208, 4405, 4409, 4423, 4516, 4519, 4567, 4577, 4596, 4606, 4609, 4613
Midleton College	3600
Millstreet Community School	4536, 4538, 4542, 4569, 4575
Mount Mercy College	4300
Mount St Michael	3219
North Monastery Secondary School	2108, 2414, 4601
Pobalscoil na Tríonóide	4531
Presentation College	1205
Presentation Secondary School	4203, 4506, 4510
Regina Mundi College	4574
Sacred Heart Secondary School	1414, 3569, 4580, 4582, 4587, 4597
Schull Community College	1200, 3401, 3509, 3526, 3550
Scoil Mhuire	4422, 4504
Scoil Mhuire gan Smál – Blarney	1513, 4523
Scoil na mBráithre Chríostaí	4710

School name/County

St Aloysius College	1522, 3539, 4556, 4581, 4612
St Aloysius School	1412
St Mary's High School	2507
St Mary's Secondary School - Macroom	3534, 4526, 4535, 4539
St Mary's Secondary School - Mallow	1108, 1508

Donegal

Carndonagh Community School	4305
Choláiste Cholmcille	3536
Coláiste Ailigh	2309
Deele College	4219
Gairm Scoil Chú Uladh	4617
Magh Ene College	1202, 3537, 4565, 4594
Pobalscoil Ghaoth Dobhair	1411, 1514, 1524

Down

New-Bridge Integrated College	2103
Our Lady's GS	1511
South Eastern Regional College - Bangor Campus	3603

Dublin

Adamstown Community College	1101, 4420
Alexandra College	3205, 4607, 4611
Ardgillan Community College	2209, 3218, 4106, 4202
Blackrock College	1531, 3565
Clonkeen College	4501
Coláiste Bríde	3535
Coláiste Cois Life	2533
Coláiste Mhuire	3544
Coláiste Phádraig - Lucan	1112, 1300, 1502, 2205
Colaiste Pobail Setanta	3506, 4503
Dominican College	4119
Gaelcholáiste an Phiarsaigh	1422
Gonzaga College	3527
Jesus and Mary Secondary School, Our Lady's Grove	4217
Loreto Abbey Secondary School	1214, 1505, 3531
Loreto College - Foxrock	3405, 3426, 3584, 4421
Loreto College - St Stephens Green	3404, 4216, 4615
Loreto High School	3203, 4212, 4514
Loreto Secondary School - Balbriggan	3425, 3528, 3561, 3579, 3602, 4218

Luttrellstown Community College	2602
Mount Anville Secondary School	3422
Mount Sackville Secondary School	4585
Old Bawn Community School	4306
Our Ladys School - Templeogue	2501, 3504
Pobalscoil Iosolde	3214, 3553
Pobalscoil Neasain - Baldoye	1510, 1521, 4545
Portmarnock Community School	2601, 4700
Ringsend College	4709
Sandford Park School Ltd	1209, 1423, 2107, 3109, 4416
Santa Sabina Dominican College	3209, 3571
Scoil Chaitriona	4412
Skerries Community College	3566
St Andrew's College	2202, 3101, 3220
St Benildus College	2513
St Conleth's College	4406
St Declan's College	2305
St Joseph Of Cluny	1420
St Mary's Secondary School	3610
Sutton Park School	1400, 2200
Synge Street CBS	1203, 1404, 1408, 1526
Terenure College	2308
Wesley College - Ballinteer	2204

Galway

Ardscuil Mhuire	3611
Coláiste Bhaile Chláir	2400, 2406, 2410, 2413, 2512, 4415
Coláiste Éinde	2603
Coláiste Ghobnait	3556
Coláiste Mhuire	4592
Coláiste na Coiribe	1409
Dominican College - Galway	3532
Gaelcholáiste an Eachréidh	4302
Glenamaddy Community School	3421
Merlin College	4102
Portumna Community School	2401, 3416, 3505, 3513, 4107, 4502, 4508
Seamount College	3102

2017 Projects – quick search



School name/County

Kerry

Comprehensive School – Tarbert	2524, 4566
Gaelcholáiste Chiarraí	4515
Killorglin Community College	2102, 2203, 4112
Tarbert Comprehensive School	2535
The Intermediate School	4713

Kildare

Ardcoil Rath Iomgháin	4418
Celbridge Community School	4414
Coláiste Naomh Mhuire	3574
Geal Cholaiste Chill Dara	4570
Kildare Town Community School	4598
Maynooth Education Campus	1111, 2303, 4595
Patrician Secondary School – Newbridge	1415
Scoil Dara	2214
Scoil Mhuire Community School	1503, 3201
St Pauls Secondary School	3564
St Wolstan's Community School	4525

Kilkenny

Castlecomer Community School	3518, 3548
Coláiste Eamann Rís	3414
Coláiste Pobal Osraí – Kilkenny	3578, 4301
Loreto Secondary School – Kilkenny	3555, 4537, 4578, 4583, 4590
Presentation Secondary School	3580
St Kieran's College	2526, 3567

Laois

Heywood Community School	1515, 4591
Portlaoise College	1407
St. Mary's C.B.S.	4568

Leitrim

St. Clare's Comprehensive School	3409, 3413, 4307
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Limerick

Ardcoil Ris	2109, 2310, 2527, 3207, 4599, 4602
Castletroy College	2101
Coláiste Chiaráin	1107, 3608
Colaiste Ide and Iosef	3546, 3551, 4559
Coláiste Iósaef	2106, 3501, 4408, 4517, 4705

Desmond College – Limerick	1207, 1500, 2100, 2201, 2600, 3523, 3604, 4109, 4404, 4562
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Gaelcholáiste Luímnigh	1104, 4704, 4712
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Glenstal Abbey School	3100
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Hazelwood College	1410, 2407, 3400, 4403, 4561
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John The Baptist Community School	3213, 3530, 3552, 4530, 4555, 4557
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Laurel Hill Secondary School FCJ	1532, 4543
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Salesian Secondary College, Pallaskenry	1403, 2515, 2522, 2528, 2531, 2534, 3418, 3560, 3609, 4413
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Scoil Mhuire agus Ide	4533
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Londonderry

Gaelcholáiste Dhoire	1421
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Loreto College Coleraine	1303, 1528, 1605
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St Mary's College	1100, 1103, 1106, 1109, 1406, 1600, 1603
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Longford

Ballymahon Vocational School	4553
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Lanesboro Community College	3107, 4115, 4309, 4593
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Louth

Bush Post Primary School	3512, 3520, 4579, 4584, 4708
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Colaiste Chu Chulainn	1416
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Drogheda Grammar School	3558
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Dundalk Grammar School	4540
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Our Ladys College – Drogheda	1212, 3302
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St Mary's Diocesan School	3406
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St Oliver's Community College	3204
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St Vincent's Secondary School	1506, 1512, 3202, 3510, 3515
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Mayo

Jesus & Mary Secondary School	2504, 2605, 4588
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Our Lady's Secondary School	4564
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St Joseph's Secondary School	4213
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St Muredachs College	2300, 4529, 4532
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Meath

Community College	2529, 4610
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Eureka Secondary School	3503, 4400
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Franciscan College	4310
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School name/County

Loreto Secondary School – Navan	2210, 2517, 3217, 3572
St Patrick's Classical School	1105
St Peter's College – Dunboyne	2509
St. Joseph's Secondary School	3607

Monaghan

Beech Hill College	2523
Our Lady's Secondary School – Monaghan	4401
Patrician High School – Carrickmacross	3605, 4214, 4707

Offaly

Colaiste Choilm	3206
Sacred Heart Secondary School	1401
Tullamore College	1206, 1604, 3300, 3557

Roscommon

C.B.S. Roscommon	1504, 1523, 3507, 3516, 3581, 4505, 4521
Roscommon Community College	3519, 4419, 4518, 4703
Scoil Mhuire gan Smál – Roscommon	1516, 2503, 4206, 4541, 4546
Scoil Mhuire Strokestown	3301, 3305, 3412, 3545, 4573

Sligo

Jesus & Mary Secondary School	1213, 1419, 3105, 4308
Sligo Grammar School	1302
St Attracta's Community School	3568
Ursuline College	1517, 4512, 4701

Tipperary

Ardscail na mBráithre	4614
Borrisokane Community College	2212
C.B.S.	4210
C.B.S. Thurles	4603
Cistercian College	3211, 3540
Coláiste Mhuire Co-Ed	1402
Colaiste Phobáil Rós Cré	2532, 3216
Comeragh College	4571
Presentation Secondary School	2405
Presentation Secondary School – Thurles	2500, 3502, 3511
Scoil Mhuire	4204
St Joseph's College	1114, 2301, 2506, 2516, 3408, 4560

St Mary's Secondary School – Nenagh	4711
The Abbey School	4500
Ursuline Secondary School – Thurles	1529, 2510

Waterford

Ard Scoil Na Mara	4522
Blackwater Community School	4527
De La Salle College	2207, 2302, 4548
Gaelcholáiste Phort Láirge	1520, 4544
Newtown School – Waterford	1518, 3549, 4411
Our Lady Of Mercy Secondary School	2411, 3415, 4605

Westmeath

Athlone Community College	1525, 2408, 4558
Colaiste Mhuire – Mullingar	2403, 2415
Marist College – Athlone	2511
Meán Scoil an Chlochair	4549, 4551
Moate Community School	1509, 3200, 3208, 3500
Our Lady's Bower	2306, 2412, 3306, 3547, 3576, 4706
St Aloysius College	2104

Wexford

F.C.J. Secondary School	4563, 4600
Loreto Secondary School – Wexford	4604
Meanscoil Gharman	2519

Wicklow

Avondale Community College	1405, 1519, 2105, 3577
Colaiste Chraobh Abhann	2530, 3508
Dominican College – Wicklow	1304, 3562, 4616
East Glendalough School	2206
St David's Secondary	2211
St Gerard's	1208
St Marys College	3212, 3542, 4209, 4554

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





Chemical, physical & mathematical sciences

JUNIOR INDIVIDUAL

1100

Title: SCOBY SCOBY Do

Overview: SCOBY produces cellulose fibres. Ways to waterproof the material for clothing and its possible use for the removal of metal ions from water are investigated.

School: St Mary's College

County: Londonderry

Teacher: Ann Blanking

Student(s): Maeve Stillman

1101

Title: Go Bananas! Using Banana Peel for Eco-Friendly and Low-Cost Nylon Production

Overview: Using the starch in banana peels to synthesise a type of nylon with superior properties to regular nylon 6/6 in a cheap and eco-friendly way

School: Adamstown Community College

County: Dublin

Teacher: Jane Halloran

Student(s): Haritha Olaganathan

1102

Title: Could rushes be used as a fuel?

Overview: I am looking at the feasibility of using rushes as a renewable energy source.

School: Mary Immaculate Secondary School - Lisdoonvarna

County: Clare

Teacher: John Sims

Student(s): Dylan Egan

1103

Title: A comparative study of various types of biscuits and their 'dunking' abilities

Overview: An investigation of different types of biscuits for their ability to withstand 'dunking' in various drinks of various temperatures. Which biscuit is the best 'dunker'?

School: St Mary's College

County: Londonderry

Teacher: Ann Blanking

Student(s): Ann Blanking

1104

Title: The energy efficiency of the kettle/ imscrúdú ar éifeachtacht an chitil.

Overview: I will be comparing the the electrical efficiency of the kettle to one that is insulated and under pressure and will estimate the power saved.

School: Gaelcholáiste Luimnigh

County: Limerick

Teacher: Maria Kennelly

Student(s): Seoda Ni Chaoimh

1105

Title: Using the SOHO Spacecraft to Discover Comets

Overview: I will be using data from the SOHO spacecraft (Solar and

Heliospheric Observatory) to look for and hopefully discover new comets.

School: St Patrick's Classical School

County: Meath

Teacher: Sinead O'Sullivan

Student(s): Brendan Watters

1106

Title: A comparative investigation of sugars in fizzy drinks versus sugars in sports drinks

Overview: This project investigates the amount of sugar in fizzy drinks compared to that in sports drinks.

School: St Mary's College

County: Londonderry

Teacher: Ann Blanking

Student(s): Miadach McSwine

1107

Title: How Old Is The Universe?

Overview: To find the minimum age of the universe using globular clusters and Hertzsprung Russell diagrams.

School: Coláiste Chiaráin

County: Limerick

Teacher: Edel Farrell

Student(s): Hannah Lucey

1108

Title: Assessment and evaluation of the production and combustion of fuel pellets made from waste coffee grounds; Impact on waste minimisation in Ireland

Overview: Investigating the possibility of converting waste coffee grounds into bio-fuel pellets to be used as a wood pellet substitute or an alternative fuel for barbecues.

School: St Mary's Secondary School - Mallow

County: Cork

Teacher: Rory Coote

Student(s): Emily Murphy

1109

Title: A comparative investigation of the antibacterial abilities of different types of Honey

Overview: This project investigates different types of honey for antibacterial action against the gram negative bacteria, e.coli and the gram positive bacteria b.subtilis. Is Manuka best?

School: St Mary's College

County: Londonderry

Teacher: Ann Blanking

Student(s): Jennifer Doherty

1110

Title: Waste Not Wash More. An investigation into how much washing up liquid you should use

Overview: Im making a dilution series to see which amount of washing up liquid can wash your dishes the most efficiently.

School: Colaiste Dun an Ri

County: Cavan

Teacher: Lorraine Hickey

Student(s): Evan O'Reilly

1111

Title: To investigate the maximum height a water rocket can achieve

Overview: The aim of this project is to study the factors that affect the maximum altitude a water rocket can achieve.

School: Maynooth Education Campus

County: Kildare

Teacher: Tom Dixon

Student(s): Toby Markham

1112

Title: Anagramic squares

Overview: Is there a maximum square number possible from the set of all anagramic pairs?

School: Coláiste Phádraig - Lucan

County: Dublin

Teacher: Jacqueline Farrell

Student(s): Oscar Nolan

1113

Title: Effect of microwaving and boiling on the Vitamin C content of fresh orange juice.

Overview: To examine which cooking technique microwaving or heating on a hob effects Vitamin C levels the most and to determine if raw foods are preferable.

School: St. Leo's College

County: Carlow

Teacher: Anne Rennick

Student(s): Katie O Sullivan

1114

Title: Solar sleeve

Overview: A solar sleeve that fits around the tower of a wind turbine in order to maximize renewable energy output into already installed grids.

School: St Joseph's College

County: Carlow

Teacher: Tipperary

Student(s): Joseph O'Donoghue

INTERMEDIATE INDIVIDUAL

1200

Title: Comparing antioxidant levels of berries grown under different conditions using the Briggs Rauscher reaction in conjunction with a photometer.

Overview: This project aims to investigate the comparative levels of antioxidants in berries from various sources in my locality, including organic and conventional farms.

School: Schull Community College

County: Cork

Teacher: Larissa Kelly

Student(s): Fionn Ferreira

1202

Title: An investigation into developing a more efficient method of drying woodchip for use in boilers.

Overview: This project will be testing the effect of temperature, air velocity and compression pressure on the drying of wood chips for use in boilers.

School: Magh Ene College

County: Donegal

Teacher: Yvonne Higgins

Student(s): Conor Herity

1203

Title: Methods of Representing Primes That Distinguish Between the Components of Twin Prime Pairs

Overview: This project seeks to establish if there are consistent differences in the properties of the smaller and larger number in twin prime pairs.

School: Synge Street CBS

County: Dublin

Teacher: Shane Freeman

Student(s): Haroon Hussain

1204

Title: Modelling the Mathematics of the Cork Accent

Overview: I will analyse the Cork accent, derive mathematical functions that define it, create a mapping function between Cork and other accents and test its predictability.

School: Coláiste Muire - Crosshaven

County: Cork

Teacher: Martina McMahon

Student(s): Andrew Nash

1205

Title: How to throw better.

Overview: Conduct a quantitative analysis of athletic output during the throwing, kicking, hitting phase of a ball and contrast the performance under conscious or sub-conscious mind

School: Presentation College

County: Cork

Teacher: Ian Lehane

Student(s): Conor Cronin

1206

Title: The Answer Is Blowing In The Wind

Overview: An investigation of the energy and cost saving potential of sails on diesel powered ocean going vessels.

School: Tullamore College

County: Offaly

Teacher: Jillian Browne

Student(s): Cillian Fogarty

1207

Title: The Physics of a Skateboard

Overview: I will be looking at the physics behind maneuvering of the two most basic skateboarding tricks, the "Ollie" and the "Shuvit".

School: Desmond College - Limerick

County: Limerick

Teacher: Donal Enright

Student(s): Ben Montgomery

1208

Title: To investigate the torque output of a 2-stroke internal combustion engine when adjusting the compression ratio

Overview: To build a 2-stroke engine



and an adjustable connecting rod and crankshaft to measure the torque output of a 2-stroke engine when changing the compression-ratio.

School: St Gerard's

County: Wicklow

Teacher: John Reidy

Student(s): Peter O'Flynn

1209

Title: A Quantum Random Number Generator for cryptographic applications

Overview: This project presents a quantum random number generator for a multitude of cryptographic applications based on the alpha decay of a household radioactive source.

School: Sandford Park School Ltd

County: Dublin

Teacher: Dana Kilroy

Student(s): Louie Lyons

1210

Title: Augmented Reality Sudoku Solver

Overview: This camera solves Sudoku puzzles by holding it to a live image, once solved the camera outputs the numbers onto the correct squares

School: Ballyclare High School

County: Antrim

Teacher: Paul Wilson

Student(s): Alexander Baine

1212

Title: A mathematical study of Frieze patterns and their use in the early Celtic Manuscripts, The book of Kells

Overview: Frieze patterns occur in mathematical geometry. An infinite strip of a repeating pattern is called a frieze pattern. All frieze patterns show mathematical symmetry.

School: Our Ladys College - Drogheda

County: Louth

Teacher: Frances O'Regan

Student(s): Judith Ugwuja

1213

Title: Fairly Biased? - Is the stroke index system in golf benefitting a particular handicap?

Overview: The development of a new mathematical method of surveying and indexing a golf course so as to create a fluid stroke index system.

School: Jesus & Mary Secondary School

County: Sligo

Teacher: Luke Saunders

Student(s): Andrew Blakeney

1214

Title: Does Your Speed While Running Vary Depending On The Surface That You're Running On?

Overview: We will investigate how fast a person can run on five different surfaces and compare their average speeds on each surface to one another.

School: Loreto Abbey Secondary School

County: Dublin

Teacher: Aideen Lambe

Student(s): Mia Foley,

Iris Benny, Isolde Healy

SENIOR INDIVIDUAL

1300

Title: P-Adic Numbers: A Method for Determining Pythagorean Triplets

Overview: An investigation into p-adic numbers and their applications to Pythagorean triplets and quadratics (determined by positioning on the unit circle).

School: Coláiste Phádraig - Lucan

County: Dublin

Teacher: Jacqueline Farrell

Student(s): Dáire Byrne

1301

Title: Case study of Data Mining in Observational Astronomy: The search for new OB stars in the Small Magellanic Cloud

Overview: Interdisciplinary observational astronomy and data science project using virtual-observatory tools & spectral energy distributions to more effectively identify OB-candidates for spectroscopic follow-up in the SMC.

School: Coláiste An Spioraíd Naomh

County: Cork

Teacher: Tim Kerins

Student(s): Cormac Larkin

1302

Title: To produce a filter incorporated with Graphene and to use this filter to purify contaminated water

Overview: To incorporate Graphene Oxide as a substrate into a water filter as there are no credible solutions to the current worldwide soiled water issue.

School: Sligo Grammar School

County: Sligo

Teacher: Sandra Tiernan

Student(s): Paddy Bird

1303

Title: Bead Fountains

Overview: We wish to investigate the phenomenon of the bead fountain, test models proposed to explain this and to develop a model based on our measurements.

School: Loreto College Coleraine

County: Londonderry

Teacher: Katrina Brolly

Student(s): Emmett Brolly

1304

Title: Can coffee be used to remove lead and other heavy metals from drinking water?

Overview: We investigate the possibility of using spent coffee grounds infused into a porous foam made from silicon and sugar to remove heavy metals from water.

School: Dominican College - Wicklow

County: Wicklow

Teacher: John O'Brien

Student(s): Rachael Millea

JUNIOR GROUP

1400

Title: The design and testing of a safe drinking water system for developing countries

Overview: We have designed and are developing a safe drinking water system for communities with lack of access to safe and sanitised water in developing countries.

School: Sutton Park School

County: Dublin

Teacher: Catherine Tattersall

Student(s): Xiangyu Carbon Mallol,

Méabh Scathill

1401

Title: The Effects of Chewing Gum on Shoulder Internal Rotation

Overview: An investigation looking at the link between chewing gum and loss of shoulder internal rotation.

School: Sacred Heart Secondary School

County: Offaly

Teacher: Kevin Gallagher

Student(s): Rachel Conroy,

Hannah Daly, Roisin Kenny

1402

Title: An Investigation into the Effect of Adding Cow Manure to Concrete Composite

Overview: We will investigate if cow manure can be a beneficial additive to concrete, thereby reducing the environmental impact of both the agriculture and concrete industries.

School: Coláiste Mhuire Co-Ed

County: Tipperary

Teacher: Mairead Hayes

Student(s): Cormac Walsh,

Rebecca Elphick

1403

Title: GIDI for books

Overview: We are developing an ink for books that will glow in the dark so that bookworms can read in the car and in bed at night without disturbing the driver or your room mate. We have called it GIDI (Glow In the Dark Ink) for books.

School: Salesian Secondary College, Pallaskenny

County: Limerick

Teacher: Lisa Downey

Student(s): Megan Browne,

Niamh Cusack

1404

Title: New Conjectures Concerning the Partition Function

Overview: Some of Ramanujan's most important work concerned partitions. We have discovered many new partition function congruences that differ greatly from those that he discovered.

School: Synge Street CBS

County: Dublin

Teacher: Kate Walsh

Student(s): Talha Moktar,

Abdulrhman Abouryana

1405

Title: The Age of Make-up: The Chemical Composition of Make-up

Overview: To compare modern-day make-up to make-up used thousands of years ago and the affects of make-up on your skin.

School: Avondale Community College

County: Wicklow

Teacher: Deirdre Doyle

Student(s): Sinead Doyle,

Aoife Healy

1406

Title: Investigating the pH of toothpastes

Overview: We assume that toothpastes are weak alkalis based on the premise that they neutralise any acid that may be in our mouths. Are they alkaline?

School: St Mary's College

County: Londonderry

Teacher: Ann Blanking

Student(s): Sinead Ferreira,

Amy Lough

1407

Title: Bottled Water vs Mains Water

Overview: Water should be colorless odorless and tasteless. We will analyse three different bottled water suppliers and compare to the mains water in that particular area.

School: Portlaoise College

County: Laois

Teacher: Christine Lawlor

Student(s): Emma Lynch,

Saorcha Lawlor, Ben O'Rourke

1408

Title: Generalisations of Feynman's Triangle Theorem

Overview: Richard Feynman's Triangle Theorem is a surprising result in Euclidean geometry. The goal of this project is to prove various generalisations of his theorem.

School: Synge Street CBS

County: Dublin

Teacher: Martha Nolan

Student(s): Carl Jones,

Keiron O'Neill

1409

Title: Autonomously Landing Rockets

Overview: This project is about the possibilities of reusing spent stages in a simulator called Kerbal Space Program.

School: Coláiste na Coiribe

County: Galway

Teacher: Mairéad O hEanaigh

Student(s): Cathal Lawlor,

Conor Dixon, Oisín Fitzgerald

1410

Title: An Exploratory Investigation into the Acoustical Conditions



Chemical, physical & mathematical sciences

Experienced by both Primary and Second Level students in County Limerick

Overview: Measure, Analyse and Compare the sound intensity levels that primary and second level students and teachers are exposed to on a daily basis.

School: Hazelwood College

County: Limerick

Teacher: Michelle Herbert

Student(s): Yvonne O Kelly
Caitlin O Connor, Holly Hennessy

1411

Title: Ag Fiosrú Teoiric Pick ag úsáid Lego (Investigating Picks Theorem Using Lego)

Overview: In this project we are investigating using Lego to explain and prove Picks Theorem.

School: Pobalscoil Ghaoth Dobhair

County: Donegal

Teacher: Susan Ní Loinsigh

Student(s): Daire Ó Gallchoir,
Jack Mac Giolla Bhride

1412

Title: A comparative study of the natural sugar and vitamin C content in commercial Bear Yoyos, our own homemade equivalent and fresh fruit.

Overview: By testing for sugar and vitamin C, we will determine the healthiest of the three, Bear Yoyos, our own homemade equivalent and fresh fruit.

School: St Aloysius School

County: Cork

Teacher: Katie O'Donovan

Student(s): Lydia Punch, Sarah Lane

1413

Title: Blocked Heads

Overview: Blockages in boats' heads is a problem for sailors due to calcification. We believe we can solve this problem without using HCL or Brick cleaner!

School: St Patrick's High School

County: Armagh

Teacher: Colleen Connolly

Student(s): Sarah Rafferty,
Blathnaid Campbell,
Austia Rackauskaite

1414

Title: An Investigation into Flexagons

Overview: Flexagons are polygons, which can be "flexed" to reveal faces other than the original front and back ones. They have a surprisingly complex mathematical structure.

School: Sacred Heart Secondary School

County: Cork

Teacher: Colm Kiely

Student(s): Caoimhe Diffley,
Jennifer Deasy, Caoimhe Collins

1415

Title: Can a slinky defy gravity?

Overview: we wanted to investigate why the slinky defies gravity for a few

milliseconds

School: Patrician Secondary School - Newbridge

County: Kildare

Teacher: Colin Doheny

Student(s): Zack Giles,
Nikita Grinfogels

1416

Title: Hydrobags - A protection against flooding

Overview: We came up with an alternative solution for protection against flooding by using hydrogels in sandbags instead of using sand.

School: Colaiste Chu Chulainn

County: Louth

Teacher: Andrea Mhic Eachain

Student(s): Leon Browne,
Victor Akinsowon

1417

Title: An analysis of the water quality in Bandon area and effective purifying methods

Overview: Take water samples from a variety of tributaries and analyse the water quality. Investigate cost effective ways of purifying the water.

School: Coláiste Na Toirbhirte

County: Cork

Teacher: Declan Cronin

Student(s): Grace McWeeney,
Niamh Tobin, Niamh Trunwit

1418

Title: Does the temperature that batteries are stored at affect battery life?

Overview: Many people argue about where to store batteries, so we want to find out what is the most efficient temperature to store batteries.

School: Bandon Grammar School

County: Cork

Teacher: Marie Hogan

Student(s): Michael Ross,
Edward Abbott

1419

Title: Flint on the Moy? A Geological Study of an Area of Shoreline on the Moy Estuary

Overview: An investigation of the geological and geographical origins of rocks in an area of shoreline on the eastern side of the Moy Estuary

School: Jesus & Mary Secondary School

County: Sligo

Teacher: Luke Saunders

Student(s): Matthew Blakeney,
Mark Mc Dermott

1420

Title: Analysis of the mineral content and taste of bottled and tap water

Overview: Analysing bottled and tap water for their mineral content and taste

School: St Joseph Of Cluny

County: Dublin

Teacher: Catherine Holohan

Student(s): Cara McCrystal,

Daisy Gavigan

1421

Title: Éifeachtaí Leictreiceimiceacha agus Eile na gCadhnaí Cnaipe

Overview: To quantify the nature of the damage caused by ingestion of button batteries and identify its exact cause, and whether voltage affects electrochemical reaction rate.

School: Gaelcholáiste Dhoire

County: Londonderry

Teacher: Barra Ó Dochartaigh

Student(s): Clíodhna Ní Mhianáin,
Rhíannon Nic Fealóin,
Ferdia Ó Catháin

1422

Title: An dhéanann déantús croí an slíotar difríocht in éifeachtacht an slíotar?

Overview: Táimid chun ceithre ábhair éagsúla de croí slíotar a chur i gcomparáid lena chéile chun féachaint an mbeidh difríocht eatarthu in éifeachtacht an slíotar.

School: Gaelcholáiste an Phiarsaigh

County: Dublin

Teacher: Fionnuala Nic Giolla Bháin

Student(s): Oscar Mag Uidhir,
Mícheál de Faoite,
Éamon Máirtín O'Deagha

1423

Title: The Cloud Chamber

Overview: Working Cloud Chamber, What can be seen passing through.

School: Sandford Park School Ltd

County: Dublin

Teacher: Ken Forbes

Student(s): Adam Boyle,
David Bogdanyi-Dor

INTERMEDIATE GROUP

1500

Title: Honey Bees: Natural Born Mathematicians

Overview: Honeybees are some of nature's finest mathematicians, they can calculate angles and live in one of the most mathematically efficient architectural designs around: the beehive.

School: Desmond College - Limerick

County: Limerick

Teacher: Donal Enright

Student(s): Micheal Murphy,
Leona Mullally, Rhea Crowley

1502

Title: The effect of temperature and viscosity on a sonoluminescence

Overview: Does temperature or the viscosity of the a sonoluminescent liquid play a greater role in its ability to produce light?

School: Coláiste Phádraig - Lucan

County: Dublin

Teacher: Jacqueline Farrell

Student(s): Evan Carroll,
James McDonagh

1503

Title: The harmful effects of dry burning an electronic cigarette.

Overview: In doing this project we aim to investigate what happens when you 'dry burn' an electronic cigarette.

School: Scoil Mhuire Community School

County: Kildare

Teacher: Helena Lynn

Student(s): Gráinne Lawlor,
Enya Nordon

1504

Title: Slurry runoff and its effect on surface tension

Overview: Surface tension is essential for many organisms like the pond skater, our project looks at whether agricultural pollutant slurry effects the surface tension of water

School: C.B.S. Roscommon

County: Roscommon

Teacher: Louise Gallagher

Student(s): Dean Gallagher,
Daniel Garvey, Diarmuid Feeley

1505

Title: To investigate quantities needed to make a biodegradable polymer

Overview: To investigate quantities needed of Carbon Dioxide and D-limonene (from orange peel) and B-Diiminat, to make a biodegradable plastic.

School: Loreto Abbey Secondary School

County: Dublin

Teacher: Aideen Lambe

Student(s): Alice O'Loughlin Kennedy,
Sophie O'Neill, Niamh Crean

1506

Title: ARIA or Manual? - a statistical analysis into which method of grading retinal images for diabetic retinopathy is the most effective

Overview: We aim to statistically analyse a large sample of results from diabetic retinal screening as graded by manual human graders and two different automated software programmes.

School: St Vincent's Secondary School

County: Louth

Teacher: John White

Student(s): Rachel Campbell,
Bronagh Cassidy,
Aoife Lowth

1507

Title: Why an apple a day keeps the doctor away

Overview: We are investigating the change in the levels of vitamin C and starch in apples using titration methods after different time intervals post-harvest.

School: Coláiste Choilm

County: Cork

Teacher: Robert Nolan

Student(s): Claire Barry,
Chloe Madden, Sophie Koster



1508

Title: Uptake, accumulation and transfer of Alpha Radioactivity by five common food crops grown in selected Cork soils, some amended with Phosphate Fertiliser; impact for human health

Overview: Investigating the transfer of alpha radioactivity through the human food chain, the effect of Phosphate Fertiliser on radiation levels in crops and its implications for health.

School: St Mary's Secondary School - Mallow

County: Cork

Teacher: Martin Timmons

Student(s): Shauna Murphy, Caoimhe Cronin

1509

Title: Can Plants Lead the Way to Unleaded Soil?

Overview: Comparing the effectiveness of synthetic and organic chelates at promoting lead phytoremediation in a range of Irish soils.

School: Moate Community School

County: Westmeath

Teacher: Mairead Cusack

Student(s): Ronan Murphy, Gerard O'Reilly

1510

Title: A chemical analysis investigating the effects of exposing the polymer Bisphenol A (BPA) within plastic bottles to ultra violet light.

Overview: Our project aims to investigate if ultra violet light influences the depletion/ leaching of Bisphenol A (BPA) in water bottles.

School: Pobalscoil Neasain - Baldoyle

County: Dublin

Teacher: Gemma Buicke

Student(s): Alex Molloy, Amadeus Anjos

1511

Title: An Investigation of the Salinity of Irish Coastal Waters

Overview: Analysis of dissolved salt in sea water samples to determine if there is significant presence of fresh water, thus explaining low pH readings.

School: Our Lady's GS

County: Down

Teacher: Deirdre Dunford

Student(s): Eve Dunford, Annie Smyth

1512

Title: "Park and Stride" is there a correlation between exposure to atmospheric pollution at peak traffic times outside of the school.

Overview: We will examine the hazardous atmospheric pollutants that are emitted from car exhausts, which children are exposed to during their 'Park and Stride' endeavor.

School: St Vincent's Secondary School

County: Louth

Teacher: John White

Student(s): Ruth Clarke, Dearbhla Mc Court

1513

Title: A Comparative Study of Willow and Other Woods for the Purpose of Ascertaining the Best Properties for the Manufacture of Cricket Bats

Overview: We will test other woods with similar densities to see if there is a better alternative to willow for cricket bats.

School: Scoil Mhuire gan Smál - Blarney

County: Cork

Teacher: Sean Foley

Student(s): Seanán Jones, Jordan Keohane, Callum Higgins

1514

Title: Turas go Croí-Lár na h-Éireann - Samhail Mhatamatiúil (Journey to the Centre of Ireland - A Mathematical Model)

Overview: We are using various mathematical rules to find the centre point of Ireland, applying Simpson's Rule, Trapezoidal Rule, Antiderivative and Pick's Theorem

School: Pobalscoil Ghaath Dobhair

County: Donegal

Teacher: Siobhan Ni Shearcaigh

Student(s): Emma Nic Aoidh, Aoife Ní Dhochartaigh

1515

Title: Striding for speed; An investigation into the most influential factor regarding speed

Overview: Our project aims to discover which factor influences speed most. We will use video analysis software (logger pro) to collect data and analyse it.

School: Heywood Community School

County: Laois

Teacher: Aodhagan O Suilleabhain

Student(s): Sarah McMahon, Jessica Barrett, Floriana Mezzapelle

1516

Title: "The Condensation Tree" - An investigation into the quantity, quality and production of water for third world countries.

Overview: Grey water purification using natural evaporation and a "condensation tree" for maximum surface area using different materials for effectiveness and efficiency.

School: Scoil Mhuire gan Smál - Roscommon

County: Roscommon

Teacher: Padraig Harlow

Student(s): Ruth McDermott, Abby Mullally, Siofra Mahon

1517

Title: Mirages and the refraction of light in our world

Overview: Investigating how light refracts in different humidities and

temperatures and how this affects the perception of people in different countries with these conditions.

School: Ursuline College

County: Sligo

Teacher: Anthony Carolan

Student(s): Ava Connolly, Lara Mcdonagh

1518

Title: To Investigate the Efficiency of the Magnus Effect in Different Modes of Transport

Overview: Incorporate the Magnus Effect in aerodynamic designs and prototypes of different modes of transport, allowing us to compare their efficiency to conventional designs used today.

School: Newtown School - Waterford

County: Waterford

Teacher: Bryan Ronan

Student(s): Isobel Collins, Erika Beyers

1519

Title: Can milk be turned into plastic?

Overview: Investigation to see if pasteurised milk can be converted into casein plastic, and what are the benefits to the environment.

School: Avondale Community College

County: Wicklow

Teacher: Amy Murphy

Student(s): Eimer Butler Litster, Sarah Lalor, Sadhbh Ní Dhubhsláine

1520

Title: We will map the current beach profile. We will compare our results against historical maps/data. We will extrapolate forward into the future too

Overview: We will map the current beach profile. We will compare our results against historical maps/data. We will extrapolate forward into the future to

School: GaelCholáiste Phort Láirge

County: Waterford

Teacher: Seán Ó Catháin

Student(s): Clíodhna Fullam, Lily Corcoran

1521

Title: A Mathematical Analysis Applying the Golden Ratio to Snapchat Filters

Overview: Our project aims to investigate if the Golden Ratio (1:1.62) is present within snap chat filters altering the symmetry of the face adhering to phi.

School: Pobalscoil Neasain - Baldoyle

County: Dublin

Teacher: Gemma Buicke

Student(s): Jack Graham, Dominik Guzowski, Dáithí Geary

1522

Title: Think outside the sink

Overview: We hope to find a natural alternative to the use of chlorine in the treatment of drinking water, especially for water treatment in

developing countries.

School: St Aloysius College

County: Cork

Teacher: Carew Hyland

Student(s): Kate Hyland, Caoimhe Mulkeen, Orla O'Shea

1523

Title: Natural ways of removing micro-organisms in water

Overview: Our project investigates the possibility of using natural ways of removing micro-organisms from water.

School: C.B.S. Roscommon

County: Roscommon

Teacher: Louise Gallagher

Student(s): Rory Gaquin, Ryan Doorly

1524

Title: Ag cuardach an modh is éifeactaí chun Ailgéabar a theagasc don chéad bhlian.

Overview: Our goal whilst working on this project is to investigate wheather or not book learning is the most effective way to teach algebra to beginners.

School: Pobalscoil Ghaath Dobhair

County: Donegal

Teacher: Siobhan Ni Shearcaigh

Student(s): Claire Ní Bhraonáin, Alannah Ní Bhaoill

1525

Title: Pedal Power

Overview: This project investigates the relationship between heartbeat, cadence, speed and power output under cycling strain.

School: Athlone Community College

County: Westmeath

Teacher: Martina Roache

Student(s): Robert Kelly, Michael Lynch

1526

Title: Proving New Theorems Using Barycentric Coordinates

Overview: We use barycentric coordinates to prove a number of new theorems in Euclidean geometry.

School: Synge Street CBS

County: Dublin

Teacher: Elaine Egan

Student(s): Benedek Goz, Gleb Kurilenko

1527

Title: The Statistical Analysis of the Birth Dates of Thoroughbred Racehorses and the subsequent impact on their Racing Career

Overview: To prove that the rule declaring all thoroughbred horses to share a universal birthday of January 1st ultimately determines the careers of all flat racehorses.

School: Bandon Grammar School

County: Cork

Teacher: Paula McGath

Student(s): Eva Murphy, Lynn Sweetnam



Chemical, physical & mathematical sciences

1528

Title: Phone Book Physics

Overview: We'll attempt to explain the physics behind why it is so difficult to separate interleaved phone books, especially the role of friction in this context.

School: Loreto College Coleraine

County: Londonderry

Teacher: Maeve Close

Student(s): Dónal Close, Sian Donaghy

1529

Title: To investigate the effect on the milk for processing of the possible overuse of peracetic acid when sterilizing milking machines and bulk tanks.

Overview: We are investigating the effects that cleaning milking machines and bulk tanks with peracetic acid has on the composition, taste and safety of the milk.

School: Ursuline Secondary School - Thurles

County: Tipperary

Teacher: Anne Molony

Student(s): Sarah Ryan, Lauren Cloonan, Laura Maher

1530

Title: The Maths of Rigged Roulette Wheel

Overview: Our project examines the probability distribution of an old fairground roulette wheel and investigates the factors that influence the degree of bias of the wheel.

School: Ardscoil Uí Urmoltaigh

County: Cork

Teacher: Eoghan O'Leary

Student(s): Calum O'Donnell, Patryk Lis, Kieran Murphy

1531

Title: Protein Glue

Overview: To see what would be the strongest glue made from protein in various milk types

School: Blackrock College

County: Dublin

Teacher: Killian Grumley Traynor

Student(s): Fergus Woods, Sam O'Carroll

1532

Title: An Investigation Into How The Impact Force Of Rain Onto A Surface Can Be Converted Into Energy.

Overview: To investigate how the force of rain hitting of a surface can be converted into energy and how it would be more beneficial for Ireland.

School: Laurel Hill Secondary School FCJ

County: Limerick

Teacher: Andrea Enright

Student(s): Alison Kilbridge, Edel Kelleher, Alannah Browne

1534

Title: An Éifeacht Atá ag Fad an Fearsáid don Chlub Gaif ar Luascadh an Imreoir

Overview: Táimid chun cruthú nó díchruthú gur chuirfidh fad an fearsáid don chlub gaif feabhas ar an cruinneas atá ag an imreoir ag buaileadh liathróidí.

School: Colaiste An Phiarsaigh

County: Cork

Teacher: Niamh Furlong

Student(s): Kate Corcoran,

Pat Tracey, Seónaid Lally

SENIOR GROUP

1600

Title: Investigating Evaporating

Overview: A comparative investigation of the pollutants contained in the vapour from various e-cigarettes using a range of e-liquids.

School: St Mary's College

County: Londonderry

Teacher: Ann Blanking

Student(s): Kayleigh Doherty, Caoishe Mc Laughlin

1601

Title: Epidemic Models for Secondary Schools

Overview: We adapted a compartmental epidemic model and used it to model the behaviour of the common cold in a secondary school.

School: Colaiste An Spioraid Naoimh

County: Cork

Teacher: Tim Kerins

Student(s): Dylan Morley, Conor McKeown, Nathaniel Grant

1602

Title: An Application of Finite Element Analysis Techniques to Study How The Geometry of Common Sports Bats Affects The Performance of The Bat

Overview: The project investigates if the position of the radius of gyration of a sports bat/hurley relative to its sweet spot affects the performance of the bat/hurley.

School: Scariff Community College

County: Clare

Teacher: T. J. O'Halloran

Student(s): Danny Hynes, Aaron O'Brien, Ciaran Hickey

1603

Title: The Microbead Dilemma

Overview: Microbeads are contained in various products as abrasives. This project investigates the microbead content of various products and their ability to absorb waterborne pollutants.

School: St Mary's College

County: Londonderry

Teacher: Ann Blanking

Student(s): Lauren Mc Callion, Rebecca Wright

1604

Title: The Chemistry Of Chlorophyll

Overview: We are investigating the effects of temperature and enzyme action on the chemical structure of chlorophyll and its stability in aquatic and terrestrial plants.

School: Tullamore College

County: Offaly

Teacher: Elaine Howlin

Student(s): Alana Dillon, Ciannait Goulding

1605

Title: Crumple Zone

Overview: In this project we aim to explain the physics behind a crumpled paper ball, and why it is much stronger than a sheet of paper.

School: Loreto College Coleraine

County: Londonderry

Teacher: Maeve Close

Student(s): Fearghal Close, Dominic Bradley, Seán Doherty

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1100 - 1605

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JUNIOR INDIVIDUAL

2100

Title: The Fire "Tech" Stinguisher.

Overview: A device to show the type of fire extinguisher in place, sound an alarm when smoke is detected and points to the nearest exit.

School: Desmond College - Limerick

County: Limerick

Teacher: Donal Enright

Student(s): Kayla McMahon

2101

Title: Intelligent Traffic Light Sensor

Overview: The main idea is to figure out when to turn a traffic light green for a waiting car. This should prevent big traffic jams.

School: Castletroy College

County: Limerick

Teacher: Ellie Murnane

Student(s): Liam O'Mara

2102

Title: Tractor Safe Lock

Overview: Tractor Safe Lock is a device that automatically engages the handbrake of a tractor when the operator exits the tractor and saves lives.

School: Killorglin Community College

County: Kerry

Teacher: Donal O'Reilly

Student(s): Jack Nagle

2103

Title: Pi-Ticket

Overview: A simple, easy to use, cost effective, event entry system that minimises human contact and expensive hardware.

School: New-Bridge Integrated College

County: Down

Teacher: Dara Morgan

Student(s): Jack Delaney

2104

Title: Making caring for people easier using technology

Overview: we are planning to make caring for people easier using technology, we're trying to track tasks completed, tasks to be completed using sensors and panels.

School: St Aloysius College

County: Westmeath

Teacher: Keith Rowe

Student(s): Alan Malone

2105

Title: Non-Slip Ladders!

Overview: The aim of my project is to design a non-slip ladder which will prevent falls causing injuries and fatalities.

School: Avondale Community College

County: Wicklow

Teacher: Aoife Sullivan

Student(s): Niall Byrne

2106

Title: pocketKnow - Your ultimate

tool for Revision

Overview: PocketKnow is an app which aims to provide an aid to students in the Junior Cycle with Past Papers, Revision Notes and Augmented Reality 3d-Models.

School: Coláiste Iósaef

County: Limerick

Teacher: Brian Clarke

Student(s): Alex Goodison

2107

Title: Cyberstick

Overview: An anonymous file sharing website for confidentiality when sharing files.

School: Sandford Park School Ltd

County: Dublin

Teacher: Edel Martin

Student(s): Finbar Giusti

2108

Title: An autonomous system that provides information on the well-being of patients suffering from dementia.

Overview: This project is a technology that improves the efficiency of care givers by reporting the well-being of their patients.

School: North Monastery Secondary School

County: Cork

Teacher: Frank Murphy

Student(s): Danila Fedotov

2109

Title: A referee wrist band that will connect all referees and will cause better and quicker decisions to be made

Overview: My project goal is to make a set of referee smartwatches that will improve the connection between all referees. This will be called "Ref Network".

School: Ardscoil Rís

County: Limerick

Teacher: Jack Corrigan

Student(s): Niall Meade

INTERMEDIATE INDIVIDUAL

2200

Title: Protecting turbobfans from foreign object damage.

Overview: Designing a system that prevents foreign object debris from entering the engines of commercial aircraft and causing detrimental effects on the power plants' performance.

School: Sutton Park School

County: Dublin

Teacher: Catherine Tattersall

Student(s): Omar Salem

2201

Title: Autistic communication system

Overview: An autistic communication system designed to assist families of autistic children in bridging communication and making learning

more about the unique needs of their child.

School: Desmond College - Limerick

County: Limerick

Teacher: Donal Enright

Student(s): Alice Duffy

2202

Title: Developing a Smart Water Meter

Overview: This project aims to build a module that connects to a water meter and to design a web interface that monitors and analyses water usage.

School: St Andrew's College

County: Dublin

Teacher: Eoin Fahey

Student(s): Aaron Speer

2203

Title: Ultra Vision

Overview: This project assists blind people in their daily lives to avoid obstacles, by wearing sensor glasses. Over 39 million people worldwide will benefit from this.

School: Killorglin Community College

County: Kerry

Teacher: Donal O'Reilly

Student(s): Timothy McGrath

2204

Title: Building a better dew collection system

Overview: A study of how water vapour can be collected and channelled/stored with the idea of making a better dew collection system.

School: Wesley College - Ballinteer

County: Dublin

Teacher: Seosamh O Braonain

Student(s): José Juan De Leon Guillamon

2205

Title: Detecting sports injuries as they happen using an Arduino based monitoring system

Overview: I want to see if it is possible to build an Arduino based sensor to detect muscle strains while someone is actively playing sport

School: Coláiste Phádraig - Lucan

County: Dublin

Teacher: Jacqueline Farrell

Student(s): Azmain Faiq

2206

Title: Mount Usher Navigator - The Application of new technology to Engage Young People in Natural Tourism

Overview: An Application to engage young people to explore and experience nature by interactive games and trails using their device. Encourages identification of plants and trees.

School: East Glendalough School

County: Wicklow

Teacher: Ric Murawski

Student(s): Donovan Web

2207

Title: Stoma Care - The search for new solutions to old problems!

Overview: I will investigate, propose, and design new post-surgery stoma care products to ease the day to day lives of patients with stomas.

School: De La Salle College

County: Waterford

Teacher: Julia Butler Kelly

Student(s): Jack Doyle

2208

Title: Saoránach

Overview: I am writing an app which makes it possible for people to report problems in their area e.g. potholes, flooding, etc. to their local council.

School: Mary Immaculate Secondary School - Lisdoonvarna

County: Clare

Teacher: John Sims

Student(s): Jessica Kelly

2209

Title: Energy Scavenging Clothing

Overview: An item of clothing that harnesses energy from the moving body to provide light and visibility.

School: Ardgillan Community College

County: Dublin

Teacher: Patrick Brennan

Student(s): Cian Bolger-Hayes

2210

Title: Investigating an Improved Method to Help Visually Impaired People Identify Euro Notes

Overview: NoteCheck a simple, cost effective device which helps visually impaired people to correctly identify the denominations of euro banknotes.

School: Loreto Secondary School - Navan

County: Meath

Teacher: Lisa Darley

Student(s): Eleanor Murchan

2211

Title: spright.io

Overview: spright.io helps kids to learn HTML, display their creations to the world and work collaboratively

School: St David's Secondary

County: Wicklow

Teacher: Ciaran O'Muirghéasa

Student(s): Harvey Brezina Conniffe

2212

Title: Development of an algorithm for increasing the efficiency of computer component selection

Overview: Aim- To increase the efficiency of computer component selection in order to assist individuals in selecting the optimum components for their design requirements and budget.

School: Borrisokane Community College

County: Tipperary



Technology

Teacher: Mary Brady
Student(s): Robert Guest

2214
Title: You've Got Braille
Overview: When post comes into your postbox it triggers a sensor that notifies the deaf/blind/elderly person that they have post on a receiver in there home.
School: Scoil Dara
County: Kildare
Teacher: Adrian Guinan
Student(s): Thomas Sims

SENIOR INDIVIDUAL

2300
Title: EnableArm: The Facial Care Device for People with Limited Hand Dexterity
Overview: EnableArm is a headset device which performs shaving and related tasks for people with paralysis causing limited hand function.
School: St Muredachs College
County: Mayo
Teacher: Kevin Boyle
Student(s): Aaron Hannon

2301
Title: Using Deep Neural Networks to find offensive text and use this to help combat online harassment
Overview: Online harassment is a social problem, It is impossible for all content to be filtered manually by humans, what if it didn't have to be?
School: St Joseph's College
County: Tipperary
Teacher: Mary Gorey
Student(s): John Ryan

2302
Title: SAR
Overview: SAR is an app I'm developing to combat both social anxiety and stress through modes giving perspective, relaxation and specific advice into the topics available.
School: De La Salle College
County: Waterford
Teacher: Mary McDonagh
Student(s): Padraig Spillane

2303
Title: To cut the risks or delay onsets of dementia and other chronic neurodegenerative diseases with the use of an Android game
Overview: My game is aimed at elderly adults. The project's job is to cut the risks or delay onsets of dementia and other neurodegenerative diseases.
School: Maynooth Education Campus
County: Kildare
Teacher: Tom Dixon
Student(s): Natasza Spaczynska

2304
Title: Branch Strike Detector
Overview: A WiFi-enabled Branch

Strike Detector using a microphone and GPS to upload position and speed data to a website, for processing at a later date.

School: Ballymena Academy
County: Antrim
Teacher: Kathryn Wylie
Student(s): Connell McLaughlin

2305
Title: Li-Pi
Overview: My own Li-Fi circuit, a new form of wireless communication through light.
School: St Declan's College
County: Dublin
Teacher: Yvonne Nolan
Student(s): Stephen Cushen

2306
Title: Aquaflo Bin
Overview: I designed a floating rubbish bin that works with a submersible pump and solar panel to remove floating debris, oil and nutrients from lakes etc
School: Our Lady's Bower
County: Westmeath
Teacher: Ethna Benson
Student(s): Tierna Maguire

2307
Title: PizzaBot Reheated: Using Random Generation to Create an Infinite Game
Overview: PizzaBot Reheated (sequel to PizzaBot from 2011) is a mobile game that uses new random generation techniques to ensure that the game goes on infinitely.
School: Coláiste An Spioraid Naoimh
County: Cork
Teacher: Tim Kerins
Student(s): Harry Moran

2308
Title: qCrypt: The quantum-secure, encrypted, data storage solution with multijurisdictional quorum sharding technology
Overview: A fully featured software solution which provides users with a quantum-secure data encryption platform. Data is "sharded" across multiple jurisdictions utilising novel quorum-based algorithms.
School: Terenure College
County: Dublin
Teacher: Michael Shanahan
Student(s): Shane Curran

2309
Title: Modelling the effect of solid electrolyte thickness on the performance characteristics of a novel hybrid supercapacitor battery
Overview: The project aim is fabricate and optimise the performance characteristics of a functional hybrid solid electrolyte supercapacitor battery
School: Coláiste Ailigh
County: Donegal
Teacher: Shane Ó Breacáin

Student(s): Ultan Farrell

2310
Title: 3D Printing for the Future: Producing Homemade Hearts and other low cost artificial limbs
Overview: Investigating the efficiency of 3D printed prosthetics, organs and other artificial creations by creating and testing sample prosthetics.
School: Ardscoil Ris
County: Limerick
Teacher: Phil Harte
Student(s): Cian O'Donnell

JUNIOR GROUP

2400
Title: Sensi: The sensory exercise app
Overview: Our project is an app which provides sensory exercises for people with sensory processing disorders. It contains gross and fine motor exercises and tracks progress.
School: Coláiste Bhaile Chláir
County: Galway
Teacher: Niamh Burke
Student(s): Alyssa Laffey, Aoife Clarke

2401
Title: 'Congraturation!' You have completed an Arcade Cabinet!
Overview: We have designed arcade that emulates multiple consoles e.g The Super Nintendo Entertainment System and Sega Mega Drive with games from 1977 to 1996.
School: Portumna Community School
County: Galway
Teacher: Niamh Barry
Student(s): Gavin McGinley, Roy Flaherty

2402
Title: Dyslexic Aid
Overview: Dyslexic Aid helps children with Dyslexia to learn letters by manipulating them with phonics into their proper orientation, following their outline and spelling words
School: St Killian's College
County: Antrim
Teacher: Sean Connolly
Student(s): Aoife Delargy, Kiera Mckillop, Sinead McKeown

2403
Title: Alert-a-Buoy
Overview: Modifying a navigational buoy so that authorities can be alerted to need of rescue at the buoy's location.
School: Colaiste Mhuire - Mullingar
County: Westmeath
Teacher: Eva Acton
Student(s): Jack Kenny, Conor Farrell, Sean Murphy

2404
Title: Virtual Music Maker
Overview: VirtualMusicMaker plays music by pressing the buttons and moving a Wii Remote connected via

Bluetooth to a RaspberryPi enabling disabled people to easily play instruments.

School: St Killian's College
County: Antrim
Teacher: Sean Connolly
Student(s): Anna Ewings, Meabh McIlwaine

2405
Title: Diabetica
Overview: We aim to have a fully functioning app for management and analysis of Diabetes for patients & to have a prototype glucometer to interact with
School: Presentation Secondary School
County: Tipperary
Teacher: Tracey O'Leary
Student(s): Aoibhin Foley, Caoimhe Woods

2406
Title: The Bike Collision Sensor
Overview: Create a sensor to detect if a moving vehicle is coming within a 1.5 metre distance of a cyclist.
School: Coláiste Bhaile Chláir
County: Galway
Teacher: Joni Treanor
Student(s): Katherine Corbett, Maeve Farragher, Róisín Joyce

2407
Title: An investigation into the use of various manures from different animals to determine which has the greatest energy supply to farms.
Overview: This project will investigate using poultry manure on farms as an energy source using a technology called fluidised bed combustion. We aim to reduce the issue of global warming by generating energy from manure.
School: Hazelwood College
County: Limerick
Teacher: Martina Matthews
Student(s): Sean O'Connor, David Noonan, Jamie Hennessy

2408
Title: To determine the technical feasibility of using machine learning technology to predict when a mobile phone or charger may explode.
Overview: Recent product recalls highlight how smartphones may explode causing serious injury. We create an Internet of Things system using machine learning to detect malfunctioning smartphones/chargers.
School: Athlone Community College
County: Westmeath
Teacher: John Friel
Student(s): Amy Fallon, Andrea Whyte

2409
Title: GPS Smart Counter Whip
Overview: To put a counter and a gps into a whip which counts how many



times the horse is hit and what time its is hit
School: Clonakilty Community College
County: Cork
Teacher: Patrick O Keeffe
Student(s): P.J Moloney, Jack Moloney, Paul Kingston

2410
Title: Home is where the smart is - use your sensors!
Overview: Our project will analyse the benefits of using the Internet of Things (IoT) in the home with a view to enhancing and improving daily living.
School: Coláiste Bhaile Chláir
County: Galway
Teacher: Joni Treanor
Student(s): Lauren McMahon, Niamh King, Alannah Murphy

2411
Title: Prevention of Further Concussions and Head Trauma in Rugby due to early detection.
Overview: We're designing an app connected to a micro-controller, accelerometer and gyroscope that will detect significant head trauma so a player will be removed from play.
School: Our Lady Of Mercy Secondary School
County: Waterford
Teacher: Rosario Burke
Student(s): Holly Meaney, Eimear Power

2412
Title: Bio Glam!
Overview: We developed a jewellery range that is biodegradable
School: Our Lady's Bower
County: Westmeath
Teacher: Ellen Maguire
Student(s): Janet Collins, Weronika Halusko

2413
Title: Smart Plug
Overview: To create an energy efficient plug adapter by using Internet Of Things.
School: Coláiste Bhaile Chláir
County: Galway
Teacher: Niamh Burke
Student(s): Finn Regan, Emmet O Shea, Michael Moroney

2414
Title: Weight....How heavy is my bin?
Overview: A device that allows the homeowner to read a calculated display of the weight for their 'pay by weight' waste bins.
School: North Monastery Secondary School
County: Cork
Teacher: Kieran Ruby
Student(s): Abrar Hussain, Daniel Dennehy

2415
Title: Dogs Be Gone
Overview: "Dogs be gone" is a high frequency tool attached to the handlebars of a bicycle it's used to keep dogs at a safe distance from cyclists.
School: Colaiste Mhuire - Mullingar
County: Westmeath
Teacher: Eva Acton
Student(s): Joseph Boyan, Ruairi Fagan

2416
Title: A device to pre-empt damage in slats on farms across the country
Overview: Our aim is to reduce the rate of farm injuries/deaths by creating a device & app that can record corrosion in slats using your smartphone.
School: Coláiste Choilm
County: Cork
Teacher: Liz Horgan
Student(s): Sarah Leahy, Louise Clarke

INTERMEDIATE GROUP

2500
Title: Epi-Print
Overview: Our project is to create an app to enable pharmacist to access anaphylactic patients medical history so they can administer epi-pens in emergency situations.
School: Presentation Secondary School - Thurles
County: Tipperary
Teacher: Patricia Stapleton
Student(s): Niamh Murphy, Isla Sexton, Laura Courtney

2501
Title: Multi-Functional Pen
Overview: To design a multi-functional pen, containing two colours, a ruler, tip ex and a rubber which is both cost effective and user friendly.
School: Our Ladys School - Templeogue
County: Dublin
Teacher: Lynsey Stuart
Student(s): Hannah O'Gorman, Emily O'Gorman, Amy Dodrill

2502
Title: Motorbike Safety App
Overview: To create an application that alerts motorists to nearby cyclists/motorcyclists in order to prevent accidents on Irish roads.
School: St. Joseph's Secondary School
County: Clare
Teacher: Anthony Guilfoyle
Student(s): Diarmuid King, Caoilfhionn O'Dea

2503
Title: Portable blood pressure monitor with alert feature
Overview: We aim to adapt/design a portable blood pressure monitor that can alert roughly two emergency

contacts if your blood pressures spikes/drops dangerously.
School: Scoil Mhuire gan Smál - Roscommon
County: Roscommon
Teacher: Pdraig Harlow
Student(s): Aine Earley, Hannah Ward, Caroline Lapina

2504
Title: Variable road speed sign
Overview: This is a road sign that changes speed according to the temperature of the given time. We aim that this we reduce casualties on Irish roads.
School: Jesus & Mary Secondary School
County: Mayo
Teacher: Niamh Breheny
Student(s): Jason Feely, Edward Gough, Sean Mckeen

2505
Title: Smartphone Hologram
Overview: For our project we make a hologram using a smartphone and a plastic prism.
School: Bailieborough Community School
County: Cavan
Teacher: Nuala Burns
Student(s): Pat Faley, Emily Gregory, Megan Wilson

2506
Title: When In Doubt, Swing It Out!
Overview: We are investigating, developing and testing a device, based on a gyroscope, for a golf club that indicates how long your swing should be.
School: St Joseph's College
County: Tipperary
Teacher: Mary Gorey
Student(s): Christine Delaney, Kate Madden, Seamus Ryan

2507
Title: THINK FAST!
Overview: We are investigating to see if people who play computer/video games have a higher dexterity than others. We plan on proving this by testing the reactions of four individuals of the same age, over the course of six weeks
School: St Mary's High School
County: Cork
Teacher: Niamh Jones
Student(s): Karynn Collins, Megan Murphy, Emma Cosgrove

2508
Title: Design and development of a home security robot.
Overview: We are going to build a robot using Raspberry Pi and an Arduino to remotely monitor your house while you are away through the internet.
School: Clonakilty Community College
County: Cork
Teacher: Patrick O Keeffe

Student(s): Colm Brennan, Dylan O' Mahony

2509
Title: Notate it
Overview: We have started creating an app that will assist new/experienced musicians in notating. The app will place notes played or sung onto a staff.
School: St Peter's College - Dunboyne
County: Meath
Teacher: Catherine Clair
Student(s): Zoe McConnell, Emma Sidlauskas, Daniel Eaton

2510
Title: Fastest Fingers First - Do texters pay the price?
Overview: Does texting affect finger dexterity? Dexterity is the movement of fingers and we'll find out does texting influence this in a positive or negative way?
School: Ursuline Secondary School - Thurles
County: Tipperary
Teacher: Olivia Hogan
Student(s): Sadhbh Leahy, Caoimhe Perdue

2511
Title: Get off my Tail
Overview: The aim of this project is to develop a system to warn a motorist if he/she is driving too close to another car i.e. tailgating.
School: Marist College - Athlone
County: Westmeath
Teacher: Cian O'Brien
Student(s): Pdraig McDermott, Billy Dalton, Oisín Lough

2512
Title: The Hox Project - Using RFID technology to advance medicine
Overview: We have created and developed several devices to help the blind and elderly administer medicine correctly and safely using audio descriptors and RFID technology.
School: Coláiste Bhaile Chláir
County: Galway
Teacher: Niamh Burke
Student(s): Ailaidh Fox, Deirdre Hughes

2513
Title: A smoke alarm geared towards alerting hard of hearing/deaf people to fires at home and in the workplace
Overview: We are designing a more reliable means of alerting hard of hearing/deaf people to fires, using Bluetooth and mobile app technologies.
School: St Benildus College
County: Dublin
Teacher: John Furler
Student(s): Paraic O Ciaruain, Mihailo Manojlovic

2515
Title: heartbeat



Technology

Overview: to incorporate a heart monitor into the steering wheel of all motor vehicles to prevent accidents from people falling asleep while driving
School: Salesian Secondary College, Pallaskenry
County: Limerick
Teacher: Lisa Downey
Student(s): Rachel Judge, Sarah Lynch, Zara Miller

2516
Title: Unlicensed to Kill
Overview: A device to prevent unlicensed drivers from endangering others on our roads.
School: St Joseph's College
County: Tipperary
Teacher: Mary Gorey
Student(s): Liam Ryan, David Moran

2517
Title: Stopping the shake
Overview: We hope to invent something that will allow a cup of coffee to be successfully drank by someone with hands that tremor.
School: Loreto Secondary School - Navan
County: Meath
Teacher: Lisa Darley
Student(s): Hannah Nugent, Katie Rattigan

2518
Title: Development of an Improved Rowing Machine Handle to Increase Feathering Muscle Build-up
Overview: The design and development of a rowing machine handle with a feathering function and investigate if it helps improve feathering muscle development
School: Clonakilty Community College
County: Cork
Teacher: Patrick O Keffe
Student(s): Tadhg O Suilleabhain, Tomás Murphy, Daniel O'Brien

2519
Title: Funky Focail App
Overview: Our project aims to increase the use of the Irish language in young children aged between 4-6 by developing a gaming application called "Teanga Dufair"
School: Meanscoil Gharman
County: Wexford
Teacher: Áine O' Regan
Student(s): Niamh Tennant, Olivia Morris Nolan

2520
Title: Independence
Overview: An innovative, modern, yet practical bag to provide independence and support to a visually impaired individual, aiming to improve their standard of living.
School: Davis College
County: Cork
Teacher: Carol O' Sullivan

Student(s): Rory O Connor, Christopher O Connell, Kevin Walsh

2521
Title: A Low Cost Non-Electirc Air Cooling Fridge
Overview: A non-electric fridge for the developing world made from waste materials, to preserve food and medicines using naturally compressed air
School: Clonakilty Community College
County: Cork
Teacher: Patrick O Keffe
Student(s): Ciarán Nyhan, James Campbell, Cian Ryan

2522
Title: Dairy Calf Incubator
Overview: We will be designing a calf incubator which will reduce mortality in dairy calves in the first 4 to 6 weeks of life.
School: Salesian Secondary College, Pallaskenry
County: Limerick
Teacher: John O'Flynn
Student(s): Ciara Nolan, Rebecca Fitzgerald, Jessica Fitzsimmons

2523
Title: inexpensive mobile device to help the elderly
Overview: This Device helps people to automatically send data about their health to their gp, this device also helps turning basic home appliances on and off.
School: Beech Hill College
County: Monaghan
Teacher: Claire Leonard
Student(s): Caolan Maguire, Shane Gilbride

2524
Title: Bristles, less power lost by Thistles.
Overview: Our project is to reduce current loss in fence on a farm by bushes, trees and other conductors.
School: Comprehensive School - Tarbert
County: Kerry
Teacher: Gerard Nash
Student(s): Tomás Culhane, Ciaran Healey

2526
Title: hydroelectric waste water turbines
Overview: To get more use out of waste water from household appliances and turn it into electricity and therefore saving people money on electricity bills.
School: St Kieran's College
County: Kilkenny
Teacher: Eileen Hanrick
Student(s): Daire Cassin, Jim Kirby, Bill Bryan

2527
Title: Investock: Developing a

simulated Trading Platform, Stock Market Index & Educational Resource to enhance 2nd level students' financial literacy in an appealing & interactive manner
Overview: Investock aims to address poor financial literacy in students through the experimental use of a simulated trading platform, Index & accompanying educational resource.
School: Ardscoil Ris
County: Limerick
Teacher: Phil Harte
Student(s): Domhnall Coffey, Dara O'Brien, Ronan Randles

2528
Title: Slurry vent extractor.
Overview: A slurry vent which draws harmful gases away from the shed and releases them safely
School: Salesian Secondary College, Pallaskenry
County: Limerick
Teacher: John O'Flynn
Student(s): Michael Kelly, Michael Byrnes

2529
Title: Is it possible to make a bin that separates its own waste?
Overview: We are planning to make a smart bin that will separate and re-purpose its own waste into three sections: metal, paper and plastic
School: Community College
County: Meath
Teacher: Claire Tuttlebee
Student(s): Jennifer Vance, Conor Powderly, Warren Leung

2530
Title: Innovations in feeding technology for livestock
Overview: Innovations and improvement in the hydration of livestock and the time efficient method of rationing feed.
School: Colaiste Chraobh Abhann
County: Wicklow
Teacher: Aoibheann O'Gara
Student(s): Oisín Cullen, Dylan Symmes, Sam Ireland

2531
Title: Wizloo
Overview: Our project aims to develop an app suited to Apple devices to identify if toilet facilities in listed premises are actually wheelchair accessible.
School: Salesian Secondary College, Pallaskenry
County: Limerick
Teacher: Claire Sheehy
Student(s): Ross Fitzgerald, Colin Griffin, Eryk Swiatek

2532
Title: Using an electric toothbrush to charge a mobile phone
Overview: Our project is an adaptation of a method used to create a wireless power source. This

wireless power source will be used, to wirelessly charge a phone.
School: Colaiste Phobáil Rós Cré
County: Tipperary
Teacher: Sarah Kirwan
Student(s): Alan Mullally, Peter Maher

2533
Title: Mo Lorg Carbóin
Overview: Táimid ag iarraidh aip a cruthú chun cabhrú leis and gnáth-duine a lorg carbóin a laghdú agus troid in aghaigh téamh domhanda.
School: Coláiste Cois Life
County: Dublin
Teacher: Ciara Ni Chualain
Student(s): Sarah Rooney, Rebecca Atkinson, Catríona Atkinson

2534
Title: Cow Cluster Cleaner!
Overview: This project is for cleaning clusters in the milking parlour and saving time in making it more hygienic increasing milk quality.
School: Salesian Secondary College, Pallaskenry
County: Limerick
Teacher: John O'Flynn
Student(s): Ashling O'Shaughnessy, Chloe Keyes, Joanne Davoren

2535
Title: Electronic Shopping Cart
Overview: Based to make your shopping load more accessible and easier to unload to prevent back strain mainly with elderly generation that suffer from back problems.
School: Tarbert Comprehensive School
County: Kerry
Teacher: Gerard Nash
Student(s): Katelyn O'Mahony, Charlott-Theres Mohnke, Alejandro Maristany

SENIOR GROUP

2600
Title: Ergonomic Planter
Overview: A device that will improve planting in developing countries by allowing users plant with increased safety, consistency and speed, using an ergonomically designed portable planter.
School: Desmond College - Limerick
County: Limerick
Teacher: Donal Enright
Student(s): Jack O'Connor, Diarmuid Curtin

2601
Title: Mobile Emergency-International Solution
Overview: Investigating the inadequate emergency service dispatch systems in developing countries. Our solution is an application we developed named "Mobile Emergency."
School: Portmarnock Community School



County: Dublin

Teacher: Niall Fitzgerald

Student(s): Darragh Bolger,
Ravi Gollapalli

2602

Title: LifeStats

Overview: A multi-award-winning web-app/IoT network that aims to augment peoples lives using statistics and provide cost-effective contextual-advertising for local businesses without the need for user tracking.

School: Luttrellstown Community College

County: Dublin

Teacher: Jennifer O' Dwyer

Student(s): Akhil Voorakkara,
Steven Harris, Jack Lane

2603

Title: A unique approach to biomimicry in bipedal locomotion

Overview: We aim to increase the efficiency in bipedal locomotion. To do this we will investigate an alternative muscle mimicry approach and machine learning approach.

School: Coláiste Éinde

County: Galway

Teacher: Matthew Lockett

Student(s): Kevin McAndrew,
Nico Amaya

2604

Title: Collapse Response System

Overview: This device automatically alerts carers to the collapse of their patient by sending an SMS text message.

School: Ballyclare High School

County: Antrim

Teacher: Paul Wilson

Student(s): Jonathan Rainey,
Daniel Stewart, Craig Moore

2605

Title: Make a Mark-Sheep Marking Gun

Overview: We have designed a single-handed gun for applying marking fluid to sheep and intend to investigate the advantages of using this compared to other methods.

School: Jesus & Mary Secondary School

County: Mayo

Teacher: Niamh Breheny

Student(s): Sarah Murphy,
Mary Murphy

BT YOUNG SCIENTIST & TECHNOLOGY EXHIBITION

ALUMNI



The BTYSTE Alumni Showcase, a new feature for 2017, features previous participants exhibiting their commercial ventures before the general public at the exhibition.

A competition took place to allow Alumni of the BT Young Scientist & Technology Exhibition or BT Young Scientist Business Bootcamp who qualified for the Exhibition and now have an a company based on their BTYSTE project. The goal of the Alumni Showcase is to shine a light on the myriad of successful commercial enterprises born at the Exhibition since its beginnings in 1965. Those that are featured in the Showcase are:



FenuHealth

FenuHealth is a multi-award Equine Supplement which specialises in Gastric Ulcers in horses. From a stable of seven products, the main product is FenuSave which is being sold in Ireland and exported to 12 countries. All products are 100% natural, are manufactured to human health standards and are tested to parts per billion. FenuSave was even used by horses at the Rio Olympics as well as the Aintree Grand National with over 100 National Hunt Race Wins in 2016. FenuHealth.com was founded by sisters Kate [16] and Annie [15] Madden, students of Loreto College, St Stephen's Green and they currently have a team of 5 working with them [based in Ireland, Europe and the Middle/Far East] and are recruiting an extra 5 to join a rapidly expanding and successful sales team.

Restored Hearing

Restored Hearing has created tunable acoustic materials for noise absorption and sound therapy for tinnitus. Sound Bounce is a smart material which responds proportionally to the noise environment. It has applications across the construction, automotive, and aerospace sectors.

Sound Relief tinnitus sound therapy is an online treatment for chronic ringing in the ears. Used daily, it has been proven to give a reduction in tinnitus within one month.

The Duffly Bag

The Duffly Bag is a sleeping bag designed for homeless people sleeping rough on the streets. It's lightweight, waterproof, heat-retaining, non-flammable and has a pouch in the head for storing valuables. It is currently being made by the homeless service users of the Mendicity Institution.

Zorin OS

Zorin Group is the parent company behind Zorin OS, a replacement for Windows and macOS, designed to make your computer faster, more powerful and secure.

Since 2008, the team been developing an operating system that brings together the power of Linux – a powerful but typically technical system – and makes it accessible to everyone.

Zorin Group is focused on continuing to build and bring Zorin OS to millions of users around the world. It is also currently developing products to make the power of computing accessible to people in the developing world who have never had access to it before.





Biological & Ecological Sciences

JUNIOR INDIVIDUAL

3100

Title: The effects of micro gravity on microorganisms

Overview: My project aims to examine how microorganisms behave when in a micro gravitational environment and if they grow differently in space

School: Glenstal Abbey School

County: Limerick

Teacher: Tracey Larkin

Student(s): Ivor Larkin

3101

Title: Does the storage of potatoes affect their solanine content?

Overview: I investigated to see if I could store potatoes in different conditions to reduce their solanine content. I will investigate different coloured light and sunlight.

School: St Andrew's College

County: Dublin

Teacher: Hilary Rimbi

Student(s): Tom O'Gorman

3102

Title: Is the incidence of bovine TB in South Galway higher than the national average?

Overview: For my project I will be discovering what factors lead to an increase in TB and if these factors are common in South Galway

School: Seamount College

County: Galway

Teacher: Mary Reynolds

Student(s): Luke Connors

3103

Title: Does damage affect the strength of Laminaria digitata?

Overview: I am looking to see if damage to the blades of Laminaria digitata affects their breaking strength.

School: Mary Immaculate Secondary School - Lisdoonvarna

County: Clare

Teacher: John Sims

Student(s): Harry Wainwright

3104

Title: An investigation on whether cereal is a healthy breakfast option for children

Overview: This project aims to establish whether cereal is actually a healthy breakfast option for children and whether it contains the nutrients, vitamins and minerals needed.

School: Christ King Girls Secondary School

County: Cork

Teacher: Moya O'Hare

Student(s): Romy Kolich

3105

Title: The importance of early intervention in 22q11 deletion syndrome

Overview: To prove early detection and intervention is crucial in the care

management of 22q11 deletion syndrome.

School: Jesus & Mary Secondary School

County: Sligo

Teacher: Luke Saunders

Student(s): Annie Forde

3106

Title: An investigation into the composition of the gas found in the bladders of Ascophyllum nodosum and Fucus vesiculosus

Overview: I am looking at the composition of the gas in the bladders of Ascophyllum nodosum and Fucus vesiculosus and the effect of light on it.

School: Mary Immaculate Secondary School - Lisdoonvarna

County: Clare

Teacher: John Sims

Student(s): Calum MacNamara

3107

Title: Understanding how the weather affects fishing

Overview: What effect has the weather conditions on coarse fishing. Is it possible to accurately predict the optimum fishing conditions based on weather front data?

School: Lanesboro Community College

County: Longford

Teacher: Michael Lyons

Student(s): Adam Kingi

3108

Title: Raising awareness and showing the benefits of A2 milk

Overview: I want to raise awareness and show the benefits of A2 milk. A2 milk is not available in Ireland at the moment.

School: Coláiste Chríost Rí

County: Cork

Teacher: Ciara McGrath

Student(s): Niall Lyons

3109

Title: Time as a variable in bread production

Overview: My project will analyse the effect of long fermentation on bread, such as on the degradation of gluten, colour, texture and nutritional content.

School: Sandford Park School Ltd

County: Dublin

Teacher: Edel Martin

Student(s): Oscar Despard

3110

Title: A novel approach to growing Nannochloropsis in a controlled environment and it's subsequent ability to produce oil

Overview: This project investigates the degree to which it is possible to control the temperature of algae in a low cost closed system bioreactor.

School: Bandon Grammar School

County: Cork

Teacher: Carena McCarthy

Student(s): Gregory Tarr

INTERMEDIATE INDIVIDUAL

3200

Title: What will be the end for the Varroa destructor mite?

Overview: An investigation into the factors that reduce the spread of the Varroa destructor mite in Apis mellifera mellifera colonies.

School: Moate Community School

County: Westmeath

Teacher: Mairead Cusack

Student(s): Lorna Boland

3201

Title: The effect of exercise on surgical scar tissue

Overview: I want to find out how different activities effect surgical scars. This includes the change of colour and sensation from the scar following activity.

School: Scoil Mhuire Community School

County: Kildare

Teacher: Helena Lynn

Student(s): Alannah Murphy

3202

Title: Do different sock materials affect the surface temperature of the foot during racket sports?

Overview: I intend to find out using datalogging whether some socks contribute to more adverse skin temperatures than others during racket sports.

School: St Vincent's Secondary School

County: Louth

Teacher: John White

Student(s): Eve Morrissey

3203

Title: A scientific study of autonomous sensory meridian response

Overview: My project is focusing on and examining the scientific phenomenon Autonomous Sensory Meridian Response (ASMR), its effects and possible use as a sleep aid.

School: Loreto High School

County: Dublin

Teacher: Angela Benson

Student(s): Anna Basquel

3204

Title: Crickets – a Home-Grown Source of Protein. Can we produce our own protein requirements by breeding crickets at home?

Overview: I have investigated the optimum conditions for breeding crickets at home. My aim is to educate people to their potential as a homegrown protein source.

School: St Oliver's Community College

County: Louth

Teacher: Deirdre Dunford

Student(s): Jack Mc Govern

3205

Title: A comparative evaluation of the water quality of ponds and lakes in Dublin City parks using pH, nitrate and Biological Oxygen Demand testing

Overview: My project aims to compare and evaluate the water quality of ponds and lakes using several chemical indicators.

School: Alexandra College

County: Dublin

Teacher: Emma Cronin

Student(s): Grace Gologley

3206

Title: Investigating the use of natural plants oils and extracts as an antiproliferative cancer agents.

Overview: Examine if natural plant oils and extracts have an antiproliferative effect on cancer cells and determine whether they enhance the response of cells to chemotherapy.

School: Colaiste Choilm

County: Offaly

Teacher: Brendan McGlynn

Student(s): Aivan Jose

3207

Title: 'To Bee or not to Bee': Investigating solutions to falling bee populations using a multifaceted problem solving approach.

Overview: This Project investigates if an artificial flower feeding system and an awareness/education initiative can aid bee populations over Winter, by providing food and parasite treatment.

School: Ardscoil Ris

County: Limerick

Teacher: Jack Corrigan

Student(s): David Hamilton

3208

Title: The wonders of Red Palm Oil

Overview: I am investigating the African Red Palm Oil as a natural treatment of head lice and resulting strengthening of hair.

School: Moate Community School

County: Westmeath

Teacher: Margaret Mandal

Student(s): Jessica Okpeaye

3209

Title: An investigation into the tolerance levels of Daphnia on carbon dioxide and acid rain

Overview: This project examines the effect of Carbon Dioxide and Sulphuric Acid on Daphnia

School: Santa Sabina Dominican College

County: Dublin

Teacher: Audrey Carty

Student(s): Sarah Egan-Frazer

3210

Title: Examining total metal content in river water in a Burren catchment area

Overview: I am looking at the total metal content in river water in a



Burren catchment area and possible sources of those metals.

School: Mary Immaculate Secondary School - Lisdoonvarna

County: Clare

Teacher: John Sims

Student(s): Amy Woods

3211

Title: What fitness types are best for our horses?

Overview: In my project I intend to investigate if slow work or fast work more beneficial for a horses fitness.

School: Cistercian College

County: Tipperary

Teacher: Lesley Cox

Student(s): Seán Clancy

3212

Title: The impact of different diets on the methane emissions from cow faeces

Overview: I hope to find, then compare the differences between the level of methane emissions from cow faeces of cows who are receiving different diets.

School: St Marys College

County: Wicklow

Teacher: Joanne English

Student(s): Elizabeth Byrne

3213

Title: The effects of natural yogurt on a foal when included in it's diet.

Overview: An investigation into the effects of lactobacillus bulgaricus and streptococcus thermophilus in natural yogurt on a foal's mass, coat quality, hoof strength and overall growth.

School: John The Baptist Community School

County: Limerick

Teacher: James Devereux

Student(s): Olivia Buckley

3214

Title: The natural economical and environmental insect repellent for use in third world countries

Overview: Third world countries have an increasing need for an environmentally friendly insect repellent. I have designed a cruelty free, highly effective and affordable solution.

School: Pobalscoil Iosolde

County: Dublin

Teacher: Lynda Jordan

Student(s): Molly Measey

3215

Title: A comparison of foot biomechanics in sport playing and non-sport playing teens

Overview: I will analyse the gait cycle of both sport playing and non-sport playing teenagers, recording and comparing the incidence of abnormal gait in both groups

School: Bandon Grammar School

County: Cork

Teacher: Paula McGath

Student(s): Alex O' Connor

3216

Title: Can I determine which water type yields the greatest tap root of carrots

Overview: The aim of my project is to determine the ideal water source which can maximise the tap root yield of carrots

School: Colaiste Phobáil Rós Cré

County: Tipperary

Teacher: Sarah Kirwan

Student(s): Julie Brennan

3217

Title: Equine learning theory and biomchanics

Overview: It is my belief that amateur riders will benefit hugely from the application of learning theory in training, which I will investigate in this project.

School: Loreto Secondary School - Navan

County: Meath

Teacher: Lisa Darley

Student(s): Sarah Hanly

3218

Title: Advanced ecological study of Wavin Lake

Overview: A rebirth of previous study of Wavin Lake taking a look at how the lake has been affected by the changes implemented since the study.

School: Ardgillan Community College

County: Dublin

Teacher: Laura Sheahan

Student(s): Jack Curtis

3219

Title: Investigation into the effects of the reduction of earthworms in Irish soil due to the presence of New Zealand flatworms and pesticides

Overview: Investigation into the effect of the reduction of earthworms in Irish soil, due to the presence of New Zealand flatworms and unnatural substances such as pesticides

School: Mount St Michael

County: Cork

Teacher: Alison O'Neill

Student(s): Chantelle French

3220

Title: Are plastic bottles safe to reuse?

Overview: I will be testing the leakage of ions, other dissolved substances and solid particles from different type of plastic bottles into the water they contain.

School: St Andrew's College, Blackrock

County: Dublin

Teacher: Hilary Rimbi

Student(s): James Lai

SENIOR INDIVIDUAL

3300

Title: What range of frequencies affect microscopic water creatures on the Grand Canal?

Overview: I want to investigate what range of frequencies affect Daphnia and to compare these to the frequencies given off by boats on the local canal.

School: Tullamore College

County: Offaly

Teacher: Noreen Flynn

Student(s): Stephen Harte

3301

Title: An investigation into the quality of effluent discharging domestic waste water treatment systems (septic tanks) and an apparatus to improve this.

Overview: Research and develop a retro fit apparatus to improve the performance of existing septic tanks in particular the reduction of ammonia and phosphorus being discharged.

School: Scoil Mhuire Strokestown

County: Roscommon

Teacher: Modwena Geoghegan

Student(s): Abbie Moloney

3302

Title: The antimicrobial potential of tree bark extracts

Overview: The project aims to examine inhibitory effects of extracts of tree bark. To do so extracts will be tested against causative agents of tree diseases.

School: Our Ladys College - Drogheda

County: Louth

Teacher: Frances O'Regan

Student(s): Niamh Ann Kelly

3303

Title: Using households Items for the faecal counts of parasites of farm animals

Overview: Using household items to count faecal parasitic eggs in farm animals to assist farmers in the management of their business.

School: Bandon Grammar School

County: Cork

Teacher: Paula McGath

Student(s): Caoimhe Sanchez

3304

Title: An Investigation into the application of Symsagittera roscoffensis & its symbiont Tetraselmis convolutae in neurobiology and biotechnology.

Overview: To investigate the potential application as a bioremediator, the process of algal protoplast formation and specific functional brain regeneration in Symsagittifera roscoffensis and Tetraselmis convolutae.

School: Coláiste Choilm

County: Cork

Teacher: Robert Nolan

Student(s): Con Moran

3305

Title: An detailed analysis into the role of clover in reducing artificial nitrogen

consumption and increase grass palatability and growth rate.

Overview: To carry out an analysis on how clover can reduce and replace Nitrogen in meadows and if it will increase grass palatability and growth rate.

School: Scoil Mhuire Strokestown

County: Roscommon

Teacher: Modwena Geoghegan

Student(s): Michael Feely

3306

Title: Diet Induced thermogenesis! preventing obesity, diabetes & heart diseases using anthocyanins, catechins & capsaicins

Overview: Identify a natural treatment for obesity, diabetes, heart diseases by increasing Diet Induced Thermogenesis values of macronutrients using foods rich in anthocyanins, catechins and capsaicins.

School: Our Lady's Bower

County: Westmeath

Teacher: Ellen Maguire

Student(s): Tierna Mac Uidhir

JUNIOR GROUP

3400

Title: An investigation into the production of selenium-enriched dairy products with commercial potential

Overview: A study into how supplementing a cow's diet with organic Selenium results in production of Selenium-enriched milk with commercial potential.

School: Hazelwood College

County: Limerick

Teacher: Martina Matthews

Student(s): Liam Power, Ruairi Hannigan, Ronan O' Connor

3401

Title: Agroforestry and Carbon Sequestration

Overview: This project aims to investigate the relatively new land use, agroforestry, and its potential to offset carbon emissions from other agricultural sources.

School: Schull Community College

County: Cork

Teacher: Larissa Kelly

Student(s): Asa Curran, Tiarnan Collins, Jack Ryan-Purcell

3402

Title: To investigate the carbon footprints of various foods and to test how additional carbon footprint information would influence consumers decisions.

Overview: Our project deals with the carbon footprint of several different foods and recipes and how additional carbon footprint information would affect our decisions as consumers.



Biological & Ecological Sciences

School: Coláiste Choilm

County: Cork

Teacher: Liz Horgan

Student(s): Cliona Reardon, Hilary Scragg

3403

Title: Do Irish beaches contain microplastics?

Overview: We want to see if Irish beaches contain microplastics and if so, we want to quantify the amount of microplastics found in Irish beaches.

School: Mary Immaculate Secondary School - Lisdoonvarna

County: Clare

Teacher: John Sims

Student(s): Naimh O'Growney, Zoe Norrish

3404

Title: Are blood types a contributing factor of head lice?

Overview: We wish to determine whether or not blood types are a factor of head lice.

School: Loreto College - St Stephens Green

County: Dublin

Teacher: Louise Kerr

Student(s): Saoirse Lynch, Asha Rait

3405

Title: Does Simulating a Lack of Binocular Vision Have An Impact on performance?

Overview: in our project we'll be doing various tests under the categories : depth perception, aim and balance, and reading and writing.

School: Loreto College - Foxrock

County: Dublin

Teacher: Helen Hennessy

Student(s): Jessica Oakley O'Kelly, Margot Moore, Jennifer Leavy

3406

Title: 40 Licks (trying to determine if being weaned onto certain foods as a baby can effect your development into a super-taster)

Overview: It is based on trying to determine if the food a person is weaned onto as a baby can affect his/her development into a supertaster

School: St Mary's Diocesan School

County: Louth

Teacher: Sophie Caine

Student(s): Seb Lennnon, Calum Agnew

3407

Title: Sugar content of smoothies sold in retail outlets

Overview: To analyse and compare the sugar content in the 20 most popular smoothies sold in coffee chains and supermarkets using a Brix Hydrometer and refractometer.

School: St Catherine's College

County: Armagh

Teacher: Ciaran Connolly

Student(s): Samantha Budakova, Kelly Mackey

3408

Title: The investigation into prevention of Lungworm in dogs in Ireland

Overview: An investigation of Lungworm in the Irish dog population, the causes and treatments and to develop a prevention method.

School: St Joseph's College

County: Tipperary

Teacher: Mary Gorey

Student(s): Rachel O Connell, Rachel O'Gorman, Paul Mc Cormack

3409

Title: Obesity

Overview: Our project is about obesity and the difference in food choice between 1st and 6th years.

School: St. Clare's Comprehensive School

County: Leitrim

Teacher: Edel McPhelim

Student(s): Wiktorja lesniak, Elisha Harte

3410

Title: Does soil management influence flooding?

Overview: our project is testing soils under different managements to see whether management affects flooding, water absorption and water run off.

School: Coláiste Choilm

County: Cork

Teacher: Joan Faherty

Student(s): Lisa Rea, Sarah O'Shea, Diana Yermolayeva

3411

Title: Is vegetation on limestone pavement in the Burren advancing or retreating?

Overview: We are using lichens growing on limestone pavement to indicate if the vegetation on limestone pavement is retreating or advancing.

School: Mary Immaculate Secondary School - Lisdoonvarna

County: Clare

Teacher: John Sims

Student(s): Róisín McNamara, Sharon Daly

3412

Title: The amount of carbon in different types of hedgerows and how it affects wildlife

Overview: Our project aims to investigate the amount of carbon in different types of hedgerows and how it effects wildlife in the area.

School: Scoil Mhuire Strokestown

County: Roscommon

Teacher: Modwena Geoghegan

Student(s): Alannah Hanley, Zuzanna Pawelec

3413

Title: A habitat study of Juncacea in North Leitrim

Overview: This project is a habitat study on rushes and the effects that

treatment by farmers have on their surrounding habitat.

School: St. Clare's Comprehensive School

County: Leitrim

Teacher: Edel McPhelim

Student(s): Shannon O'Hagan, Lara Mulvaney

3414

Title: The effect of light levels on stem curvature on pea plants

Overview: we want to see if the amount of light that a seedling has effects the amount it curves and how fast it does so

School: Coláiste Eamann Ris

County: Kilkenny

Teacher: Kate Stapleton

Student(s): Philip Dillon, Luke Butler

3415

Title: Salt Content of Bottled Water and Sports Drinks and Their Effects on Health.

Overview: To see which salts are in bottled water and energy drinks and compare this with the recommended daily allowance of potassium and sodium.

School: Our Lady Of Mercy Secondary School

County: Waterford

Teacher: Rosario Burke

Student(s): Destine Mbala, Yoma Omakri, Iffa Akbar

3416

Title: An investigation of the pillars of physical activity and heart rate towards healthy living

Overview: Which pillar of physical activity increases your heart rate the greatest: Physical education, extra-curricular or extra-school sport?

School: Portumna Community School

County: Galway

Teacher: Niamh Barry

Student(s): Padraic Tuohy, Eoin Horan, Oisín McDonagh

3417

Title: An investigation into whether diluting disinfectants can be selective for increased bacterial resistance

Overview: Our project is based on whether placing bacteria in the presence of a diluted disinfecting agent can be selective for increased resistance in that strain.

School: Carrigtwohill Community College

County: Cork

Teacher: Diarmuid Crowley

Student(s): Emma Grimes, Alice Bogue

3418

Title: An investigation into the influence of smell on taste.

Overview: Investigation into how taste is effected by smell and if any of the five specific tastes are affected to a greater or lesser extent

School: Salesian Secondary College, Pallaskenry

County: Limerick

Teacher: Claire Sheehy

Student(s): Amy Gee, Emma Burke, Evan McGregor

3419

Title: Impact of sound pitch on the biological gustatory perception mechanism, a quantitative comparative study between adults and children.

Overview: In our project; we'll be investigating whether the pitch of music affects the bitterness/sweetness of food, and comparing the effect between adults and children.

School: Kinsale Community School

County: Cork

Teacher: Mairead Dullea

Student(s): Caoimhe Lynch, Sylvie Plant

3420

Title: How effective is smoking as a preservative on fish; is chilling during processing really necessary?

Overview: The purpose of this project is to test whether or not chilling requirements of smoked fish during processing are excessive.

School: Bandon Grammar School

County: Cork

Teacher: Carena McCarthy

Student(s): Brigid Creswell, Lauren McCourt

3421

Title: Ashes an undervalued nutrient

Overview: To show the benefits of peat and wood ashes for growth, slug repellent and other applications instead of being charged for dumping them in bins.

School: Glenamaddy Community School

County: Galway

Teacher: Deirdre Hardiman

Student(s): Shannon Mc Hugh, Ciara Keaveney

3422

Title: Sycamore poisoning in horses, is it weather related?

Overview: This project examines whether sycamore-seed poisoning a fatal disease of horses is linked to a certain combination of weather conditions temperature, humidity and wind speed.

School: Mount Anville Secondary School

County: Dublin

Teacher: Bernard Crampton

Student(s): Juliet Hill, Morena Fusciardi, Sarah Paran

3424

Title: The Health Benefits of Iodine Found in Seaweed

Overview: Our project is about testing how much iodine is in seaweed and compare it to the



World Health Organisations recommended amount for an adult.
School: Meánscoil Na Mbráithre
County: Clare
Teacher: Eimear McNerney
Student(s): Micheál McNerney, Brendan O'Gorman, Darragh Nagle

3425

Title: Investigating the behaviour of seagulls in our area
Overview: Observing the predominant characteristics of seagulls in a coastal area and using our findings to conclude a humane solution to the problem.
School: Loreto Secondary School - Balbriggan
County: Dublin
Teacher: Niamh Mc Nally
Student(s): Kirsty Burns, Cleo Gallen, Enya Andersen

3426

Title: The Great Gluten Bake Off: An analysis of the effects of raising agents and stabilisers in gluten free baking.
Overview: Using gluten free flour, investigate how changing the raising agent and stabiliser impact on the cake produced, measured by height, weight, texture, density and taste.
School: Loreto College - Foxrock
County: Dublin
Teacher: Karen Young
Student(s): Aimee O'Neill, Dervla McKenna

INTERMEDIATE GROUP

3500

Title: Growing plants for nutrition in Space
Overview: Growing plants with high nutrition content, in a self-contained environment to provide astronauts with tasty food.
School: Moate Community School
County: Westmeath
Teacher: Margaret Mandal
Student(s): Nicole Murray, Jenny Fox

3501

Title: How ALARMinG is your blood pressure?
Overview: We are investigating whether a person can decrease the spike in their blood pressure by familiarizing themselves with the specific alarm tone being used.
School: Coláiste Iósaef
County: Limerick
Teacher: Ann Hickey
Student(s): Seamus Connery, Paudie Mulcahy, Enda O'Neill

3502

Title: Less flooding, less drought- lets get back to grass roots
Overview: Our Project is based on forming new deep roots in grassland to mitigate flooding and drought by combining Perennial Ryegrass and

Festuca Pratensis
School: Presentation Secondary School - Thurles
County: Tipperary
Teacher: Patricia Stapleton
Student(s): Niamh Ryan, Laura Daly

3503

Title: To Investigate the effect of music on athletic ability
Overview: Our aim is to investigate the effect of music on your sports performance. The sample will be a group of girls between the age of 13-16yrs
School: Eureka Secondary School
County: Meath
Teacher: Mary Byrne
Student(s): Emily Sheridan Fox, Holly Lynch, Molly Fitzgerald

3504

Title: Quantitative study of portion sizes in Irish takeaway restaurants
Overview: To investigate variation in recommended portion size and those served in take-away and fast food restaurants and to assess people's awareness.
School: Our Ladys School - Templeogue
County: Dublin
Teacher: Lynsey Stuart
Student(s): Hannah Spain, Siobhán Larkin

3505

Title: Seven days without physical activity makes one WEAK!!
Overview: To conduct a comparative, quantitative analysis of the physical activity levels of post primary students in the BMW and the SE regions of Ireland.
School: Portumna Community School
County: Galway
Teacher: Niamh Barry
Student(s): Jack O Meara, Shane Moroney, Joshua Gaynor

3506

Title: Does weight and height effect football fundamentals
Overview: We are experimenting on a number of people with varying height and weight to see if it affects different fundamentals of football needed to succeed.
School: Colaiste Pobail Setanta
County: Dublin
Teacher: Mikey O'Sullivan
Student(s): Aidan Hall, Brian O'Sullivan, Evan McCord

3507

Title: The effects of recent floods on Farms in South Roscommon
Overview: An investigation into the effects of recent floods on farms in South Roscommon
School: C.B.S. Roscommon
County: Roscommon
Teacher: Louise Gallagher
Student(s): Jack Lohan,

Micheál Beirne

3508

Title: The Potential Use of Gorse as a Biofuel
Overview: The aim of our project is to find a more productive use for gorse by investigating its effectiveness as a biofuel.
School: Colaiste Chraobh Abhann
County: Wicklow
Teacher: Patty Kelly
Student(s): Lucy McCabe, Kellianne Coughlan

3509

Title: The Anisakis simplex solution
Overview: Our project aims to investigate ways in which to help minimise the problem of parasitic Anisakis simplex worms in white fish.
School: Schull Community College
County: Cork
Teacher: Larissa Kelly
Student(s): Tarah Fleming, Hollie Collins, Aoife Nash

3510

Title: Dynamic vs static stretching - effects on flexibility
Overview: We intend to examine the effects of dynamic stretching and static stretching on increasing the flexibility of muscles in the bodies of racket sport players.
School: St Vincent's Secondary School
County: Louth
Teacher: John White
Student(s): Catherine Raftis, Mollie O'Rourke, Kayla O'Shea

3511

Title: Does overwintering carrots in the ground affect Falcarninol levels?
Overview: An investigation into effects of overwintering carrots in the ground on the levels of the polyethylene, falcarninol.
School: Presentation Secondary School - Thurles
County: Tipperary
Teacher: Patricia Stapleton
Student(s): Isabel Finlay, Kate Atkinson, Laoise Nugent

3512

Title: Ultra Clean Caps
Overview: To build a device attached to a multi-sports bottle holder which eradicates germs on the bottle caps using germicidal Ultra Violet UV-C light.
School: Bush Post Primary School
County: Louth
Teacher: Emma McMahon
Student(s): Peter Suresh, Barry Dunne, Oliver McGuinness

3513

Title: The impact of moderate exercise on the onset of degenerative diseases.
Overview: To investigate the effect exercise has on degenerative diseases and in particular, neurotransmitters, the brain chemicals that communicate

information throughout our brain and body.

School: Portumna Community School
County: Galway
Teacher: Niamh Barry
Student(s): Gráinne Donohue, Clodagh McIntyre

3514

Title: Eazy Zleep - eczema relief
Overview: Eazy Zleep is a material for eczema sufferers that will slowly release cream throughout the night, enabling a pain free and restful nights sleep.
School: Ballymena Academy
County: Antrim
Teacher: Kathryn Wylie
Student(s): Rachel Brown, Ellen McAuley, Susanna Crabbe

3515

Title: How does music affect sleep?
Overview: For our project we plan to investigate whether music affects sleep quality and the affects of low frequency music in comparison to high frequency music.
School: St Vincent's Secondary School
County: Louth
Teacher: John White
Student(s): Damilola Alabi, Denise Walsh, Leah Finnegan

3516

Title: An investigation into the effects of the pine martens on the ecology and balance of nature of Roscommon Woodlands
Overview: We are investigating the impact that pine martens have on the local community of Athleague Co. Roscommon. The Pine Marten is causing trouble for the farmers.
School: C.B.S. Roscommon
County: Roscommon
Teacher: Fiona Leavy
Student(s): Gustavo Rodrigues, Liam Ormsby, Cian Murray

3517

Title: Hang on in there - living on an inter-tidal rocky shore
Overview: Investigating the adaptations of Dog-whelks (Nucella lapillus) on rocky shores of different exposure.
School: Coláiste Choilm
County: Cork
Teacher: Karina Lyne
Student(s): Paul McAllen, Emer O'Keeffe

3518

Title: The physical effects of hard surface running (roads) vs soft surface running (grass)
Overview: Our project aims to discover is there an overall effect on physical fitness as a result of running on soft surface (grass) versus hard surface (road)
School: Castlecomer Community School



Biological & Ecological Sciences

County: Kilkenny

Teacher: James Murphy

Student(s): Conor McMahon, Jack Buggy, James Brennan

3519

Title: A comparative study of fungal diversity in areas of varying light intensity

Overview: Our project involves identifying local fungi and comparing those found in areas of high intensity with those found in areas of low light intensity

School: Roscommon Community College

County: Roscommon

Teacher: Joanne Broggy Shea

Student(s): Sinead Dillon, Pedro Silva, Rebekah Daniels

3520

Title: Effects of health tracking and wearable technology on people's rate of exercise

Overview: We will compare whether or not health-tracking technology increases our rate of exercise, and if the visual reminder of a Fitbit encourages even more exercise.

School: Bush Post Primary School

County: Louth

Teacher: Emma McMahon

Student(s): Gary Murphy, Ciarán Murphy, Brendan Woods

3521

Title: Prey availability for hen harriers in managed farmland

Overview: This is an investigation to determine the prey availability as a function of habitat within managed farmland for hen harriers.

School: Colaiste Treasa

County: Cork

Teacher: Derry O'Donovan

Student(s): Michael Sheehan, Jack Murphy

3522

Title: Investigation into Concentrated Cherry Extract to Aid Muscle Recovery

Overview: Extracting cherry juice and making cherry based sport protein bar, then test the effect it has on an athletes muscle recovery after physical exercise.

School: Clonakilty Community College

County: Cork

Teacher: Patrick O Keeffe

Student(s): Ciaran O'Neill, Ryan Scannell, Jack Wycherley

3523

Title: Natural control of the Varroa mite in an effort to reduce CDD

Overview: An investigation into the effect of powdered sugar dusting as a means of natural control for the Varroa mite in an effort to reduce CDD

School: Desmond College - Limerick

County: Limerick

Teacher: Aoife Culhane

Student(s): Tiernan Mason,

Jack Grimes, Liam Callanan

3524

Title: An Investigative Study into the Viability of Microbiota in Commercially Available Probiotics

Overview: We will assess viability-levels of microbiota in commercially-available probiotics by cultivating non-pathogenic bacteria. They will be subject to gram-staining, flow-cytometry and polymerase chain reaction testing.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Eve Casey, Cathy Hynes

3525

Title: To investigate the prevalence of micro-plastics in various seawater and fresh water fish species by analyzing their stomach contents

Overview: We aim to investigate the quantity of micro-plastics in sea water and freshwater fish species.

School: Colaiste Choilm

County: Cork

Teacher: Conor Crowley

Student(s): Lorraine Wilson, Lauryn Brady

3526

Title: Comparison of the structures of dried reflex and emotional tears.

Overview: We are comparing the structures of dried tears; reflex and emotional. We expect the crystal structures of tears to differ, between and within their groups.

School: Schull Community College

County: Cork

Teacher: Larissa Kelly

Student(s): Gabrielle Hogan, Lucy Robinson, Orlaith O'Donovan

3527

Title: A study of Brent Geese on Sandymount Strand.

Overview: To study light-bellied Brent Geese that feed on inter-tidal Zostera noltii on Merrion Strand and to establish whether disturbance impacts on their feeding patterns.

School: Gonzaga College

County: Dublin

Teacher: Michael Clark

Student(s): Kieran McGovern, Dan Morrissey, Myles Ryan

3528

Title: Does consuming certain varieties of potatoes as a staple food in a diet, increase blood glucose levels & chance of high blood pressure and diabetes in a sample of Rush residents

Overview: To investigate if high blood pressure and glucose levels in type-2 diabetics and gestational diabetes are linked to the varieties of potato consumed in Rush

School: Loreto Secondary School - Balbriggan

County: Dublin

Teacher: Niamh Mc Nally

Student(s): Sophie Weldon, Laura Weldon, Emma Kleiser Byrne

3529

Title: Potential uses of hydrophobic sands in different environmental conditions

Overview: We will be conducting research into several potential uses for hydrophobic sand in certain environments.

School: Colaiste Choilm

County: Cork

Teacher: Conor Crowley

Student(s): Michael Buckley, Colm Ó Tuathaigh, Liam Ó Fathaigh

3530

Title: Shake it off! - An investigation into how dancing to music alleviates the effects of parkinsons

Overview: An investigation into whether exercise with dance/music reduces the effects of parkinsons disease.

School: John The Baptist Community School

County: Limerick

Teacher: Michelle Buckley

Student(s): Lloyd O'Dea, Robert Holmes, Evan O Callaghan

3531

Title: To compare different levels of pollution around Dublin by using leaf yeast as a bioindicator of air quality.

Overview: We will investigate levels of pollution in areas throughout Dublin using pink leaf yeast from an ivy leaf as a bio-indicator of air quality.

School: Loreto Abbey Secondary School

County: Dublin

Teacher: Aideen Lambe

Student(s): Sophie Nicholaslon, Katie O Byrne

3532

Title: The Effects of Microplastics on the Reproduction of Daphnia magna

Overview: We are investigating the effects of the presence of microplastics in water on the reproduction and life cycle of Daphnia magna (water fleas).

School: Dominican College - Galway

County: Galway

Teacher: Aoife Fallon

Student(s): Abbie Healy, Grainne Corcoran, Katie Devane

3533

Title: How Different Factors Affect Tastebuds

Overview: We hope to investigate if/what factors affect taste-buds by administering different solutions of the four categories of taste. We're hoping to investigate the new fifth taste.

School: Colaiste Choilm

County: Cork

Teacher: Karina Lyne

Student(s): Robyn Sheehan, Emma McCarthy, Caoimhe Sheehan

3534

Title: Does the Gearagh make Clean Air? - The detection of Air pollution using Lichens as an indicator.

Overview: Our project aims to find out what levels of Air pollution exist in our local catchment area e.g The Gearagh using lichens as an indicator.

School: St Mary's Secondary School - Macroom

County: Cork

Teacher: Jennifer Butler

Student(s): Meadhbh Carroll, Ciara Plunkett

3535

Title: My Cancerous Cell

Overview: Our project is about Non Hodgkin's Lymphoma, which is a type of cancer. We want to spread awareness about it because many teenagers have it.

School: Colaiste Bríde

County: Dublin

Teacher: Jacqueline Kendrick

Student(s): Katarzyna Skoczen, Meghan McGill, Mary Lugemba

3536

Title: Can Mirror Therapy Improve Basketball Skills?

Overview: Can mirror visual feedback while practicing dribbling skills with a player's dominant hand, trick the brain into thinking that the weak hand can dribble too.

School: Cholaiste Cholmcille

County: Donegal

Teacher: Emma Mc Kinley

Student(s): Andrea McGlynn, Katie Slevin, Ana Keon

3537

Title: An Investigation into the Effects of Trampling on Ground-dwelling Insects in a Sand Dune Ecosystem in Co. Donegal

Overview: We investigated the effect of trampling on the diversity of crawling insects; composition of insect communities, species richness and their relative abundances in sand dunes.

School: Magh Ene College

County: Donegal

Teacher: Yvonne Higgins

Student(s): Niamh Creevy, Aine Dillion, Katie Curran

3539

Title: Are our classrooms making us sick?

Overview: To investigate the levels of bacteria in the air in typical Irish classrooms and to propose a natural and inexpensive method of purifying the air.

School: St Aloysius College

County: Cork

Teacher: Carew Hyland

Student(s): Ciara Lawlor,



Eimear Lawlor

3540

Title: How does physical fatigue affect the mind and its functions

Overview: We will conduct a series of physical and mental challenges to investigate how a person's mental state is affected by physical exertion.

School: Cistercian College

County: Tipperary

Teacher: Lesley Cox

Student(s): Diarmuid Kilgallen, Ben Murphy, Gavin Meagher

3541

Title: An investigation into the use of the Cyclopterus Lumpus to combat the problem of sea lice in salmon farming in Bantry Bay.

Overview: We are going to investigate the use of the Cyclopterus Lumpus in the salmon farm in Bantry bay to eliminate sea lice from the salmon.

School: Coláiste Pobal Bheanntraí

County: Cork

Teacher: James McSweeney

Student(s): Liam Cotter, Clíodhna O'Connor, Jennifer Andrews

3542

Title: We are the only mammals to drink another mammals milk...so should we be moo-ing away from cow's milk?

Overview: To investigate whether cows milk is really 'The Super Food' it is believed to be, and can people be moved towards alternative milks?

School: St Marys College

County: Wicklow

Teacher: Joanne English

Student(s): Rachel Bentley, Aoife Lancaster, Niamh Brannigan

3543

Title: Put a halt to that Headache! Which pain killer has the fastest dissolution time?

Overview: In our BT young scientist project we are investigating which pain killers Eg. Nurofen are the most effective in treating body pain such as headaches.

School: Coláiste Pobal Bheanntraí

County: Cork

Teacher: Hazel Jennings

Student(s): Sophie O'Sullivan, Ellen Cronin

3544

Title: Éifeacht atá ag caiféin ar daoine éagsúil

Overview: Táimid ag déanamh tástáil ar na héifeachtaí difriúla atá ag caiféin ar chorp daoine éagsúla ag brath ar tréithe pearsanta i.e. mais, aois, gnéas.

School: Coláiste Mhuire

County: Dublin

Teacher: Máire Ní Ghóillidhe

Student(s): Aoibhín Ní Cheara, Seán Power, Lara McQuade

3545

Title: Olfactory Fatigue: Is it affected by gender?

Overview: We are testing to see if olfactory fatigue is affected by your gender

School: Scoil Mhuire Strokestown

County: Roscommon

Teacher: Modwena Geoghegan

Student(s): Rebecca O'Connor, Ailish O'Reilly

3546

Title: To investigate the effect of protein milk on muscular strength

Overview: We are investigating the effect of protein milk on muscular strength in girls between the ages of 16 and 18 years old in our school.

School: Colaiste Ide and Iosef

County: Limerick

Teacher: Maria Mc Mahon

Student(s): Sinead Hunt, Caoimhe NíFhlannabhra

3547

Title: Green pools-are they the future?

Overview: We want to investigate sphagnum moss and its properties which can potentially remove bacteria from swimming pools.

School: Our Lady's Bower

County: Westmeath

Teacher: Ethna Benson

Student(s): Katie Ward, Aoife Temple

3548

Title: Which chicks thrive better, Incubated chicks or naturally hatched chicks

Overview: Comparing naturally hatched and reared chicks to incubated chicks reared without mother to check growth rate and final size.

School: Castlecomer Community School

County: Kilkenny

Teacher: Fiona Morrissey

Student(s): Tom Buggy, Daniel Murphy, Kevin Conry

3549

Title: To investigate the impact different vegetative cover has on the attenuation of water in soils.

Overview: We wish to investigate and compare various water catchments to decipher which vegetative cover creates the optimal soil quality to maximise absorption and prevent flooding.

School: Newtown School - Waterford

County: Waterford

Teacher: Bryan Ronan

Student(s): Caoilín O'Meara, John Monaghan

3550

Title: Dublin Bay Prawns-Improving Quality

Overview: We wish to evaluate a new product designed to assist the glazing

of prawns on Irish fishing vessels. This has never been used in Ireland.

School: Schull Community College

County: Cork

Teacher: Larissa Kelly

Student(s): Martin Fleming, Seán Lannin, Luke Franklin

3551

Title: Who Is The Fittest Of Them All?

Overview: We are testing fitness in different groups of students, and will use the data collected to determine who is the fittest group in our school.

School: Colaiste Ide and Iosef

County: Limerick

Teacher: Maria Mc Mahon

Student(s): Aoife Curtin, Ciara Hunt, Emily Piersie

3552

Title: Investigative study into the effects of music genres and animal audio on the quality of dairy herds milk and the quantity produced

Overview: We are investigating the effects that playing music and animal sounds to cows has on the quality and quantity of the milk they produce.

School: John The Baptist Community School

County: Limerick

Teacher: James Devereux

Student(s): Tadhg McCarthy, Shane Bradshaw, Oisín O Grady

3553

Title: To find out if the theory of long finger genetics affect your ability to play football.

Overview: To practically investigate if long finger genetics and testosterone levels affect your ability to play football.

School: Pobalscoil Iosolde

County: Dublin

Teacher: Lynda Jordan

Student(s): Precious Daramola, Halima Usman

3554

Title: An investigation into Nisin, a preservative in cheese, and it's effects on Oesophagal and Colon Human cancer cells

Overview: Our aim is to see if nisin actually can shrink cancer tumours in cell lines.

School: Bandon Grammar School

County: Cork

Teacher: Paula McGath

Student(s): Valerie French, Lauren Bateman

3555

Title: Elderly Mobility: Move to Improve?

Overview: Our project is to investigate whether a supervised mobility programme is superior to an unsupervised programme, in older adults aged 65 years and over.

School: Loreto Secondary School - Kilkenny

County: Kilkenny

Teacher: Aine Murphy

Student(s): Amy O'Connell, Sinead Flynn

3556

Title: Laghdú Stus i mBainisíocht Ba

Overview: Investigating the behaviour among cattle during human interaction in various scenarios and reducing stress for both farmer and animal.

School: Coláiste Naomh Eoin

County: Galway

Teacher: Cormac Coyne

Student(s): Gráinne Finnerty, Muireann Ní Fhlatharta

3557

Title: Investigating The Difference In Bacterial Contamination When Handling and Using a Device to Insert Contact Lenses

Overview: We aim to prove that a device such as the one we designed, reduces the amount of bacteria entering the eye through contact lenses.

School: Tullamore College

County: Offaly

Teacher: Elaine Howlin

Student(s): Lucy Leonard, Michele Mann

3558

Title: To Investigate the Effect of Bisphenol A on Multiple Plants

Overview: Bisphenol-A is used in the production of plastic. Our aim is to investigate the effect of BPA on plant nutrient and pH levels.

School: Drogheda Grammar School

County: Louth

Teacher: Ronald Hancock

Student(s): Eibun Lawal, Oba William-Funmilayo

3559

Title: Increasing Soil Fertility - is Biochar the Answer?

Overview: We would like to investigate the effectiveness of biochar, wormcast and seaweed on increasing soil fertility by growing and harvesting wheat in vermiculite.

School: Bandon Grammar School

County: Cork

Teacher: Paula McGath

Student(s): Amy Bevan, Alison Hathaway

3560

Title: Fox repellent

Overview: We aim to stop fox predation on fowl, we have created an organic, chemical free repellent from preventing this from occurring.

School: Salesian Secondary College, Pallaskenry

County: Limerick

Teacher: John O'Flynn

Student(s): Kate Heelan, Sarah Leahy



Biological & Ecological Sciences

- 3561**
Title: An investigation into the short term effects of the HPV vaccine on female secondary school students
Overview: We intend to investigate the short term effects of the HPV vaccination on female students ages 12-15 in secondary schools in Ireland.
School: Loreto Secondary School – Balbriggan
County: Dublin
Teacher: Niamh Mc Nally
Student(s): Anna Sowray, Savannah-Rose Mc Auley, Kelsey Wilson
- 3562**
Title: The antimicrobial properties of traditional Maasai medicine
Overview: We investigate the antimicrobial properties of traditional medicine used by the Maasai tribe in Tanzania.
School: Dominican College – Wicklow
County: Wicklow
Teacher: John O'Brien
Student(s): Caoimhe O'Neill, Ciara Fagan
- 3563**
Title: Birds and their Love Affair with Milking Parlours
Overview: The project aims to find a solution to the problem of birds entering farmers' milking parlours
School: Ardscoil Uí Urmoltaigh
County: Cork
Teacher: Michael Murphy
Student(s): James O'Leary, Jack O'Donovan, Brian Dowling
- 3564**
Title: Is organic really best?
Overview: Our project aim is to examine the effects of the run-off from organic fertilizer compared to commercial fertilizer.
School: St Pauls Secondary School
County: Kildare
Teacher: Máire Dowling
Student(s): Eimear Mulhall, Erin Meredith
- 3565**
Title: Does music affect performance in sport?
Overview: This project will examine, through use of exercises that include the core elements of sport (strength, speed and stamina), how music affects performance in sport.
School: Blackrock College
County: Dublin
Teacher: Emer O'Reilly
Student(s): Tadhg Egan, Ryan O Connell
- 3566**
Title: A comparative study of lichen species in the supralittoral zone at senetive points from Dublin to Drogheda.
Overview: We are investigating impact of NOX and particulate matter on the growth of lichens in North Dublin and comparing the intra species genetic variation.
School: Skerries Community College
County: Dublin
Teacher: Katie Corbett
Student(s): Sara Burs, CaseyAnne Murphy, Sarah Burns
- 3567**
Title: An investigation into the effectiveness of planting linseed and oat habitats on Wexford farms, on the populations of declining farmland birds.
Overview: To investigate the biodiversity value of planting linseed and oats for farmland bird cover and habitats, on farms in Wexford. To monitor the farmland bird population during a longitudinal study.
School: St Kieran's College
County: Kilkenny
Teacher: Eileen Hanrick
Student(s): Luke Gannon, Tom O'Dwyer, Alex McCluskey
- 3568**
Title: To investigate does intensive agriculture effect the population of earthworms in heavy soils
Overview: Our project aims to examine whether or not modern farming techniques effect the population of earthworms in soil, and the productivity of the soil.
School: St Attracta's Community School
County: Sligo
Teacher: Peadar Weir
Student(s): Brian Normanly, Fergal Monaghan, Shane Kennedy
- 3569**
Title: A natural safe pesticide to control varroa mites infesting Irish beehives.
Overview: Our aim is to create a natural, safe pesticide which will kill the Varroa mites that are infesting Irish beehives and devastating our bee population.
School: Sacred Heart Secondary School
County: Cork
Teacher: Claire Holland
Student(s): Rachel Hodnett, Aoife Minihan, Maeve O'Regan
- 3570**
Title: Challenge testing a cosmeceutical cream containing the seaweed extract Fucus vesiculosus
Overview: Our project aims to Challenge Test a cosmeceutical cream containing a seaweed extract from Fucus vesiculosus to ascertain its antimicrobial efficacy.
School: Scoil Mhuire
County: Clare
Teacher: Sue-Ann Sheridan
Student(s): Lisa Conneely, Ciara Hehir
- 3571**
Title: To test the effect of music on the pulse rate
Overview: Our project aims to see if when listing to music, the genre, volume or tempo has an effect on the average pulse rate per minute
School: Santa Sabina Dominican College
County: Dublin
Teacher: Paul Nugent
Student(s): Ellen Mulligan, Helena Hughes
- 3572**
Title: The Effect of Temperature on the effectiveness of Probiotic Drinks
Overview: This work investigates if the effectiveness of probiotic foods is reduced by consumption with high temperature drinks such as your morning cup of coffee.
School: Loreto Secondary School – Navan
County: Meath
Teacher: Lisa Darley
Student(s): Heather Mitchell, Katie Langford
- 3574**
Title: 'The Effects of Different Artificial Lights and Soil Acidity on the Vitamin A Content of Carrots'
Overview: To see whether different artificial lights and soil acidity levels have an effect on the vitamin A content of a breed of carrots (Amsterdam Minicor).
School: Coláiste Naomh Mhuire
County: Kildare
Teacher: Keith Breen
Student(s): Emma Rowland, Kate Davitt, Sara Ryan
- 3576**
Title: The health consequences of sterilising babies bottles
Overview: We want to study the approach of sterilizing baby bottles in different European countries particularly Holland and Ireland and the affect this has on immune-systems
School: Our Lady's Bower
County: Westmeath
Teacher: Ethna Benson
Student(s): Tatjana Jocher, Ciara Barry, Dearbhla McCormack
- 3577**
Title: Biodegradable plastic pots to minimise the effects of transplant shock.
Overview: Our project is an investigation of creating biodegradable plastic pots using 3D printer technology and to minimize the effects of transplant shock while replanting.
School: Avondale Community College
County: Wicklow
Teacher: Amy Murphy
Student(s): Ayyub Azmat, Niall Gaffeny, Christopher Makin
- 3578**
Title: Iniúcadh ar an difríocht idir an méad lotnaidicídí atá ar úlla neamh-orgánacha ó thíortha éagsúla.
Overview: Tá a lán dainséar bainte le lotnaidicídí ar ár sláinte, agus mar sin rinneamar fiosrúcháin ar cé chomh forleathan atá lotnaidicídí ar ár gcuid úlla.
School: Coláiste Pobal Osraí – Kilkenny
County: Kilkenny
Teacher: Lughaidh Ó Néill
Student(s): Enya Nic Pheaircín, Róisín Ní Mhaolmhuaidh
- 3579**
Title: An investigation into the effects of swimmers' sun cream on the behaviour, burrow depth and orientation of Talitrus saltator.
Overview: We aim to investigate if swimmers' sun cream has an effect on the behaviour, burrow depth and orientation of Talitrus saltator.
School: Loreto Secondary School – Balbriggan
County: Dublin
Teacher: Niamh Mc Nally
Student(s): Aisling Leneghan, Frances Mulholland
- 3580**
Title: Equine injuries, how they occur and preventative methods.
Overview: To examine and compare the physical damage done to both racehorses and show jumpers, where they are most prone and prevention methods for the future.
School: Presentation Secondary School
County: Kilkenny
Teacher: Jennifer Reddy
Student(s): Jessica Lennon, Kayleigh Soden
- 3581**
Title: White Chafer Grub: A Golfers Pest
Overview: An analysis of the soil preferences of the White Chafer Grub beetle
School: C.B.S. Roscommon
County: Roscommon
Teacher: Louise Gallagher
Student(s): Shane Browne, Aaron Burgoyne
- 3583**
Title: Investigation into the enviromental impact of forestry plantation in Ireland
Overview: For our project, we have chosen to investigate the effects of artificially planted forestry on our island eco-system.
School: St. Joseph's Secondary School
County: Clare
Teacher: Marguerite McGuinness
Student(s): Michael Fitzgerald, Grainne Brady, Mark Leyden
- 3584**
Title: Underage Female Athletes



and Ankle Injuries – What is the Relationship between Jump Strength, Balance and Proprioception

Overview: This study aims to investigate the jump strength, balance and proprioception of underage female athletes who participate in either basketball or hockey.

School: Loreto College – Foxrock
County: Dublin

Teacher: Helen Hennessy

Student(s): Siobhan Murray, Anna Geraghty, Laura McCarthy

SENIOR GROUP

3600

Title: Foal sickness containment and prevention

Overview: We are looking at foal sickness containment and prevention. We are making a sensor to catch early illness.

School: Midleton College

County: Cork

Teacher: Paul Joyce

Student(s): Cathal Mariga, George Hennessy

3601

Title: Why does the colour red irritate bulls

Overview: We will investigate why people think bulls are irritated by the colour red. We will also show them that this is not true from the evidence that we will gather

School: Bailieborough Community School

County: Cavan

Teacher: Nuala Burns

Student(s): Aaron Hawthorne, Aaron Smith, Ryan Gargan

3602

Title: To investigate whether contrast sensitivity can be improved from regular exposure to action video games and the impact on everyday

tasks on a teenager with myopia

Overview: To investigate if contrast sensitivity can be enhanced by video games and if there is a positive impact on everyday tasks for teenagers with myopia.

School: Loreto Secondary School – Balbriggan

County: Dublin

Teacher: Niamh Mc Nally

Student(s): Chloe Tap, Dagmara Dobkowska

3603

Title: Investigating the link between habitat and the antibacterial effect of honey

Overview: Our project is focused on the antibacterial effects of honey, particularly the link between habitat type and antibacterial effect.

School: South Eastern Regional College – Bangor Campus

County: Down

Teacher: Jonathan Cash

Student(s): Holly King, Molly McConnell

3604

Title: A rush to biomass

Overview: our project is helping the earth in two ways. Recycling unwanted rushes to make a biomass fuel and reducing the level of MCPA.

School: Desmond College – Limerick

County: Limerick

Teacher: Marie Corkery

Student(s): Niamh O Connell, Jaimie Campbell

3605

Title: The Nutrition Behind Muscle Building: A Practical Workbook For Teens.

Overview: This project aims to solve the problematic knowledge gap with regard to nutrition and supplements among teenagers (15–20) looking to build muscle for sport or lifestyle

School: Patrician High School –

Carrickmacross

County: Monaghan

Teacher: John O'Rourke

Student(s): Conor Greene, James Carolan, Aaron Quigley

3606

Title: The effect of diluting antibacterial soap

Overview: Will adding water to liquid antibacterial hand soap reduce how effective the soap is at killing bacteria?

School: Fort Hill College

County: Antrim

Teacher: Stephen McCormick

Student(s): Jack Hanna, Michael Clarke, Katie Bailey

3607

Title: Stimulating plant growth using electricity

Overview: Research on electroculture and techniques that use electricity and magnetism to stimulate plant growth. Improved plant growth, quality and increased yields are some noticeable effects.

School: St. Joseph's Secondary School

County: Meath

Teacher: Eileen Nertney

Student(s): Niamh McHugh, Vitalija Janusonyte

3608

Title: An investigation into the effect of desalinated water on the growth of plants.

Overview: We wish to investigate whether desalinated water has any positive or negative effects on the growth of plants through the use of an irrigation system.

School: Coláiste Chiaráin

County: Limerick

Teacher: Edel Farrell

Student(s): Caitriona Brady Halmschlag, Finnian Brady Halmschlag

3609

Title: How reseeded ground with clover effects milk production

Overview: The various levels of milk components of cows grazed on permanent grassland in 2015 versus cows grazed on reseeded ground with clover in 2016.

School: Salesian Secondary College, Pallaskenry

County: Limerick

Teacher: John O'Flynn

Student(s): Finnian Walsh, Matthew Lucey

3610

Title: Does using the lift have a negative impact on the health of teenage girls?

Overview: Our project aims to figure out if the stairs in our school is beneficial for us teenage girl students, in terms of our health.

School: St Mary's Secondary School

County: Dublin

Teacher: Orla O Keeffe

Student(s): Thaara Wilson, Divya Kripakaran, Sherine Shibhu

3611

Title: The Green Crisps – To Investigate and Compare the Nutritional Values of Potato Crisps And Kale Crisps

Overview: Analyse/compare nutritional information of potato crisps versus kale crisps. To identify a healthy nutritious snack-food alternative, to help displace 'junk-food' and combat the obesity epidemic.

School: Ardscoil Mhuire

County: Galway

Teacher: Niall Kelly

Student(s): Sally Anne Parsons, Jessica Burke

BTYSTE 2017 Events

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





Social & Behavioural Sciences

JUNIOR INDIVIDUAL

4100

Title: A Statistical Study to Assess Subjectively and Objectively the Claimed Benefit of Repetitive Colouring on People's Stress Levels
Overview: My project aims to see whether repetitive colouring helps reduce stress levels.

School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Grace Hynes

4101

Title: Living with Hearing Loss: The Influence of Environmental Factors on Speech Audibility
Overview: To identify what environmental factors contribute to a "good listening environment" and use this knowledge to improve speech audibility for people with hearing loss.

School: Christ King Girls Secondary School
County: Cork
Teacher: Denise Quilter
Student(s): Nicole Marinos

4102

Title: A Scientific Investigation of the Cures and Folkways of the Irish Traveller
Overview: The purpose of my study is to research and present my findings on the Cures and Folkways of the Travelling Community.
School: Merlin College
County: Galway
Teacher: Claire Cunningham
Student(s): Ian McDonagh

4103

Title: Intelligent Transport Management Systems Have Arrived; is Human Behaviour Now the Limiting Factor to the Minimisation of Phantom Traffic Jams?
Overview: A statistical analysis to determine whether human behaviour is the limiting factor to the optimisation of traffic flow and the minimisation of phantom traffic jams.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Mia Casey

4104

Title: A statistical analysis of asthma awareness in Ireland.
Overview: Use of the health belief model (HBM) to analyse asthma awareness amongst the general public in Ireland.
School: Colaiste Treasa
County: Cork
Teacher: Derry O'Donovan
Student(s): Isobel Hynes

4105

Title: A statistical analysis of people's attitudes towards antibiotics including

antibiotic resistance

Overview: My project aims to find out about people's attitudes toward taking antibiotics and their awareness of antibiotic resistance.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Emma Hurley

4106

Title: Do You Buckle Up? Investigating the Number of Primary School Children who are not Properly Secured During Travel by Car
Overview: In this project I will investigate the number of children in primary school who are not properly secured during car travel.
School: Ardgillan Community College
County: Dublin
Teacher: Laura Sheahan
Student(s): Emily Cathcart

4107

Title: Do you understand Type 1 diabetes?
Overview: I carried out research on the knowledge and understanding of 12-16 year old adolescents on what it means to have Type 1 Diabetes.
School: Portumna Community School
County: Galway
Teacher: Niamh Barry
Student(s): Sean Power

4108

Title: A Statistical Study Investigating if The Media Publicity of The Whistleblower Report has Affected People's Trust in The Gardaí
Overview: My project aims to find out whether the publicity in the media of the whistleblower report has affected people's trust and attitudes in the Gardaí.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Lily Fitzgerald

4109

Title: An Exploratory study into the meaning and development of 'play' in Ireland over the last 5 Decades
Overview: An Exploratory study into the meaning and development of 'play' in Ireland over the last 5 Decades
School: Desmond College - Limerick
County: Limerick
Teacher: Aoife Culhane
Student(s): Conor Fox

4110

Title: "tudes" to Fude Dudes
Overview: I aim to find out how successful the food dudes programme was and how it could be approved upon
School: Colaiste Dun an Ri
County: Cavan
Teacher: Lorraine Hickey
Student(s): Ella Sexton

4111

Title: Statistical Comparison of Irish Attitudes to Settled Migrants.
Overview: This project will compare Irish attitudes to migrants based on the experiences of where you live and have they changed in the last year.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): David Daly

4112

Title: Does playing board games help people with dyslexia?
Overview: Two board games developed to assist those with dyslexia to help them to develop themselves but they also have fun while doing so.
School: Killorglin Community College
County: Kerry
Teacher: Donal O'Reilly
Student(s): Natasha Myers

4113

Title: 'The Twilight Years' Nursing home care compared to living alone.
Overview: In my project I aim to investigate the differences between lifestyles of elderly people living in a nursing home and those living independently.
School: Colaiste Dun an Ri
County: Cavan
Teacher: Lorraine Hickey
Student(s): Shanice Meegan

4114

Title: Too cool to wear hi-viz to school? A statistical analysis of the attitude of secondary school students to wearing hi-viz on their commute to school.
Overview: I aim to understand the attitudes of secondary school children to wearing hi-viz clothing on their commute to school and to make subsequent recommendations.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Conor Green

4115

Title: Driven by Gender? An investigation into subject choice in 1st year.
Overview: What influence does a Taster Programme have on subject choice in 1st year and can it increase the number of girls doing STEM subjects?
School: Lanesboro Community College
County: Longford
Teacher: Mary O'Brien
Student(s): Orla Lyons

4116

Title: Breastfeeding support groups: A statistical analysis into whether women who have access to this support will persevere through the

challenging times.

Overview: My project investigates whether breastfeeding support groups are effective and accessible in rural areas so all women can feel supported through the challenge of breastfeeding.
School: Colaiste Dun an Ri
County: Cavan
Teacher: Lorraine Hickey
Student(s): Emily Dickson

4117

Title: The Effectiveness of a Healthy Lifestyle Reward Scheme for Second level Schools A Quantitative Analysis
Overview: My project aims to test whether healthy eating habits of second level school children can be influenced with a reward scheme.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): David McCarthy

4118

Title: A Statistical Evaluation to Understand how Beliefs, Lifestyle Factors and Sensory Perceptions influence the consumption of Tap and Bottled Water
Overview: I aim to investigate how beliefs, lifestyle factors and sensory preferences influence tap and bottled water consumption, using a questionnaire and blinded sensory testing.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Shane Collins

4119

Title: An analysis of the Brexit referendum by age immigration and area
Overview: The idea is to evaluate the results of the Brexit referendum based on vote distribution, economic parameters and demographic details of the population of Britain.
School: Dominican College
County: Dublin
Teacher: Orla Condren
Student(s): Palakshi Rattan

4120

Title: Impact of Using Different Types of Traffic Calming Measures in a Small Rural Village
Overview: This project looks at how average driver speed changes in a small rural village when different traffic calming measures are introduced.
School: Bandon Grammar School
County: Cork
Teacher: Maire Flynn
Student(s): Charlie O'Callaghan

INTERMEDIATE INDIVIDUAL

4200

Title: Portion Sizes: Knowledge and



Education

Overview: Finding out what people know about portion sizes and investigating what sized portions they eat. Improving knowledge of portion sizes through better education.

School: Coláiste An Spioraid Naoimh

County: Cork

Teacher: Julie Hanlon

Student(s): Tony O'Halloran

4201

Title: God Help Us

Overview: My project aims to study the relationship between our religious and non-religious beliefs and the effect they can have on our mental health.

School: Coláiste Choilm

County: Cork

Teacher: Paudie Scanlon

Student(s): Sean Kenneally

4202

Title: Muscle madness; teenagers fixation on supplemented protein and its harmful effect in the body

Overview: An awareness project into the consumption and effects of protein supplements, shakes and bars in teenagers. Aim to highlight the harmful effects caused by excess protein.

School: Ardgillan Community College

County: Dublin

Teacher: Laura Sheahan

Student(s): Adam Tegart

4203

Title: Know your A-B-C'S (App for Babysitters on Childcare and Safety)

Overview: Literature review and survey of parents and school friends to collate identified childcare and safety information for teenage babysitters in a way they'll use it.

School: Presentation Secondary School

County: Cork

Teacher: Grainne McGrath

Student(s): Andrea E Conway

4204

Title: Gender Inequality in GAA

Overview: I intend to investigate the extent of the lack of gender equality in the GAA community, via surveys, interviews and statistical analysis.

School: Scoil Mhuire

County: Tipperary

Teacher: Daphne Dowley

Student(s): Karen Murray

4206

Title: Road-signs: Helpful Information or Distracting Noise?

Overview: My project is an investigation into whether or not road-sign "clutter" i.e bad road-sign placement is a hazard to road users and pedestrian alike.

School: Scoil Mhuire gan Smál - Roscommon

County: Roscommon

Teacher: Padraig Harlow

Student(s): Ava O'Leary

4207

Title: Tech Issues: An Analysis of the Impact of Mobile Phones on Pro-social Behaviour

Overview: Are people engaged with mobile phones less likely to be helpful to a stranger than those who are not?

School: Coláiste Muire - Crosshaven

County: Cork

Teacher: Martina McMahon

Student(s): Mia Dunne

4208

Title: 'Not What the Doctor Ordered': A statistical study investigating whether Cost is the main incentive for self-medication.

Overview: My project aims to investigate the sources of the public's attitudes towards self-medication and whether cost is the main motivation for self-medication.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Jennifer McCarthy

4209

Title: The reaction's of people to mothers breastfeeding in public

Overview: I'm investigating the reactions of people towards mothers breastfeeding in public and their opinion on how they can make breastfeeding in public more socially acceptable.

School: St Marys College

County: Wicklow

Teacher: Joanne English

Student(s): Erin Connolly

4210

Title: Raising awareness of the attitudes and delayed effects of concussion in Rugby

Overview: This project is about assessing the understanding and raising awareness of the dangers of concussion injury for players, coaches and parents in youth rugby at local level.

School: C.B.S.

County: Tipperary

Teacher: Mary Bridget Lenane

Student(s): Morgan McKnight

4211

Title: Infantilisation of Youth: A study of the association between infantilisation of teenagers and mental well-being in later life.

Overview: This novel research project investigates if there is a correlation between infantilisation of youth and poor mental health and well-being in adulthood.

School: Colaiste Treasa

County: Cork

Teacher: Derry O'Donovan

Student(s): Conleth Aspel

4212

Title: Does Your Name Determine Your Place In Society?

Overview: My project aims to find out if a persons name affects how they are treated through work, school, bullying in their childhood and adulthood life.

School: Loreto High School

County: Dublin

Teacher: Angela Benson

Student(s): Zephrah Murphy

4213

Title: Domestic God and Goddess: An assessment of teenagers ability to care for themselves and the factors that influence this.

Overview: I intend to examine if Irish teenagers can perform basic domestic skills (e.g. cooking, cleaning, ironing, sewing) and the factors that influence this.

School: St Joseph's Secondary School

County: Mayo

Teacher: Lorraine Carey

Student(s): Niamh Breslin

4214

Title: Analysis of responses to different types of anti-smoking campaign messages among 10 to 17 year olds

Overview: I want to understand how different anti-smoking campaign messages are perceived by young people and how they could be made more relevant to this demographic.

School: Patrician High School - Carrickmacross

County: Monaghan

Teacher: John O'Rourke

Student(s): Oisín Gartlan

4215

Title: Parental Positivity and Putting Positivity into Everyday

Overview: My project looks at positivity and mental health in primary schools. It also investigates whether parents influence their children's positivity/negativity.

School: Coláiste Na Toirbhirte

County: Cork

Teacher: Declan Cronin

Student(s): Meaghan Jeal

4216

Title: The Effects the Development of Technology has on Linguistics

Overview: An investigation into how the development of technology has influenced the development of children's linguistics and what potential implications for society this correspondence may have.

School: Loreto College - St Stephens Green

County: Dublin

Teacher: Jamie Bain

Student(s): Hana Gallagher

4217

Title: What Causes Stress In

Teenagers?

Overview: By surveying twice I can compare what stresses students at the start of the year compared to before exams & how it's dealt with

School: Jesus and Mary Secondary School, Our Lady's Grove

County: Dublin

Teacher: Marc Paul Lynn

Student(s): Emma Babos

4218

Title: To investigate the effects of health and lifestyle games on the behaviour of students

Overview: To examine the effects of a new health and lifestyle game on the behaviour of a sample of transition year students in my school.

School: Loreto Secondary School - Balbriggan

County: Dublin

Teacher: Niamh Mc Nally

Student(s): Kate O'Kelly

4219

Title: A Study into the development of young drivers on Irish roads

Overview: In my project I hope to research the danger that young male and female drivers impose on our roads.

School: Deelee College

County: Donegal

Teacher: Mary Gibbons

Student(s): Dylan Nesbitt

SENIOR INDIVIDUAL

4300

Title: When It All Goes Wrong - The Psychological Effects Of A Farm Accident

Overview: My Project aims to investigate the psychological effects of a farm accident on the family and its surrounding community.

School: Mount Mercy College

County: Cork

Teacher: Aaron O'Sullivan

Student(s): Emma Kearney

4301

Title: Anailís staitisticíúil ar thionchar cuairteanna chúraim dheonacha ar dhearfacht mheoin othair gheiriatria.

Overview: Bhunaíos 'KareBears,' grúpa deonach ógánaigh a dtugann comhlúadar d'othair Geiriatria St. Lukes CillChainnigh. Déanfaidh mé anailís staitisticíúil ar thionchar ár gcúairteanna ar dhearfacht mheoin na n-othair.

School: Coláiste Pobal Osraí - Kilkenny

County: Kilkenny

Teacher: Lughaidh Ó Néill

Student(s): Maeve Shaw

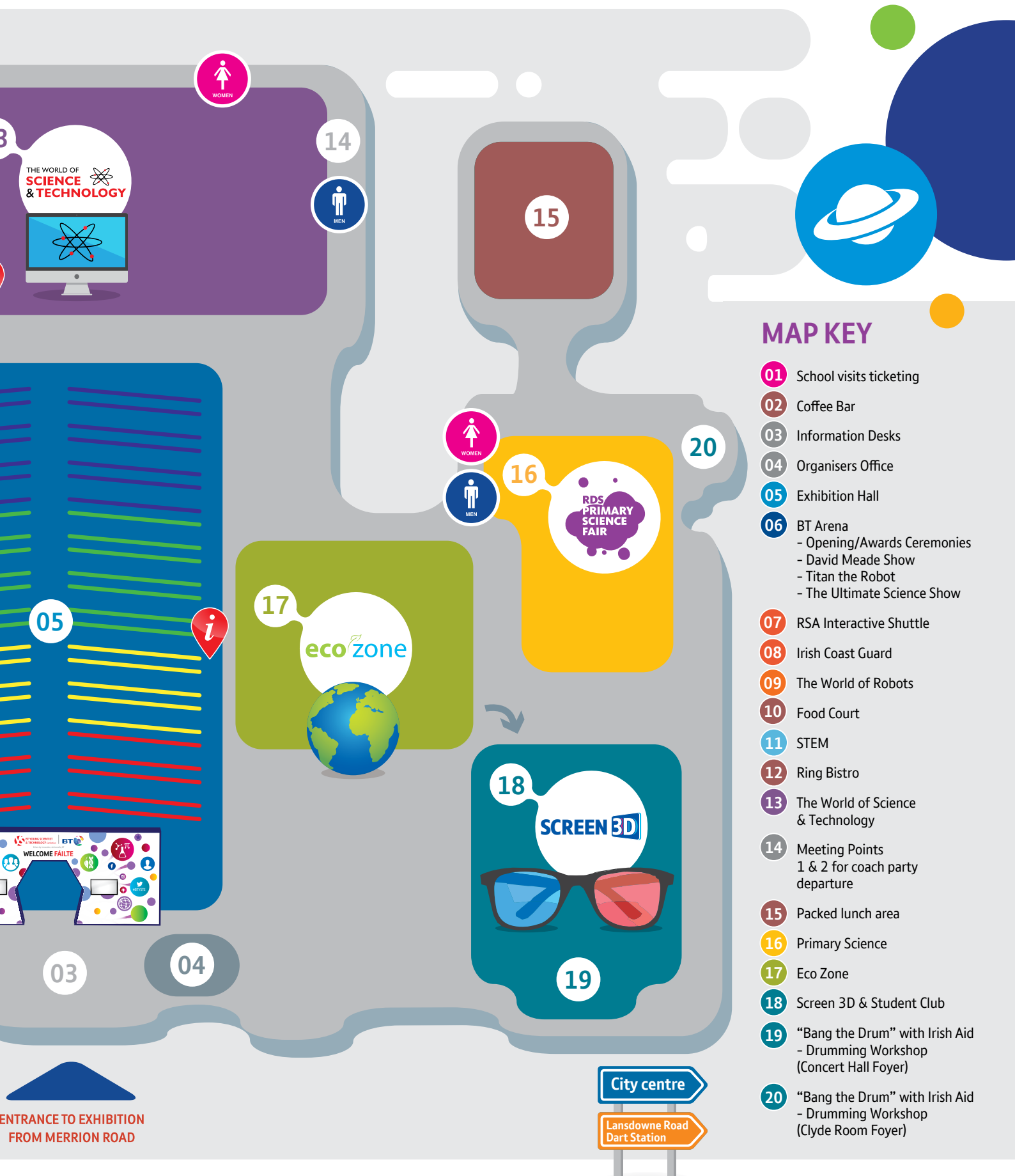
4302

Title: MiContact

Overview: Ag úsáid app bunaithe ar anailís iompraíocht fheidhmeach chun cur le clár idirghabhála luaithe

Map





MAP KEY

- 01 School visits ticketing
- 02 Coffee Bar
- 03 Information Desks
- 04 Organisers Office
- 05 Exhibition Hall
- 06 BT Arena
 - Opening/Awards Ceremonies
 - David Meade Show
 - Titan the Robot
 - The Ultimate Science Show
- 07 RSA Interactive Shuttle
- 08 Irish Coast Guard
- 09 The World of Robots
- 10 Food Court
- 11 STEM
- 12 Ring Bistro
- 13 The World of Science & Technology
- 14 Meeting Points
 - 1 & 2 for coach party departure
- 15 Packed lunch area
- 16 Primary Science
- 17 Eco Zone
- 18 Screen 3D & Student Club
- 19 "Bang the Drum" with Irish Aid
 - Drumming Workshop (Concert Hall Foyer)
- 20 "Bang the Drum" with Irish Aid
 - Drumming Workshop (Clyde Room Foyer)



Social & Behavioural Sciences

agus páistí le uathachas a spreagadh teagmháil súil a dhéanamh
School: Gaelcholáiste an Eachréidh
County: Galway
Teacher: Mary Ní Mhathúna
Student(s): Ciara-Beth Ní Ghríofa

4303

Title: Did gender quotas change voting patterns?
Overview: I am looking to see if the gender quotas used in the 2016 general election changed peoples voting patterns.
School: Mary Immaculate Secondary School - Lisdoonvarna
County: Clare
Teacher: John Sims
Student(s): Róisín O'Donoghue

4304

Title: Introverts Vs Extroverts : Alcohol Consumption
Overview: I will be looking to see if there is a correlation between how introverted a person is and how much alcohol they consume.
School: Coláiste Muire - Crosshaven
County: Cork
Teacher: Martina McMahon
Student(s): Kelly Williams

4305

Title: Manipulative Media
Overview: An investigation into how people of different ages are manipulated by the media, and a study of the techniques it uses to mislead people.
School: Carndonagh Community School
County: Donegal
Teacher: Siobhan Coll
Student(s): Sally McKenna

4306

Title: To Investigate the Attitudes of Irish People towards Compulsory Religious Education
Overview: This project aims to assess what people feel the socio-economic benefits of Compulsory Religious Education are.
School: Old Bawn Community School
County: Dublin
Teacher: John Mc Carthy
Student(s): Luke Coulton Dillon

4307

Title: A Study Of How Student's attendance at school effect their overall grades
Overview: The purpose of my study is to investigate how a students attendance at school effect there overall grades.
School: St. Clare's Comprehensive School
County: Leitrim
Teacher: Edel McPhelim
Student(s): John Keaney

4308

Title: Name-Brand Vs. Generic Medicines: The Costly Question that Nobody is Asking
Overview: My project aims to gauge the public and health care professionals' perception and knowledge of the issue of Name-Brand Vs. Generic medicines.
School: Jesus & Mary Secondary School
County: Sligo
Teacher: Helena Ryder
Student(s): Cillian O'Boyle

4309

Title: "We remember 95% of what we teach":Peer tutoring in TY
Overview: My project investigates if peer-tutoring is an effective way of revising science in TY. Can it help students better remember material covered?
School: Lanesboro Community College
County: Longford
Teacher: Michael Lyons
Student(s): Brian Lyons

4310

Title: Do teachers' attitudes, behavioral practices and expressions effect student performance and application in class, community and the home?
Overview: This project aims to identify how teachers affect students emotionally, socially and academically, while discovering how to enhance students' learning experience in the classroom.
School: Franciscan College
County: Meath
Teacher: Emma Sweeney
Student(s): Deolu Shomoye

JUNIOR GROUP

4400

Title: Do You See What I See: A Investigation into Optical Illusions and How They Can Be Applied in Everyday Life
Overview: Throughout our project we explored why people see optical illusions differently, uses of optical illusions in everyday life as well as extensive background research
School: Eureka Secondary School
County: Meath
Teacher: Mary Wright
Student(s): Ruth Smyth, Katie Conachy, April Burke

4401

Title: To Pump or not to Pump: a comparative study of the methods of control of diabetes in teenagers
Overview: We wish to investigate how teenagers choose the method of control they use for their diabetes and how this choice impacts on their everyday life.

School: Our Lady's Secondary School - Monaghan
County: Monaghan
Teacher: Kathryn Higgins
Student(s): Laura Christie, Maria Duffy, Katie Mohan

4402

Title: Fresh air, Friend or Foe? The development of an app to combat rural seclusion among the Irish farming community.
Overview: Producing an app to improve connectivity between Irish farmers who are a vulnerable group in society experiencing elevated levels of poor mental health and well-being.
School: Colaiste Treasa
County: Cork
Teacher: Derry O'Donovan
Student(s): Maeve O'Connor, Aoidhe Sheill

4403

Title: MIGRANE - It's not just a headache!!
Overview: Our project aims to investigate the prevalence/effects that migraine has on adolescents and to raise awareness of the support and help that's available to them.
School: Hazelwood College
County: Limerick
Teacher: Martina Matthews
Student(s): Tara O'Brien, Lauren Moran

4404

Title: The Dilemma of When to Start School, aged four or aged 5, decisions decisions!!!!
Overview: This project has been designed to help parents to decide when to send their child to school. We hope we can resolve this issue.
School: Desmond College - Limerick
County: Limerick
Teacher: Marie Corkery
Student(s): Aoife Lee, Emma Brennan, Ellie Bucke

4405

Title: A statistical analysis of the public's attitudes towards tattoos and an assessment of their impact on employment opportunities.
Overview: Our project aims to look at the public's attitudes towards tattoos and to assess people's views on the impact of tattoos on employment opportunities.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Rachel Henderson, Meadhbh Hurley, Aoife Walsh

4406

Title: Play Now, Study Later?
Overview: To what extent do toys we play with as children influence our choice of course at Third Level?
School: St Conleth's College

County: Dublin
Teacher: Seamus Callaghan
Student(s): Zachary Carr, Sophie Lee

4407

Title: Troponin:Indicator of heart attack or shock to the system?
Overview: We are investigating whether doctors are inaccurately using Troponin as an indicator for a heart attack when it is actually an indicator of shock.
School: Colaiste Dun an Ri
County: Cavan
Teacher: Lorraine Hickey
Student(s): Lucy Fitzsimons, Ava McCaul

4408

Title: The Effect The Islamic State Of Iraq And Syria's Actions Have Had On The Reputation Of The Muslim Community
Overview: Our project aims to find out how ISIS's actions have had on the reputations of normal Muslims. To do this we'll conduct some tests.
School: Coláiste Iósaef
County: Limerick
Teacher: Brian Clarke
Student(s): Paul Barrett, Cathal O' Brien

4409

Title: A Statistical Analysis of Dream Recollection Based on Age, Gender and Lifestyle
Overview: With our project we want to find out if age, gender and lifestyle have an impact on who remembers their dreams and when.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Sarah Carroll, Anna Peare, Leah Hurley

4410

Title: What animals are we afraid of? and more importantly, Why?
Overview: A statistical study on whether our fears of animals are rational or whether they have been passed down to us by our parents.
School: Colaiste Dun an Ri
County: Cavan
Teacher: Lorraine Hickey
Student(s): Mark Byrne, Oisín Blake

4411

Title: Project EasySurf
Overview: We plan to make simple visual tools to understand when conditions are safe and good to surf, for people of different abilities.
School: Newtown School - Waterford
County: Waterford
Teacher: Bryan Ronan
Student(s): Hazel Griffin, Adrianna Kostka, Jude Lee

4412

Title: Think Fast: Analysing the visual



reaction times of GAA athletes versus non GAA athletes

Overview: We are analysing the visual reaction times of GAA athletes versus non GAA athletes, by surveying and testing students and members of our local club.

School: Scoil Chaitríona

County: Dublin

Teacher: Brian Gallagher

Student(s): Aisling Ní Dhonnabháin, Meadhbh Ní Cheallacháin, Aoife Nic an Tuile

4413

Title: Do Robots make Better Bosses?

Overview: We intend to investigate if Robots would make more effective bosses than humans.

School: Salesian Secondary College, Pallaskenry

County: Limerick

Teacher: Claire Sheehy

Student(s): Caoimhe Carey, Amy Cusack-Sexton, Dawn O'Neil

4414

Title: Slowing Ireland down!

Overview: To investigate whether percentage of male and female drivers that break the speed limit changes when Gardaí are present.

School: Celbridge Community School

County: Kildare

Teacher: Mary Gormley

Student(s): David Cornea, Sean Mac Court

4415

Title: Ability in Maths: Could a fixed Mind-set be our problem?

Overview: We are investigating does having a fixed mindset verses a growth mindset affect how we learn Mathematics.

School: Coláiste Bhaile Chláir

County: Galway

Teacher: Caroline Concannon

Student(s): Katelyn McMahon, Adalina Feekry, Leah Cowap

4416

Title: Once more with feeling – do Emojis help us to communicate

Overview: Social media is now a mainstream method of communication. Can emojis help communicate tone of voice? Are emojis changing the way we communicate?

School: Sandford Park School Ltd

County: Dublin

Teacher: Keith McBain

Student(s): Rachel Doyle, Isabelle Doyle

4417

Title: How can we improve the mindfulness of young people in Ireland?

Overview: To improve the concentration levels of 2nd years in our school and to introduce them to new techniques to help them to cope

with stress

School: Bandon Grammar School

County: Cork

Teacher: Marie Hogan

Student(s): Orla O'Sullivan, Laura Ryan, Amy O'Reilly

4418

Title: Does the involvement of children in numerous after school activities cause more harm than good?

Overview: We picked this project to alert people about the harm that doing too many activities can cause physically and to the family unit

School: Ardscoil Rath Iomgháin

County: Kildare

Teacher: Fiona Searing

Student(s): Katie Hyland, Abby Kenny

4419

Title: The Effect on a Student's Academic Self-Concept and Self-Esteem When Moving From Primary to Post-Primary School

Overview: This project will investigate the effect of the transition from Primary to Post-Primary School on a student's Academic Self-Concept and Self-Esteem.

School: Roscommon Community College

County: Roscommon

Teacher: Jude Lohan

Student(s): Michael Lohan, Michael Staunton, Ben Finnerty

4420

Title: Access to clean drinking water in schools for all students to provide well-being?

Overview: Our project is based on the fact that most secondary school in the local area do not have access to clean and safe drinking water.

School: Adamstown Community College

County: Dublin

Teacher: Jane Halloran

Student(s): Saoirse Doyle, Sarah Stewart

4421

Title: The study of the beats per minute on canine heart rate and response times

Overview: Testing if the beats per minute in music affects dogs' heart rate and response timing.

School: Loreto College – Foxrock

County: Dublin

Teacher: Carol Byrne

Student(s): Solen O'Neill, Lucy Mahon, Megan Dempsey

4422

Title: Irlen glasses

Overview: We will show the advantages, disadvantages and effects of wearing Irlen glasses on people with Irlen syndrome, including two members of our team.

School: Scoil Mhuire

County: Cork

Teacher: Rachel Currivan

Student(s): Saoirse Brazil Kearney, Caoimhe Brazil Kearney

4423

Title: The age of adoption a smart phones – a study of past and future

Overview: It aims to look at whether or not the age of children receiving phones is decreasing and if parents observe what's on their children's phone.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Emer Heery, Lilly Gill

INTERMEDIATE GROUP

4500

Title: Effects of non-selection for physical activities on adolescents' mental health.

Overview: Investigation into the mental effects on adolescents who are not chosen for sports teams or picked among the last for schoolyard/PE activities.

School: The Abbey School

County: Tipperary

Teacher: Marian Keating

Student(s): Tadhg Carew, Jack Quirke

4501

Title: To investigate the presence of negativity bias in Irish secondary level students try to find what influences it.

Overview: We will survey secondary students, record the results and make a conclusion based on the results.

School: Clonkeen College

County: Dublin

Teacher: Lisa O'Rourke

Student(s): Lucas Carraher, Seán Nolan, Ruairi Greene

4502

Title: Children in Critical Care Units – The Simple Truth

Overview: A quantitative investigation of accommodation and care provided to children and adolescents in critical care units in Ireland.

School: Portumna Community School

County: Galway

Teacher: Niamh Barry

Student(s): Julie Moran, Sandra Shaughnessy, Katelyn Malone

4503

Title: Analysing Micro Expressions

Overview: Analysing and comparing the body language between Hilary Clinton and Donald Trump and their facial expressions

School: Colaiste Pobail Setanta

County: Dublin

Teacher: Mikey O'Sullivan

Student(s): Adam Mulhall, Conor Hoey, Darwin O'Sullivan

4504

Title: Siúcra Tóg Go Bog É

Overview: To investigate Irish preteens and teenagers knowledge of their daily recommended sugar limits and to develop an app. to improve this knowledge.

School: Scoil Mhuire

County: Cork

Teacher: Eimear O' Sullivan

Student(s): Marie O'Neill, Orla Gillespie, Lisa Finn

4505

Title: A statistical analysis into the impact of the new CAO point system on the update of higher level subjects and class sizes.

Overview: An investigation into the effects of the new CAO points system on students doing the leaving cert re: class size and higher level subject uptake

School: C.B.S. Roscommon

County: Roscommon

Teacher: Fiona Leavy

Student(s): Albert Looby, Johnny O'Connor, Jack McGahon

4506

Title: Whey or No Whey?

Overview: The aim of this project is to investigate and compare the performance of whey protein products against milk products on the young female body.

School: Presentation Secondary School

County: Cork

Teacher: Grainne McGrath

Student(s): Éadaoin Joy, Mae McKenna, Julie Moran

4507

Title: Barefoot or runners – how do I achieve my maximum performance?

Overview: We will evaluate the difference between running barefoot versus running in sports shoes on an athlete's performance. We will evaluate on three different surfaces.

School: Coláiste Choilim

County: Cork

Teacher: Robert Nolan

Student(s): Jess Sheahan, Claire Nevin, Amy Lynch

4508

Title: Post-Brexit: Saving our Top Five

Overview: Our project is on the effects of "brexit" and technology industry in Ireland. We plan to use surveys to interview 5 different companies on the effects of "brexit" on their company coming up with results

School: Portumna Community School

County: Galway

Teacher: Niamh Barry

Student(s): Cian Farrell, Aidan Donnelly, Joseph Evans



Social & Behavioural Sciences

4510

Title: Understanding the Diversity Landscape in Science and Engineering in Industry throughout Ireland and existing perceptions among Women.
Overview: We will investigate if diversity exists among science and engineering companies throughout Ireland and what perceptions women may have towards jobs in this sector.
School: Presentation Secondary School
County: Cork
Teacher: Grainne McGrath
Student(s): Sarah Burke, Sarah Kent

4511

Title: An investigation into how single gender schools and co ed schools effect children in the future
Overview: We are investigating if you go to a single gender school or a mixed school will it effect your social skills in the future.
School: St. Joseph's Secondary School
County: Clare
Teacher: Anthony Guilfoyle
Student(s): Laura Byrnes, Alesandra Alvarez, Siobhán Downes

4512

Title: 7 is Scarlet
Overview: An investigation into the links between gender and talents in relation to synesthesia.
School: Ursuline College
County: Sligo
Teacher: Anthony Carolan
Student(s): Eimear Kearins, Ailbhe Morgan, Ava O' Grady

4513

Title: Did You Just Assume My Gender? - Gender Spectrum Awareness In Young People
Overview: We wish to answer the question "Are the Younger Generations Aware of the Gender Spectrum?" along with other questions linked to the gender spectrum.
School: Coláiste Choilm
County: Cork
Teacher: Paudie Scanlon
Student(s): Ellen Collins, Katie Lombard

4514

Title: Rendered Speechless by your own voice
Overview: Our project aims to investigate the science behind rendering a person speechless when hearing their own voice at a slight delay.
School: Loreto High School
County: Dublin
Teacher: Angela Benson
Student(s): Ciara McCarthy, Saoirse Hassett, Sheena Morris

4515

Title: Investigation into the impact of mindfulness as part of a school

curriculum

Overview: An investigation into the impact of ten minutes of mindfulness daily for children in primary school by doing simple memory, concentration and stress level tests.
School: Gaelcholáiste Chiarraí
County: Kerry
Teacher: Triona Uí Mhaolchatha
Student(s): Aoife Ní Chonaill, Laoise Ní Chaochlaigh, Rionach De Bhillis

4516

Title: A statistical analysis of people's awareness of the dangers of Bisphenol A (BPA) in reused disposable plastic bottles.
Overview: Our project aims to study people's awareness of BPA in reused disposable plastic bottles and the various effects/dangers of it on our health.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Nia Daly, Triona Nyhan, Úna O'Donovan

4517

Title: Do You Know What You're Eating?
Overview: Research into how aware and educated people are of what they're eating and are they sticking to the RDA'S of nutrients and foods.
School: Coláiste Iósaeif
County: Limerick
Teacher: Sharon Magner
Student(s): Aisling Hughes, Leanne Herlihy

4518

Title: An analysis of young adults gambling in rural areas in comparison to urban areas
Overview: This project will focus on gambling in Ireland, primarily examining the gambling habits of young adults in urban and rural areas.
School: Roscommon Community College
County: Roscommon
Teacher: Joanne Broggy Shea
Student(s): Sam Fitzmaurice, Shane Donoghue, Theo O Reilly-Linnane

4519

Title: A Statistical Analysis of the General Public's Opinions and Awareness to the Sea Levels Rising.
Overview: Our project aims to investigate the general public in relation there knowledge of Sea Levels Rising and how its affecting them as-well as governmental policies.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Deirdre O Reilly, Anna Walsh, Mia Hynes

4520

Title: The Secret Life of Teens
Overview: An investigation into the perception of privacy in connection with teenagers on social media.
School: Coláiste Choilm
County: Cork
Teacher: Karina Lyne
Student(s): Aisling O' Sullivan, Idena Scragg, Lily O' Brien

4521

Title: Dating - Through The Years
Overview: A look at dating methods used over the past 40 years. We will survey two categories:ages 16-26/46-56 to see how dating has changed and that the impact if any is on teenagers.
School: C.B.S. Roscommon
County: Roscommon
Teacher: Fiona Leavy
Student(s): Martin O'Hara, Jack McNally

4522

Title: A comparison of the attitudes of Irish, French and Spanish students towards the teaching of foreign languages.
Overview: To investigate the interest of students in foreign languages and to discover the different approaches used by teachers in Ireland and other European countries.
School: Ard Scoil Na Mara
County: Waterford
Teacher: Claire Adamson
Student(s): Cathy O'Neill, Chloe Kinsella

4523

Title: Does science practical work, work?
Overview: Investigate the importance of practical work in science using quantitative and qualitative methods in relevance to a student's learning and understanding of science.
School: Scoil Mhuire gan Smál - Blarney
County: Cork
Teacher: Sean Foley
Student(s): Triona Twomey, Jennifer Rea, Sarah Bannon

4525

Title: Working ways, Working hours.
Overview: Our project is a study of how different working environments and hours impact work life balance and productivity.
School: St Wolstan's Community School
County: Kildare
Teacher: Sinead McGee
Student(s): Mikela Cooney, Anna Bourke, Muireann Duggan

4526

Title: Where are the banbhainisteoirí?
Overview: A statistical analysis into the low level of female coaches in the GAA and investigating why these

levels are low.

School: St Mary's Secondary School - Macroom
County: Cork
Teacher: Jennifer Butler
Student(s): Rosa Simmonds, Michelle O'Riordan

4527

Title: Close The Gap
Overview: We are studying the gender gap in STEM fields today and creating a Transition Year module aimed towards girls that will hopefully close this gap.
School: Blackwater Community School
County: Waterford
Teacher: Brigid Barrett
Student(s): Fiona Martin, Sally English, Oisín Ormonde

4528

Title: To Bonus or Not to Bonus - An investigation to see the effect Higher Level Maths has on other subjects
Overview: The aim of our project is to discover if the Bonus Point Scheme results in Leaving Certificate Students dropping to Ordinary Level in other Subjects.
School: Coláiste Choilm
County: Cork
Teacher: Karina Lyne
Student(s): Cian Sullivan, Cian McCarthy, Alana Murphy Dooley

4529

Title: Is concussion in early life a contributing factor to Parkinson disease later in life
Overview: We want to investigate the relations between concussion in young life and Parkinson's disease in later life.
School: St Muredachs College
County: Mayo
Teacher: Kevin Boyle
Student(s): Peter Harrison, James Hackett

4530

Title: Riddle me this' - Are Riddles or Nursery Rhymes beneficial to future education.
Overview: To find out if Nursery Rhymes or Riddles are beneficial in education for all age groups and to investigate the most common Rhymes among children.
School: John The Baptist Community School
County: Limerick
Teacher: Michelle Buckley
Student(s): Chloé O' Dwyer, Rachel Mc Mahon, Martina O'Regan

4531

Title: Is There A Connection Between a Child's Handwriting and Their Parents?
Overview: We wish to investigate the connection between parents' handwriting and their children's, in



attempt to combat the problem of untidy handwriting.

School: St Muredachs College

County: Mayo

Teacher: Kevin Boyle

Student(s): Brian Durkan, Austin Bourke, Matthew Aris

4532

Title: To investigate the behavior of horses being ridden alone compared to in a group

Overview: We are investigating the changes in a horses behavior while being ridden alone compared to being ridden in a group by carrying out a survey

School: Pobalscoil na Tríonóide

County: Cork

Teacher: Cormac de Fréin

Student(s): Monica Cherry, Niamh Buckley

4533

Title: Beeware

Overview: Investigation into the importance of bees in the environment and in life, along with the awareness people have of bees and their endangerment.

School: Scoil Mhuire agus Ide

County: Limerick

Teacher: Rebecca Phillips

Student(s): Sinead Woulfe, Claire Meehan, Sophie Meredith

4534

Title: "Don't sweat the small stuff" can drawings on sensory be used to increase understanding of ASD. Our 'ideal transition year class' - A science for all approach.

Overview: To identify if there are gaps in understanding ASD in a transition year class. To increase understanding and support the ideal TY class

School: St. Joseph's Secondary School

County: Clare

Teacher: Marguerite McGuinness

Student(s): Luke Frawley, Conor Kelly

4535

Title: The Effects of Powdered Protein on Athletes

Overview: Our Project aims are to find out the effect powdered protein has on an athlete's body and how educated they are before they consume it.

School: St Mary's Secondary School

County: Macroom

Teacher: Jennifer Butler

Student(s): Emer McMahon, Emma Lucey

4536

Title: What Olympic sport is most suitable for me?

Overview: A statistical based project that determines what Olympic sport is suitable for a person based on certain characteristics of that person using a yes/no flowchart.

School: Millstreet Community School

County: Cork

Teacher: Shane Guerin

Student(s): Grace O'Connor, Fionan Buckley, Jennifer Linehan

4537

Title: Are we ready to vote? - An investigation into the difference in political knowledge of 16 year olds versus 18 year olds with a view to reduce the voting age.

Overview: Investigation into the difference in political knowledge and interest of 16 year olds versus 18 year olds with a view to reduce the voting age.

School: Loreto Secondary School - Kilkenny

County: Kilkenny

Teacher: Noelle Corrigan

Student(s): Grace O'Neill, Ciara Davis, Sophie Harte

4538

Title: Epileptic or Drunk? An awareness campaign to highlight symptoms of epilepsy

Overview: We aim to find out public awareness to the symptoms of epilepsy. Is the person having a fit or drunk. How do we tell the difference?

School: Millstreet Community School

County: Cork

Teacher: Jennifer O' Donoghue

Student(s): Ciara Fitzgerald, Katie Crowley, Emma Kelleher

4539

Title: I spy with my colored eye

Overview: We wish to investigate whether or not eye colour influences the strength of ones eye sight. Does eye colour / the amount of melanin in ones eye cause them to see more or less.

School: St Mary's Secondary School - Macroom

County: Cork

Teacher: Jennifer Butler

Student(s): Carolyn O'Donovan, Ciara Walsh

4540

Title: An investigation on racism in Irish and Northern Irish schools and the potential effects due to Brexit

Overview: Our project investigates racism, intercultural understanding between students and school policies in Irish secondary schools and the effects of Brexit on the diverse school community.

School: Dundalk Grammar School

County: Louth

Teacher: Shane Lynch

Student(s): Zoha Khan, Roisin Murphy

4541

Title: The Multiverse - what world would you live in?

Overview: We ask people questions about world changing events to determine what universe they would

rather live in and how many parallel universes we can create.

School: Scoil Mhuire gan Smál - Roscommon

County: Roscommon

Teacher: Padraig Harlow

Student(s): Caoimhe Donoghue, Una Geoghegan

4542

Title: The correlation between success in an Olympic sport and participation in that sport following the Olympics

Overview: We want to find out if a sport does well in the Olympics, if that, does that success boost interest in that given sport following the Olympics.

School: Millstreet Community School

County: Cork

Teacher: Jennifer O' Donoghue

Student(s): Katie Hickey, Robyn Sheehan, Elmarie Kelleher

4543

Title: N Plates: A Necessity or a Nuisance?

Overview: An investigation into the impact of novice plates on road safety, driver behaviour and attitudes, to determine if N Plates have been a success.

School: Laurel Hill Secondary School FCJ

County: Limerick

Teacher: Andrea Enright

Student(s): Jane McNamara, Susan O'Neill, Naoise Quinn

4544

Title: Recession Suicide and # little things in Waterford

Overview: To examine the relationship between suicide and economic adversity and to measure the uptake of the department of health's public education campaign # little things

School: GaelCholaiste Phort Láirge

County: Waterford

Teacher: Seán Ó Catháin

Student(s): Emily Walsh, Lucy Kirby, Katie Donnelly

4545

Title: A statistical examination into the impact a low fat diet has on obesity, obesity related illness and government expenditure on health care within Ireland

Overview: A statistical analysis into the relationship between obesity, obesity related illnesses and government expenditure within the healthcare system due to the promotion of low-fat diets.

School: Pobalscoil Neasain - Baldoye

County: Dublin

Teacher: Gemma Buicke

Student(s): Rebecca Clancy, Sarah Griffin, Aine Glynn

4546

Title: The psychology of tattoos;

Kudos or concern?

Overview: We are going to find out the psychology behind tattoos, why people get them, what effect they have and what influences people to get them.

School: Scoil Mhuire gan Smál - Roscommon

County: Roscommon

Teacher: Padraig Harlow

Student(s): Sarah Dunican, Jasmine Tucker

4547

Title: An eifeacht do cluichí ríomhaireachta ar an gcorp

Overview: Rinneamar taighde ar buileadh croi, brú fola, caoinfhulaingt piain, am freagairte, diríú aigne agus ráta anáilaithe daltaí roimh agus taréis cluiche ríomhaireachta a imirt.

School: Gaelcholáiste Mhuire

County: Cork

Teacher: Aoife Ní Mheachair

Student(s): Dara Ní Chonaill, Katelyn Ní Cholmáin, Ava Níc Ruairí

4548

Title: Nomophobia and Phone Addiction - Is it a growing concern among young people?

Overview: This project investigates how addicted Irish teenagers are to their mobile phones; we plan to examine the impact of phone withdrawal from a sample size.

School: De La Salle College

County: Waterford

Teacher: Julia Butler Kelly

Student(s): Jack Keller, Oisín Orrick, Mohamed Eltayeb

4549

Title: Do our daily activities influence the subject of our dreams

Overview: Our project aims to research if our daily activities influence the subject of our dreams

School: Meán Scoil an Chlochair

County: Westmeath

Teacher: Edward Heery

Student(s): Georgia Martin, Nicole Gill

4550

Title: Evaluating the impact of a digital literacy programme on students digital wellbeing in our school

Overview: We will evaluate the impact of a research-informed digital literacy programme on students' digital wellbeing in our school.

School: Bandon Grammar School

County: Cork

Teacher: Paula McGath

Student(s): Georgie Roche, Ruth Kevane

4551

Title: Does participation in Transition Year enhance Psychological Wellbeing for participating students?

Overview: Our project examines if



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students' participation in transition year improves their psychological well being and self efficacy as suggested by the Department of Education
School: Meán Scoil an Chlochair
County: Westmeath
Teacher: Edward Heery
Student(s): Caoimhe Clarke MacMahon, Katie Colton, Chloe Gannon

4552
Title: Are Irish Islands becoming extinct? An investigation into the attitudes of Islanders towards the declining population of Ireland's Islands
Overview: We are investigating the constantly declining population of some of Ireland's smallest communities and surveying the locals by getting their attitudes on the falling population
School: Coláiste Pobal Bheanntairi
County: Cork
Teacher: Siobhan O'Sullivan
Student(s): Neasa O Sullivan, Sarah Bishop

4553
Title: Defib Demo-The Heart Of the Matter
Overview: Our aim is to develop and design an educational awareness programme for GAA players, parents, and coaches on how to use a defibrillator correctly and efficiently.
School: Ballymahon Vocational School
County: Longford
Teacher: Sinead Mulcahy
Student(s): Sarah McCormack, Ciara Moughty, Emma Kearney

4554
Title: Can YOU be Fooled by The Power of Persuasion?
Overview: To establish the credibility of criminal witnesses and whether they can be persuaded to think they have seen something that they haven't.
School: St Marys College
County: Wicklow
Teacher: Joanne English
Student(s): Niamh Byrne, Leanne Finn

4555
Title: A quantitative comparative analysis of the ethical views in science held by the Irish public on the basis of area, gender and age group.
Overview: A study into the views held by the Irish public on the basis of age, gender, religion, education level and geographical location.
School: John The Baptist Community School
County: Limerick
Teacher: James Devereux
Student(s): Emily Dollyery, Rachel Looby, Lily Sadlier

4556
Title: To examine the differences between a traditional ash wood hurley and a fibre glass hurley and to recommend which hurley seems more suitable to the game of hurling.
Overview: To examine the factors which may influence the better hurley and to show which hurley would be more advantageous to camogie/hurling players.
School: St Aloysius College
County: Cork
Teacher: Carew Hyland
Student(s): Anna Myers, Aoife Dalton

4557
Title: Mass medias influence on the general public's interest and awareness of Ladies GAA
Overview: We want to figure out what the media does to effect the public's interest and awareness of women's GAA compared to men's GAA.
School: John The Baptist Community School
County: Limerick
Teacher: James Devereux
Student(s): Molly Hickey, Bláithín Leahy

4558
Title: MCPA Pesticide in Drinking Water
Overview: This project will look at the reasons why, despite information campaigns, the pesticide MCPA is being found in excessive levels in our drinking water supply.
School: Athlone Community College
County: Westmeath
Teacher: Martina Roache
Student(s): Megan Coolahan, Ceara Mulry, Clodagh Moxham

4559
Title: Am I Liked? Examining the science behind likes on social media.
Overview: We want to examine scientifically, by means of questionnaires, surveys and analysis, the growing need for teenagers to achieve certain "like" numbers on social media.
School: Colaiste Ide and Iosef
County: Limerick
Teacher: Maria Mc Mahon
Student(s): Leona Lyons, Rachael Horan, Cian O'Connor

4560
Title: Early to bed and Early to rise
Overview: Our project aims to investigate the effect on someones life based on their morning, evening and night routines.
School: St Joseph's College
County: Tipperary
Teacher: Mary Gorey
Student(s): Bríd Ryan, Kate Treacy, Sophie Hennessy

4561
Title: Accents - The Unspoken About

Prejudice
Overview: Our project will investigate Irish peoples perceptions on different accents and show the different interpretations between age groups
School: Hazelwood College
County: Limerick
Teacher: Matthew Finn
Student(s): Ava Mullane, MaryKate Fehin

4562
Title: An Investigation into the dangers associated with 'Social Media Parenting'
Overview: This project investigates parents' knowledge of the dangers associated with posting pictures and information about their children on Social Media.
School: Desmond College - Limerick
County: Limerick
Teacher: Marie Corkery
Student(s): Amy O Shea, Aoife Corbett

4563
Title: Measuring Radon awarness in a High Risk Area
Overview: We will measure how many people in our area know that they are living in an area where 20% of houses have high radon levels.
School: F.C.J. Secondary School
County: Wexford
Teacher: Stephanie O' Dwyer
Student(s): Kate Kirwan, Ciara Carroll, Niamh O'Dowd

4564
Title: Attitudes Towards iPads in Education
Overview: Our project involves a statistical investigation of attitudes towards iPads in education. We will do this by surveying students, parents and teachers.
School: Our Lady's Secondary School
County: Mayo
Teacher: Fenton McHugh
Student(s): Courtney Hefferon, Oisín Lally, Grace Kelly

4565
Title: A Case-study into Public Awareness of Microbeads in Personal Care and Household Products
Overview: We wish to investigate the awareness and attitude of people towards pollution of waterways caused by microplastics used in personal care and household products.
School: Magh Ene College
County: Donegal
Teacher: Yvonne Higgins
Student(s): Jamie Lee Clancy, Rachel Currid, Caolan Clancy

4566
Title: Equestrian road safety
Overview: our project is telling people about equestrian safety on the roads and the dangers riders and horses

have on the road as well as drivers
School: Comprehensive School - Tarbert
County: Kerry
Teacher: Gerard Nash
Student(s): Chloe O Carroll, Aine Enright, Aoife O'Brien

4567
Title: A Study Using Statistical Methods To Assess The Awareness Levels of the LungWorm Parasite in Canines and its Effects
Overview: We aim to investigate peoples awareness into the increasing prevalence of angiostrongylus vasorum (lungworm infection) and its effects in canines in Ireland.
School: Kinsale Community School
County: Cork
Teacher: Mairead Dullea
Student(s): Selena McCarthy, Niamh Cronin, Jenny Murphy

4568
Title: Smoking is killin...Vaping is??
Overview: We plan to investigate the knowledge our 5th year students have about the effects of smoking e-cigarettes instead of regular cigarettes.
School: St. Mary's C.B.S.
County: Laois
Teacher: Helen Felle
Student(s): Kilian McGannon, Ben Conroy, Alan Bowe

4569
Title: 'A statistical investigation into the sodium chloride content of ration'
Overview: We are researching the sodium content of livestock feeds and the possible side effects it may have on the fresh meat we consume.
School: Millstreet Community School
County: Cork
Teacher: Suzanne Sheehy
Student(s): Gary O'Donovan, Eibhlís Kelleher, Nora O'Sullivan

4570
Title: The Effects Children with Autism have On Their Loved Ones
Overview: This project is to see how children with autism effect their loved ones' outlook on life and the impact on their relationships with people.
School: Geal Cholaiste Chill Dara
County: Kildare
Teacher: Jennifer Kelly
Student(s): Saoirse Duignan, Katie McHugh

4571
Title: To investigate the short term effects of concussions and other head injuries caused by sports on academic performance
Overview: Our project is to investigate the effects of concussions and other head injuries on the academic performance of secondary school students.
School: Comeragh College



County: Tipperary

Teacher: Carrie Hogan

Student(s): Aaron McNamara,
Donnchadh Gough

4572

Title: Is wine the new tea?

Overview: A study of the hidden drinking habits of professional women aged between thirty and sixty to reveal why these women are consuming potentially fatal amounts of alcohol.

School: Loreto College - Cavan

County: Cavan

Teacher: Michelle Rogan

Student(s): Claire Young,
Emma McDwyer

4573

Title: I Share Therefore I am

Overview: We investigate why people constantly share pictures of their foods on social media. We discover there can be a deeper message behind the screen.

School: Scoil Mhuire Strokestown

County: Roscommon

Teacher: Modwena Geoghegan

Student(s): Molly Kelly,
Elianna Harlow

4574

Title: Can listening to music while studying help students get better exam results?

Overview: Our project investigates whether there are any benefits of listening to music while studying and if listening to different genres of music has different effects.

School: Regina Mundi College

County: Cork

Teacher: John Murphy

Student(s): Aine Ginty,
Clara Kellett, Eilíse Ireland

4575

Title: What are the ideal weather conditions for high scoring in GAA?

Overview: To investigate how the weather affects scoring in the GAA. Using statistics for the past ten years we will establish ideal conditions for high scoring.

School: Millstreet Community School

County: Cork

Teacher: Shane Guerin

Student(s): Neil Flahive,
Aidan Murphy, Jack Ducey

4576

Title: Scrúdú stáit nó scrúdú intinne?

Overview: Táimid ag fiosrú an cuireann na scrúdaithe stáit isteach ar sláinte intinne daltaí óga, tríd suirbhé a chuir amach.

School: Colaiste Daibheid

County: Cork

Teacher: Sean Finn

Student(s): Dearbhla Nic Risteáird,
Niamh Nic Ruairí, Cormac Towe

4577

Title: A statistical analysis of the influence of the media on the knowledge of the 1916 Rising to Illustrate the understanding of pupils knowledge of their heritage

Overview: To create a survey to analyse the knowledge of young people on the 1916 Rising in Ireland and to check the sources of their information.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Daniel Graham,
Donnacha O'Mahony

4578

Title: Stay in the Game-a solution to teenage dropout from sport

Overview: Our project will identify teenage sports dropouts and measure whether activities designed by teenagers, using social networks, and research-based information can get them active again.

School: Loreto Secondary School -

Kilkenny

County: Kilkenny

Teacher: Brendan Williams

Student(s): Ella Richardson,
Ruth Kent, Kate Dempsey

4579

Title: Are Ireland's Children Stuck in the Mud?

Overview: Our project aims to assess if there is a correlation between Nature Deficit and Obesity.

School: Bush Post Primary School

County: Louth

Teacher: Gary Galvin

Student(s): Stefan Breen,
Eoghan O'Connor, Shane McAvinney

4580

Title: Just a Bunch of Phoneys

Overview: Nomophobia - an abbreviation for "no-mobile-phone-phobia". Our project focuses on developing an understanding of nomophobia, the fear of being without our beloved smartphones!

School: Sacred Heart Secondary School

County: Cork

Teacher: Claire Holland

Student(s): Ava O'Hare, Olivia Shortall

4581

Title: The Generation that technology forgot

Overview: To explore the relationship experienced between the elderly and technology, and aiming to decrease the barrier of fear that appears to lie between the two.

School: St Aloysius College

County: Cork

Teacher: Carew Hyland

Student(s): Alice Reddy,
Megan Driscoll

4582

Title: Can music help us to retain our memories?

Overview: Our project is about improving people's memories and retaining them. We are using music as a way to do so.

School: Sacred Heart Secondary School

County: Cork

Teacher: Elaine Galvin

Student(s): Uzoma Ogwudiegwu,
Eimear Mc Walters

4583

Title: Intelligent Tablets - Does your learning intelligence suit your tablet?

Overview: Assess the impact of electronic Tablets on learners and determine whether certain learning intelligences achieve higher or lower grades from the integration of the Tablet?

School: Loreto Secondary School - Kilkenny

County: Kilkenny

Teacher: Maureen Hand

Student(s): Lucy Keane,
Sophie Shine, Anne Holohan

4584

Title: From Sugar Rush To Cigarette Crush

Overview: The aim of this project is to investigate whether sugar addiction in adolescence increases the likelihood of being addicted to cigarettes as an adult.

School: Bush Post Primary School

County: Louth

Teacher: Gary Galvin

Student(s): Oisín Arthurs,
Doire Mullen

4585

Title: An Investigation into the comparison of virtual learning versus conventional learning among school going pupils

Overview: By means of the Google VR box and iOS and android educational apps we aim to measure and test the potential benefit of virtual learning.

School: Mount Sackville Secondary School

County: Dublin

Teacher: Anne Meade

Student(s): Kate Sullivan,
Eimear Dalton, Tiffany Qiu

4586

Title: The Sugar Babe Generation: Is our addiction to sugar damaging teenage health everywhere?

Overview: To find out how much sugar teenagers consume, what its effects are, why we are eating so much sugar and how to change these habits.

School: Coláiste Na Toirbhirte

County: Cork

Teacher: Declan Cronin

Student(s): Isabel Lordan,

Aisling Mac Seoin, Megan Dunne

4587

Title: Investment in Health Literacy is an Investment in Health

Overview: Understanding medical jargon, hospital signage and doctors instructions can be a challenge for many; we intend to investigate the problem and propose solutions.

School: Sacred Heart Secondary School

County: Cork

Teacher: Elaine Galvin

Student(s): Brónagh Deasy,
Mary Cullinane

4588

Title: To Transplant Or Not To Transplant?

Overview: To investigate if there's still a divide between Irish people today in terms of awareness of and attitude towards modern human to human organ donation.

School: Jesus & Mary Secondary School

County: Mayo

Teacher: Niamh Breheny

Student(s): Sarah Murphy,
Kelly Hannick, Emma O'Hora

4590

Title: An intervention to investigate if increased education on the topic of Osteoporosis and the importance of Dairy will increase Calcium and Vitamin D intake in Teenage Girls

Overview: project to assess teenage girls knowledge and awareness of Calcium/vitamin D intake in their diet and to help improve this through an educational programme.

School: Loreto Secondary School - Kilkenny

County: Kilkenny

Teacher: Brendan Williams

Student(s): Ella Brennan,
Jessie Oyenuaga

4591

Title: A Quantification of the Effect of Praise And Criticism on the Standard of Academic Performance

Overview: Our project's objective is to measure the effect of positive and negative feedback on schoolchildren.

School: Heywood Community School

County: Laois

Teacher: Aodhagan O Suilleabhain

Student(s): Ruth Bergin,
Maeve Weston

4592

Title: Lifestyle survey of students at Colaiste Mhuire Ballygar.

Overview: During our project we will be investigating the different types of lifestyles that our fellow students have and try to promote a healthy one.

School: Coláiste Mhuire

County: Galway

Teacher: Rita O'Connor



Social & Behavioural Sciences

Student(s): Lucia Daly,
Sarah O' Roarke

4593

Title: Medical Cannabis: Is there a middle ground?

Overview: Investigate the attitudes regarding the benefits of medical cannabis by administering a questionnaire to a test and control group and comparing their responses.

School: Lanesboro Community College

County: Longford

Teacher: Michael Lyons

Student(s): Sean Maguire,
Patrick Kenny

4594

Title: A survey of parental attitudes in the North-West towards the HPV vaccine

Overview: We will survey parents regarding their knowledge and attitudes towards the HPV vaccine, and their intent to vaccinate their daughters.

School: Magh Ene College

County: Donegal

Teacher: Yvonne Higgins

Student(s): Tara Dolan, Chloe Kilkenny

4595

Title: School Buses: Improved system

Overview: Our project is aimed to improved the school bus system, by reducing fares and getting more people to use school buses.

School: Maynooth Education Campus

County: Kildare

Teacher: Tom Dixon

Student(s): Emelia Deane,
Roisin Condell, Emma Codd

4596

Title: Comparing the Opinions of Males/Females Towards Homeless Women in Irish Society

Overview: We will conduct a survey across different genres of people on their opinion on female homelessness in Ireland and statistically analyse our results for trends.

School: Kinsale Community School

County: Cork

Teacher: Ciara Stafford

Student(s): Sarah O'Donovan,
Kitty O'Sullivan

4597

Title: Too Mobile To Sleep

Overview: An investigation into the impact of night time screen use on adolescent memory.

School: Sacred Heart Secondary School

County: Cork

Teacher: Claire Holland

Student(s): Rachel O Sullivan,
Ciara Walsh, Ellen Dineen

4598

Title: Can Fidgeting Help To Focus and Concentrate in The Classroom and

What The Most Suitable 'Fidget'

Overview: Investigating if Fidgeting can help students focus in class and if so what is the best 'fidget'

School: Kildare Town Community School

County: Kildare

Teacher: Natasha Feery

Student(s): Rourke Luttrell,
Luke McBride

4599

Title: Science vs Religion: A study to determine whether people involved in science have different religious outlooks to those who are not involved in science.

Overview: We will conduct a survey 500 scientists and 500 non-scientists and find out if their religious views are different when compared to one another.

School: Ardscoil Ris

County: Limerick

Teacher: Jack Corrigan

Student(s): Paddy Frost,
Hugh O'Donnell, Iarlaith Caffrey

4600

Title: The DoneDeal Experience

Overview: We will analyse a controlled collection of Donedeal advertisements and establish which aspect of the ads make it most appealing and best influences the sale

School: F.C.J.Secondary School

County: Wexford

Teacher: Stephanie O' Dwyer

Student(s): Aisling Pender,
Ciara Kinsella

4601

Title: A statistical analysis of the attitudes of 'pay by weight' bin charges amongst people living in the North side of Cork city

Overview: A large scale survey amongst people living in the Northside of Cork city to statistically view attitudes towards newly introduced mandatory 'pay by weight' bin-charges

School: North Monastery Secondary School

County: Cork

Teacher: Kieran Ruby

Student(s): Robert O'Regan,
Shane Power

4602

Title: Statistical Analysis of Attitudes and Perceptions Regarding the Risk of Terrorism in Ireland

Overview: We plan to use surveys to investigate people's opinions towards terrorism and how at risk they feel in Ireland.

School: Ardscoil Ris

County: Limerick

Teacher: Phil Harte

Student(s): Jordan Hennessy,
Jordan O'Sullivan, Matthew Kiely

4603

Title: To investigate the influence social media has on exam results

Overview: We will survey 180 students to see how long each day they spend on social media and see how it affected their junior cert results.

School: C.B.S. Thurles

County: Tipperary

Teacher: Patrick Dunne

Student(s): Michael Maher,
Luke Moore, Diarmuid Maher

4604

Title: An Investigation into the Public's Attitudes and Perceptions Towards Antibiotic Use and Antimicrobial Resistance

Overview: Our project aims to investigate whether people's attitudes and perceptions towards antibiotic use and antimicrobial resistance differ between people in Ireland and France.

School: Loreto Secondary School - Wexford

County: Wexford

Teacher: Pauline Finnerty

Student(s): Amy Richards,
Rebecca Thomas, Sadhbh Cullinane

4605

Title: To statistically analyse multilingual students learning new languages in secondary level education compared to monolingual students

Overview: Our project aims to find out if multilingual students find taking up new languages easier than monolingual students.

School: Our Lady Of Mercy Secondary School

County: Waterford

Teacher: Rosario Burke

Student(s): Eve Croke,
Dirin Brett Lennon, Ella Stroud Barry

4606

Title: A statistical study on people's misconception of portion sizes and the influence it has on the Irish obesity epidemic

Overview: Our project aims to see if people's incorrect ideas of the correct portion sizes has led to the increase in obesity in Ireland.

School: Kinsale Community School

County: Cork

Teacher: Damien Sweeney

Student(s): Aoibhinn Lynch,
Cathy O'Dwyer, Mary Collins

4607

Title: An Investigation Into the Impact Of a Person's Birth Order on their Personality

Overview: To use the Myers-Brigg Indicator to determine what a person's personality type is and then examine whether it is impacted by their birth order.

School: Alexandra College

County: Dublin

Teacher: Patrick Cushen

Student(s): Rameen Khalid,
Aoife McMorrough, Nicole Gallagher

4608

Title: Louise O'Neill 'Asking For It' Fact or Fiction?

Overview: We want to show the reality of situations like in Louise O'Neill's book asking for it versus peoples perceptions of these situations.

School: Bandon Grammar School

County: Cork

Teacher: Paula McGath

Student(s): Suzanne Bateman,
Elyse Dennehy Crowley

4609

Title: A study using statistical methods of the impact the BT Young Scientist has on ones self-esteem

Overview: Our project aims to investigate the impact the Young Scientist has on past participants and whether that is reflected in their activities in later life.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Cornelia O'Reilly,
Juliette Cronin

4610

Title: The Influence of Peer-Teaching in Schools on Waste Reduction compared to being taught by Teachers.

Overview: We will examine whether or not students listen better to their peers or teachers when asked to do something, in this experiment it's waste management.

School: Community College

County: Meath

Teacher: Claire Tuttlebee

Student(s): Liam Reilly,
Kevin Bawle, Johnathan Pearl

4611

Title: An investigation into teenage awareness of, attitudes towards and use of e-cigarettes compared with traditional cigarette

Overview: A survey comparing the factors that influence the awareness and uptake of electronic cigarettes versus traditional cigarettes in teenagers.

School: Alexandra College

County: Dublin

Teacher: Emma Cronin

Student(s): Aoife Sadlier,
Casilda Gavia, Paula Prieto

4612

Title: Food For Thought

Overview: The aim of our project is to investigate how food types affect peoples moods, we will also analyse how someone's personality type affects their food choice.

School: St Aloysius College



County: Cork

Teacher: Carew Hyland

Student(s): Saoirse Browne,
Megan Lawton

4613

Title: A statistical study on the causes of distracted driving and how it can be prevented

Overview: Our aim is to investigate people's awareness of reckless, distracted and disturbed driving causing fatalities. Also, ways to reduce people becoming preoccupied while driving.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Lauren White,
Alana McSweeney

4614

Title: How Do Loneliness and Depression Contribute to Substance Misuse in Today's Teenagers

Overview: We aim to find out if emotional instability contributes to addictive behavior in people aged 13 to 19 and the reasons why.

School: Ardscoil na mBráithre

County: Tipperary

Teacher: Dolores Powell

Student(s): Dillon English,
Michael Sweetman

4615

Title: "Lying is Wrong, Except When it Isn't"

Overview: We will show how ethics and age play a part in people's honesty and how the evolutionary game theory plays a part.

School: Loreto College - St Stephens Green

County: Dublin

Teacher: Jamie Bain

Student(s): Gráinne Brennan,
Hannah Burgess, Sadhbh O'Neill

4616

Title: Rainwater harvesting as a domestic water supply - an investigation into attitudes and awareness of people in Co Wicklow

Overview: The aim of this project is to explore the feasibility of rainwater harvesting as a domestic water supplement in Co Wicklow.

School: Dominican College - Wicklow

County: Wicklow

Teacher: John O'Brien

Student(s): Laura Whitty,
Rachel Winters

4617

Title: "Comparáid a dhéanamh idir an éifeachtacht de 'Traenáil H.I.T.T.' (Aclaíocht Ard-Deine) agus Cleachtaí 'Mindfulness' (Aireachas) mar straitéisí fá choinne déagóirí le dul i ngl

Overview: Is é an sprioc den taighde seo ná le fáil amach cé acu is éifeachtaí le dul i ngleic le imní l measc grúpa déagóirí, Clár Aireachas

nó Clár H.I.T.T. (Aclaíocht Ard-Deine) nó ceachtar acu.

School: Gairm Scoil Chú Uladh

County: Donegal

Teacher: Aoife Nash

Student(s): Amy Ní Ghiobúin,
Aoife Nic Eiteagain,
Ailise Ní Mhearlaigh

SENIOR GROUP

4700

Title: The study of spatial data and its applications

Overview: The study of spatial data and how it can be used to solve infrastructural, social and economic problems. Our main focus is on developing countries.

School: Portmarnock Community School

County: Dublin

Teacher: Niall Fitzgerald

Student(s): Sam Barlow,
Tom Finucane, Colin Mc Andrew

4701

Title: Nuclear - uNclear?

Overview: This is a study concerning the disparity and similarity between personal preconceptions and scientific fact relating to the nuclear industry.

School: Ursuline College

County: Sligo

Teacher: Anthony Carolan

Student(s): Amy Dykes,
Donata Semenaviciute

4702

Title: The Power of Proximity

Overview: An analysis of friendship experiences at the 2016 BT Young Scientist and Technology Exhibition.

School: Coláiste Muire - Crosshaven

County: Cork

Teacher: Martina McMahon

Student(s): Laura Cotter, Kate Cronin

4703

Title: Insight from a new Generation-Fertility Issues

Overview: Our project aims to investigate peoples knowledge and awareness of fertility and issues associated with infertility, from both a male and female perspective.

School: Roscommon Community College

County: Roscommon

Teacher: Joanne Broggy Shea

Student(s): Simon Leonard,
Conor Lavin, Michael Egan

4704

Title: Tuiscint faoi Úsáid Fuinneamh i nDaoine Óga

Overview: Dhírigh an staidéar seo isteach ar daoine óga inár scoil, agus an tuiscint a bhí acu maidir le Úsáid Fuinneamh, Fuinneamh Inathnuaite, agus Téamh Domhanda.

School: Gaelcholáiste Luimnigh

County: Limerick

Teacher: Deborah Ní Cheallaigh

Student(s): Enda Collins, Tom Keating

4705

Title: The Science of Following your Dreams

Overview: An investigation into the effects of social and economic pressure on the career choices of young Irish people and the lifelong implications of these choices.

School: Coláiste Iósaeaf

County: Limerick

Teacher: Brian Clarke

Student(s): Orla McCarthy, Leia Hayes

4706

Title: Getting Out and About - The Free Travel Scheme and Older People

Overview: A quantitative and qualitative study which explores the meaning of the Free Travel Scheme to older people and its effect on their lives and wellbeing.

School: Our Lady's Bower

County: Westmeath

Teacher: Ethna Benson

Student(s): Maeve McMahon,
Julie Ryan

4707

Title: To Investigate the effects of Human imprintation on animals

Overview: We investigate how an animal develops dependant on it being the original mother of the animal or it being adopted

School: Patrician High School - Carrickmacross

County: Monaghan

Teacher: John O'Rourke

Student(s): Colm Magee,
Rowan McMahon,
Oisín McConnon

4708

Title: The Impact of Same-Sex Marriage on the economy on both sides of the border in Ireland.

Overview: Continued from 2016 BYSTE Finals, An in depth project to show what economic impacts there have been since the passing of same-sex marriage in May 2015.

School: Bush Post Primary School

County: Louth

Teacher: Gary Galvin

Student(s): Evan Cronin,
Ryan Duffy

4709

Title: Self-Diagnostic Tool

Overview: Our project will be attempting to create a legitimate tool in identifying symptoms of mental health issues.

School: Ringsend College

County: Dublin

Teacher: James O'Keeffe

Student(s): Toni Mockler,
Nicole Meir, Kyle Graham

4710

Title: PE, should it be a leaving cert subject?

Overview: An study using opinions to investigate the thought of PE becoming a leaving cert subject and would it effect Ireland positively?

School: Scoil na mBráithre Chríostaí

County: Cork

Teacher: Maria Kelly

Student(s): Ciarán Sheehan,
Connell Sheehan, Tommy Bluett

4711

Title: Irish Attitude to Electric Cars

Overview: This project aims to discover how Irish people feel about electric cars and why there are only a handful who drive them.

School: St Mary's Secondary School - Nenagh

County: Tipperary

Teacher: Barbara Conneely

Student(s): Laoise Robinson,
Emily McNamara

4712

Title: Neamhionannas na ndéagóirí idir oideachas agus gníomhaíocht ar an úsáid de FCG(SPF) chun damáiste craiceanna a chosc

Overview: Imscrúdú a dhéanamh ar eolas atá ag déagóirí faoi an tábhacht SPF agus úsáid a bhaineann siad as i gcomparáid le oideachas atá acu faoi.

School: Gaelcholáiste Luimnigh

County: Limerick

Teacher: Ciara Ní Dhrisceoil

Student(s): Emmet Browne,
Peter O Dwyer

4713

Title: An Investigation into the Effect the Lunar Cycle has on Students

Overview: Our project is an investigation into whether or not the full moon affects the behaviour of students.

School: The Intermediate School

County: Kerry

Teacher: Sheree Murphy

Student(s): Cadhla Pigott,
Orlaith Reynolds

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 2017 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.

THE ULTIMATE SCIENCE SHOW

The Ultimate Science Show has the longest sparks, the loudest explosions, the biggest and best science demos on the planet. This fast-paced, interactive show combines mind blowing demos and will show you how a career in STEM could be waiting for you in your future.

The Ultimate Science Show is a fast-paced, thrill packed, interactive demo show that proves that, when it comes to science demonstrations, bigger is always better. SmartFutures.ie is the website for students who want to find out if a career in science, technology, engineering or maths could be for them.



Alongside the high octane demonstrations with plenty of volunteer help this show will introduce students to all the SmartFutures.ie website has to offer.

DISCOVER THE COSMOS 3D

2017

Spaceship Earth is our home in space. Life thrives on our little world. Mankind has developed technology to take us into orbit above our planet, travel to other worlds and peer back in time to the early universe.

Discover the Cosmos is a 3D journey through space and time. We will travel out to the edge of the Solar System and explore regions of space that are at the limits of the Sun's influence. We will chase a comet as it tumbles towards The Sun and explore the surface of the Red Planet, Mars. We will learn about our star and view it through the eyes of specially designed instruments on board a spacecraft.

Travelling further away from our home, we will observe our beautiful and majestic Milky Way Galaxy from deep space and explore the origin and structure of the universe. We will discuss our place in the universe and see how we on Earth fit into the cosmic scale of everything.

So, take your seat, put on your glasses and join us on a 3D journey of cosmic discovery!



TITAN

BT
ARENA

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 Middle East.



WORLD OF ROBOTS

2017

The World of Robots is the biggest open robotics contest in Ireland. Presented by the Irish robotics company, Mechatronics, 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.mechatronics.com.

Robots are the future and the future is now. It's time you were part of it.

MECHATRONICS™
Ingenious Machines

f  WWW.MECHATRONICS.COM

RDS PRIMARY SCIENCE FAIR

For further information

please visit www.rds.ie/primarysciencefair
email primarysciencefair@rds.ie
or telephone 01 240 7990

Why the RDS?

The RDS is Ireland's philanthropic society. Founded in 1731 to support the cultural and economic development of Ireland, in 2016 RDS invested over €2 million back into Ireland across a number of areas. The RDS Primary Science Fair is a key project within our science and technology work 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 @ MIC
January 19 – 21, 2017

Dublin Thursday 12th January

Does regular exercise contribute to a healthier and happier child?

Scoil Naomh Iósaf, Baltinglass, Co. Wicklow

What fruits or vegetables will produce the most electricity?

New Court Special School, Bray, Co. Wicklow

Can you improve a skill through practise alone?

Lacken NS, Blessington, Co. Wicklow

Mary Mary quite contrary, how can our (sheltered inner city) garden grow?

Rutland Street NS, Lower Gloucester Place, Dublin

Are we really a healthy school?

Scoil Choilm, Clonsilla, Dublin 15

Which is the best source of environmentally friendly electricity?

Sacred Heart BNS, Ballygall, Dublin 11

What are the best conditions for the growth of grass?

St Patricks NS, Crossabeg, Co. Wexford

Why do your hands go wrinkly in liquids?

Scoil Naomh Barra, Navan, Co. Meath

What do worms do in the soil?

St Anne's NS, Duncormick, Co. Wexford

Will cement/concrete set better under or over water?

Shanganamore NS, Athy, Co. Laois

Video games - Can they affect our attention and performance positively in school?

Bracken Educate Together NS, Balbriggan, Co. Dublin

Can we prevent an apple from turning brown?

St Joseph's BNS, Carrickmacross, Co. Monaghan

What will happen to an egg if soaked in different liquids?

St Philip the Apostle SNS, Clonsilla, Dublin 15

Which coffee cup keeps my teachers coffee warm the longest?

Carlow NS, Green Road, Co. Carlow

Harbour Magic - Do the dimensions of harbours influence flora and fauna?

Loreto Primary School Dalkey, Dalkey, Co. Dublin

The planet Mars - An Earth-like World?

St Pius X GNS, Terenure, Dublin 6W

What makes nappies happy?

Our Lady Immaculate SNS, Darndale, Dublin 17

Is natural spring water better than our tap water?

Graignamanagh Boys' NS, Graignamanagh, Co. Kilkenny

What is the best liquid in which to grow plants?

St Patrick's NS, Stamullen, Co. Meath

Which parachute can land an egg best?

Bunscoil Loreto, Gorey, Co. Wexford

All the better to hear you with - Does ear size affect hearing?

Scoil Naomh Peadars Pol, Ballon, Co. Carlow

Getting the dirt on germs - Which product most effectively removes germs?

St Laurences NS, Greystones, Co. Wicklow

Dublin Thursday 12th January (cont.)

Does weather affect children's concentration and learning in school?

St Peter's Bray, Bray, Co. Wicklow

How much will our fitness and coordination improve if we exercise daily?

St Louis SPS, Rathmines, Dublin 6

Ambidextrous! Can I train my other hand? That would be so handy!

Ballapousta NS, Drogheda, Co. Louth

How can we assist the declining bee population in our local area?

Ardfield NS, Clonakilty, Co. Cork

Can you reduce the effects of gravity?

St Teresa's PS, Balbriggan, Co. Dublin

Will eating carrots improve your eyesight?

Holy Family NS, Glenageary, Co. Dublin

Does adding substances to water change the rate at which skin wrinkles?

Scoil Náisiúnta Baile an Phiarsaigh, Drinagh, Co. Wexford

Did you know that some foods can trick your tastebuds?

St Brigid's BNS, Foxrock, Dublin 18

How is nanoscience and nanotechnology changing the world around us?

St Joseph's NS, Jenkinstown, Co. Kilkenny

Mouth breathing or nose breathing – Which slows your heart rate faster?

Powerstown Educate Together NS, Tyrrelstown, Dublin 15

Pink Lady – so much more than an apple. What is the more?

Balbriggan ETNS, Balbriggan, Co. Dublin

Has chewing gum any benefits?

Ballyconnell Central, Ballyconnell, Co. Cavan

Can you become a human lie detector?

Kilrane NS, Kilrane, Co. Wexford

Does age have an influence on how we see optical illusions?

Scoil an Chroí Ró Naofa Íosa, Mulhuddart, Dublin 15

Volcanic Eruption – How do volcanoes work?

St Brigid's NS, Redhills, Co. Cavan

How do different factors affect our lung capacity?

St Patrick's NS, Arklow, Co. Wicklow

Are you buzzing?

St Manchans NS, Moate, Co. Westmeath

Levers and pulleys – How do they lighten our load?

Kilcommon NS, Arklow, Co. Wicklow

Dublin Friday 13th January

Texting while walking – Is it as dangerous as texting while driving?

Scoil Mhuire GNS, Lucan, Co. Dublin

What natural things will light a classroom?

Holy Family, Rathcoole, Co. Dublin

The 5 Second Rule – Busted?

Thornleigh Educate Together NS, Swords, Co. Dublin

How do trees clean the air?

St Catherine's Senior School, Cabra, Dublin 7.

Are you being hacked? Online hacks and scams investigated

Corduff NS, Lusk, Co. Dublin

Bottle-Flipping – A skill or just luck?

Newbridge Educate Together NS, The Curragh, Co. Kildare

Effective transitioning between lessons – Fun-filled fluidity or tedious turnovers?

St Aidan's NS, Kilmanagh, Co. Kilkenny

Testing the Five Second Rule

St Colmcille's NS, Moore, Co. Kildare

I'm All Shook Up! Exploring shapes in buildings that withstand earthquakes.

Moneytown NS, Bray, Co. Wicklow

Are the best apples from the Orchard County?

St Malachy's Primary School, Armagh City, Co. Armagh

Explain your brain – investigating ways of improving memory!

Catherine McAuley School, 59 Lower Baggot Street, Dublin 2

Let's go Fly a Kite: What sort of kite flies best?

St Raphaela's Primary School, Stillorgan, Co. Dublin

Which material is the best insulator?

Mary Help of Christians GNS, Navan Road, Dublin 7

Investigating the Bicycle System and why students are not cycling to school.

Moyderwell Mercy Primary School, Tralee, Co. Kerry

Taking Flight – What makes the best paper airplane?

St Colman's NS Ballindaggin, Enniscorthy, Co. Wexford

Is it possible to clone vegetables and what are the benefits?

Scoil Seosamh Naomtha, Navan, Co. Meath

Does the colour of food and drinks affect how appealing they are?

St Matthew's NS, Sandymount, Dublin 4

Are bigger brand batteries really a better buy?

St Kevin's NS, Gorey, Co. Wexford

Do you know how much harmful sugar is hidden in your food?

St David's BNS, Artane, Dublin 5

Can beans germinate and grow with liquids other than water?

Notre Dame Montessori & Junior School, Churchtown, Dublin 14

What type of habitat is the best for Biodiversity?

St Gerard's Junior School, Bray, Co. Wicklow

Investigating Electromagnetism

North Kildare Educate Together NS, Celbridge, Co. Kildare

What effect does acid and sugar have on our teeth?

Catherine McAuley NS, 59 Baggot Street Lower, Dublin 2

What's in the Elephant's Poo?

Gaelscoil Bharra, Cabrach, Dublin 7

How does stress affect the body?

Navan Educate Together NS, Navan, Co. Meath

How many trees are needed to offset our school transport carbon footprint?

Kilkenny School Project NS, Springfields, Co. Kilkenny

Which is the best type of sports shoe?

St Brigid's Primary School, Kildare Town, Co. Kildare

Can we convert the energy we get from our food into electricity?

Powerscourt NS, Enniskerry, Co. Wicklow

What's the best type of rock to use for our school plaque?

St Coen's Primary School, Rathnew, Co. Wicklow

How can you best preserve berries at home?

Scoil Mhuire Davidstown, Enniscorthy, Co. Wexford

Why is a balanced diet so important for our bodies?

Holywell ETNS, Swords, Co. Dublin

Dublin Friday 13th January (cont.)

Does effective handwashing with soap reduce the spread of microbes?

St Fiachra's NS, Skeoughvosteen, Co. Kilkenny

Why do Bubbles float? – An investigation into bubbles and balloons.

St Ultans, Ballyfermot, Dublin 10

Are height and armspan genetically determined?

St Mary's NS, Raharney, Co. Westmeath

Is it possible to establish a human colony on Mars?

Tyrrelstown Educate Together NS, Tyrrelstown, Dublin 15

What is the best way to keep drinks cool without a fridge?

Glebe NS, Church Hill, Co. Wicklow

I can read you like a book

Ardnagrath, Athlone, Co. Westmeath

How dirty are our hands?

St Michaels Junior College, Ballsbridge, Dublin 4

What is the most optimal and efficient way to water our plants?

St Patrick's Senior NS, Skerries, Co. Dublin

Can we design and make packaging for posting a crisp?

Glasnevin NS, Glasnevin, Dublin 9

Dublin Saturday 14th January

Where do the waves on the beach come from?

Home Education Network, Ballyroan, Co. Laois

How do machines fly?

St Sinneach's NS, Abbeyshrule, Co. Longford

Can human thoughts and intentions alter physical reality?

An Fraoch Mor, Portlaoise, Co. Laois

How does screen time before bedtime affect our sleep?

St Clares NS, Tubberclare, Co. Westmeath

What is the best homemade "rocket fuel"?

St Joseph's NS, Dun Laoghaire, Co. Dublin

Does music affect children's concentration levels and does genre matter?

Our Lady of the Wayside NS, Kiltarnan, Dublin 18

Do different liquids affect the growth of rocket seeds?

St Mary's and St Gerard's NS, Enniskerry, Co. Wicklow

What is the best cleaning agent for removing stains?

Primrose Hill NS, Celbridge, Co. Kildare

Can we make a 5 star concoction for cleaning our whiteboard completely?

Adamstown Castle Educate Together, Lucan, Co. Dublin

How does social media affect our lives?

Scoil San Treasa, Mount Merrion, Co. Dublin

How do you design and make an Eco Village for an urban area?

John Scottus Primary School, Donnybrook, Dublin 4

Is yawning contagious?

The Harold School, Glastule, Co. Dublin

The hot topic of insulation – Can we demonstrate where the heat goes?

Castle Park School, Dalkey, Co. Dublin

Using weather patterns can we recognize a trend linked to global warming?

Rathdown Junior School, Glenageary, Co. Dublin

Does the school bus system operate as a social network?

Muslim NS, Clonskeagh, Dublin 14

Can primary school children learn to play chess in 30 minutes?

St Conleth's Junior School, Ballsbridge, Dublin 4

Is toothpaste the best substance for cleaning and whitening our teeth?

Balscadden NS, Balbriggan, Co. Dublin

How does our sun affect the earth and are we alone?

St Columba's NS, North Strand, Dublin 3

Practice makes perfect! Nature vs Nurture in relation to sport.

St Colmcille's SNS, Knocklyon, Dublin 16

How does hydration affect student concentration and performance?

Greystones ETNS, Greystones, Co. Wicklow

How do you design a schoolbag that minimises back strain and poor posture?

Scoil Naomh Mhuire, Naas, Co. Kildare

Does changing the colour of water change the colour of various flowers?

Mount Anville Montessori Junior School, Goatstown, Dublin 14

Is technology a friend or foe?

Wicklow Montessori Primary School, Ballyguile Beg, Co. Wicklow

Can we design and make the ultimate pocket rocket?

The Neale NS, Ballinrobe, Co. Mayo

What alternatives are there to kill weeds that has less environmental impact?

Birr Coderdojo, Garbally, Co. Offaly

Are people aware of their sugar intake in their dietary habits?

Scoil Chaoimhín, Sráid Mhaoilbhríde, Baile Átha Cliath 6

Wind Energy – What is the best design of a turbine blade?

Scoil Bhríde Milltown, Newbridge, Co. Kildare

Are we living in the dark ages?

St Patrick's School, Drumcondra, Dublin 9

How does the material a rollercoaster is built with affect its speed?

St Mary's NS, Garristown, Co. Dublin

Can fruit and vegetables be used as an electric power source?

Scoil Bhríde C, Blanchardstown, Dublin 15

Why do volcanoes erupt? What happens when they do?

Kildare Place School, Rathmines, Dublin 6

Does using chalkboards in the classroom help keep our eyes healthy?

Monkstown Park Junior School, Monkstown, Co. Dublin

Higher, Faster, Stronger! What are the benefits of exercise?

Balrothery NS, Balbriggan, Co. Dublin

Cruise Liners and Cargo Ships – How do they float?

Kill o'the Grange NS, Blackrock, Co. Dublin

How can Renewable Energy affect the world?

Lanesborough Primary School, Lanesboro, Co. Longford

Seeing is Believing – Can we fool our senses and trick our brain?

St Clare's, Harolds Cross, Dublin 6W

How contagious are yawns?

St Anne's NS, Shankill, Dublin 18

Which is the most effective environmentally friendly cleaner?

Scoil Mhuire, Our Lady's Island, Co. Wexford



The RDS invites you to become a Member of Ireland's Philanthropic Society

Working across the areas of science, arts, agriculture and business to see Ireland thrive culturally and economically.

Membership: €380 per year

Enjoy the many benefits of RDS Membership:

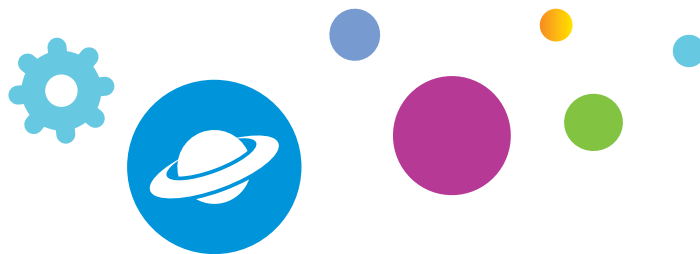
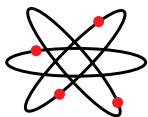
- Access to our elegant Members' Club
- Use of reciprocal clubs worldwide
- Engagement with RDS philanthropic work programme
- Superb catering & free wifi
- Use of the unique and tranquil space of the RDS Library
- Busy Members' social and cultural calendar
- Free parking for you and your guests
- Complimentary 5 day entry to the Dublin Horse Show
- Access to business meeting rooms & networking events
- Membership of the RDS Bridge Club



For further details and to register your interest please contact:

Catherine Jordan e: catherine@rds.ie t: 01 240 7280

THE WORLD OF SCIENCE & TECHNOLOGY



Food Group

Stand W1: ABP Food Group

ABP Food Group is one of Europe's leading privately owned agribusiness companies. It is the largest beef processor in Ireland and the UK. The company operates (41) processing plants in Ireland, UK, Spain, France, Holland, Denmark, Austria and Poland and has an additional sales presence in Italy, Germany and the US. ABP Food Group employs over 10,000 people and operates across 4 divisions: Beef, Pet Food (C&D Foods), Proteins and Renewables (Olleco).

As a business that works with thousands of farmers on a weekly basis, promoting and improving safety on Irish farms is a very important issue to ABP. The company has sponsored a farm safety prize at the BTSE since 2014 and has also been involved in a number of other on farm and educational initiatives. For further information is available at www.abpfoodgroup.com or #safefarmsnow



Stand W2: Henkel

Henkel is a global leader of brands and technologies organised into three Business Units Home Care, Beauty Care and 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 50,000 people globally with sales expected to be over 18 Billion in 2016.

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 a primary location for Global Acrylics Technology development, with fundamental & applied research. The technology centre also collaborates with universities and academic research institutes in many areas including Nanotechnology, Additive Manufacturing and Engineering.



Stand W3: CONCOS

Coláistí Gaeilge

Tá fíor thábhacht ag baint le Coláistí Samhraidh chun feabhas a chur ar labhairt, líofacht agus saibhreas na Gaeilge do dhéagóirí a bheas ag iarraidh na marcanna is mó a bhaint amach san Ard Teistiméireacht. Tá 50% marcanna le fáil ar an Teanga Labhartha, sé sin, 40% don béaltrial agus 10% don cluastuisint.

Bígi linn i Samhraidh 2017 chun spraoi, spórt agus craic a bheith agaibh agus sibh ag cur feabhas ar bhur gcuid Gaeilge.

Irish Language Colleges

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 (2017) for fun, sport and craic while improving your Irish.



UCD Social Sciences

Stand W4: UCD Social Sciences

www.ucd.ie/socialsciences

UCD Social Sciences is the leader in Ireland for education and research in the social sciences. The range of internationally-recognised social sciences courses in University College Dublin is unrivalled and includes archaeology, economics,

geography, information and communication studies, philosophy, politics and international relations, psychology, sociology, social policy and social justice.

Social sciences students explore the nature of our society and the challenges we face including climate change, crime and violence, social and economic inequality, gender justice, sustainable cities and human development. Outstanding and ground-breaking research by UCD's internationally renowned social sciences researchers have had profound impacts on the understanding of key issues in society as well as directly shaping public discussions and policy.

Graduates of the social sciences in UCD progress through further study to work in government departments, not-for-profit organisations, the media and businesses as economists, policymakers, environmentalists, activists, urban planners, archaeologists, librarians, secondary-school teachers, social workers, psychologists and more.

Visit the UCD Social Sciences stand and meet current social sciences students in UCD, explore your knowledge of the social sciences in everyday life, and try out the high-tech equipment used at UCD in behavioural experiments.



Stand W5: The Irish Centre for High-End Computing (ICHEC)

The Irish Centre for High-End Computing (ICHEC) is a national technology centre that manages Ireland's fastest supercomputer for scientific research, 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 research. This year the ICHEC stand will provide a variety of exhibits related to HPC and its applications such as processing large amounts of data (e.g. satellite images) to help solve different problems. Visitors to our booth will also get a unique chance to take a virtual tour of our Fionn supercomputer.



OIFIG NA bPATINNÍ
IRISH PATENTS OFFICE

Stand W6: The 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, trademarks, 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.patentoffice.ie or follow us on Facebook.



Stand W7: TEAGASC - The Agriculture and Food Development Authority

Teagasc – the Agriculture and Food Development Authority – is the national body providing integrated research, advisory and training services to the agriculture and food industry and rural communities.

Teagasc undertakes innovative research in: Animal and Grassland Research and Innovation; Crops, Environment and Land Use; Food; and Rural Economy and Development. Teagasc is a large supporter of post-graduate research, with some 140 pursuing PhD programmes on its Walsh Fellowship Scheme at any one time.

Teagasc colleges are strategically located and deliver a wide range of Level 5 and Level 6 courses in agriculture, horticulture, equine and forestry. The colleges also collaborate with a number of third level institutions in the delivery of Higher Level courses in agriculture and horticulture.

The Teagasc Advisory Service, through a nationwide office network organised into 12 regions, provides a local service to farmers.



Stand W8: Arckit

Arckit is a multi-award winning model building kit for architects and budding creators. The modular components allow you to build a vast range of structures that can be quickly assembled and endlessly modified. Models can even be completed with realistic surface material details supplied by real building companies. Digital Arckit components are also available in Sketch Up and Autodesk Revit, allowing a seamless transition between mediums for educational use.

The system is becoming widely used within schools and universities globally as a STEM/STEAM aid for teaching design and engineering skills to budding creators, as well being an advanced modelling tool for professional architects and model hobbyists. Now anyone can experience architectural design through the Arckit Education Programme; a series of interactive courses developed to teach and inspire the next generation of makers. For the first time ever, Arckit is opening up the world of architecture to everyone.



Stand W9: Junior Achievement Ireland (JAI)

Junior Achievement Ireland (JAI) encourages young people to remain in education and helps them develop the skills they need to succeed in a changing world. Junior Achievement is part of a worldwide organisation reaching 10 million young people each year. Established in Ireland in 1996 JAI has built up a strong demand from schools throughout the country and created successful partnerships with over 150 leading organisations. During the 2016/17 school year 60,000 students are participating in entrepreneurship and STEM skills programmes taught by 3,000 volunteers from the world of work. Volunteers act as role models – the messenger is as important as the message. They are recruited, trained and supported by the JAI team, teaching their programme in the classroom once a week for five weeks. 16 structured programmes are taught to 6–18 year olds (primary and secondary students) with an age appropriate programme for every class in primary and a menu available for secondary schools.



Stand W10: Cumann na bhFiann

1. Coláiste na bhFiann

Coláiste na bhFiann has nearly 50 years' experience running Irish language Summer Courses in both Gaeltacht areas and residential colleges. The main purpose of the organisation is to teach young people to speak Irish in a welcoming environment that encourages a positive attitude towards the language. Building on the basics of Irish learned within the traditional schools' structure, Coláiste na bhFiann has developed a formula that has successfully helped generations of young people to enjoy using and improving their Irish language skills.

2. Cumann na bhFiann

Cumann na bhFiann is the aftercare service run by Coláiste na bhFiann. Cumann na bhFiann organises weekly Irish language youth clubs giving young people the opportunity to use and improve their spoken Irish. By attending Cumann na bhFiann regularly, fluency in Irish is maintained and improved, thus normalising the use of Irish in everyday life. It is vital that young people are given the opportunity to recognise the advantages in speaking Irish. There are currently 60 clubs across the country which run on a weekly basis.



Stand W11: MATHSTUTOR.ie

Ireland's Leading Online Support System for JC & LC Maths!

Want to improve your maths? Need some help with exam preparation? We're here to help!

We specialise in secondary level 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.

Now you can 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, with Irish teachers supporting you every evening and at weekends.

Get a free trial 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: DIT

Most people are familiar with Ordnance Survey maps. These are produced by Geographic Science professionals. Geographic Science is a profession with ancient roots, modern relevance, and an eye to the future. Geographic Science is also known as Geomatics.

- Geographic Science professionals:
- collect information for making maps using lots of new cutting-edge technology such as satellites, drones, laser scanners and, increasingly, robots
- process this information to produce maps, 3D computer models and 4D systems of the world around us
- analyse this information using GIS to support good decision-making at home and abroad including in the third world
- manage this information and use it while working with many other professionals

DIT is the only third level institution in Ireland providing a degree-level programme in Geographic Science. The programme provides a good mix of indoor study and outdoor activity. Details can be found at <http://dit.ie/surveyingconstructionmanagement/disciplines/information-sciences/bscprogrammesgeomatics/>



Stand W13: StudyClix

StudyClix is Ireland's largest study website and is used by over 90,000 students and more than 90% 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 W14: 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.

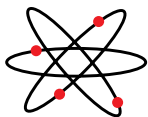


Stand W15: DCU

The DCU Faculty of Science and Health fosters and delivers education, professional development and research in the natural, human and health sciences that is of global significance and direct social, environmental and economic benefit. Our vision is to be an internationally recognised centre of excellence in scientific innovation and health transformation.

The Faculty attracts academically talented, enterprising and career focused students in search of a quality educational experience that includes gaining

THE WORLD OF SCIENCE & TECHNOLOGY



significant practical skills and undertaking a paid work placement or pre-professional experience as part of their studies. Our student focused approach equips you with a skill set appropriate to a successful and rewarding career in the fields of science, mathematics and health.

DCU Faculty of Science and Health. E: science@dcu.ie www.dcu.ie



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 STEM activities presented by three of our educational outreach programmes. Cell EXPLORERS, an initiative run by the School of Natural Sciences, promotes biological and biomedical sciences; Kitchen Chemistry proposes hands on activities inspired by the research in the School of Chemistry; the Neuroscience outreach team showcases the recent advances on brain research by their centre. 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 studying Science at NUI Galway, whether your 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 UCC's brand new "Walk Like A Dinosaur" Exhibit. A fantastic joint effort between our world-renowned scientists in the School of Biological, Earth and Environmental Sciences, the School of Engineering and the Department of Computer Science.

Check out our interactive exhibit figure out what kind of dinosaur you walk like, and see if you can top our leader board!

Learn about the science behind calculating how fast dinosaurs moved from our Electronic Engineers and Passionate Paleontologists.

Discover how animation comes alive from our Clever Computer Scientists and be fascinated by our real life dinosaur fossils!



Stand W18: University of Limerick

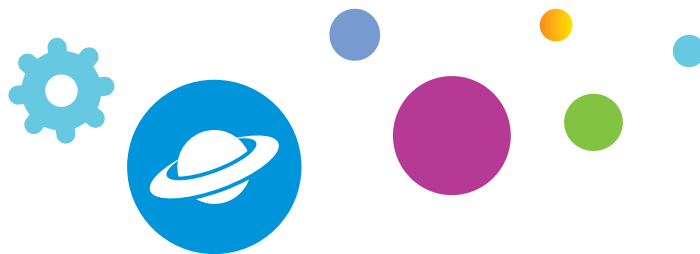
The Faculty of Science and Engineering, University of Limerick's www.scieng.ul.ie stand provides you the opportunity to experience interactive activities in Science, Engineering, Electronics, Architecture, Design, Mathematics, Computer Science and much more. The Faculty offers extensive teaching and 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.

Our academic programmes in Science, Engineering, Architecture, Design, Computing 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 the internet of things, 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 www.ul.ie 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. Thosaigh cúrsa



nua don Idirbhliain i mbliana. 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 ag www.anrinn.com.

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: Colaiste Uisce

Colaiste UISCE is a unique activity based Irish Language College and Adventure Centre situated in the heart of Gaeltacht Iorras, where the teaching adventure and water sports. 'Learning Irish is Fun' is our motto at Colaiste UISCE. We now have over **24 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 creating a positive environment to learn the language is the most important step towards learning the language. Students from Colaiste UISCE 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. Irish is intertwined with the enjoyable experience of modern exhilarating.



Sightsavers

Stand W21: Sightsavers

Sightsavers is an international organisation working with partners in more than 30 countries to prevent and cure avoidable blindness and to support people with disabilities to live independently. 80% of blindness in the world is avoidable or curable. 90% of people who are blind live in developing countries. Every year we prevent blindness and restore sight for millions of people. In developing countries, educational and occupational support for those who lose their sight is difficult to access. People with disabilities deserve the same opportunities as everyone else. Sightsavers supports people who are visually impaired or have other disabilities to live independently, get an education and earn an income. We work with national governments, strengthening systems that tackle the problems at the root: the sorts of things most of us take for granted, like access to clean water, sanitation facilities and education. Sightsavers changes lives for the better, for the long term.



Stand W22: Marie Keating Foundation

"Following the death of their mother, Marie, in 1998, the Keating family promised that they would do everything they could to bring an end to cancer. They committed to provide 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 spoken to over 235,000 people about the causes and risk factors of cancer. The Foundation also raises awareness of the most common cancers affecting both men and women in Ireland through national campaigns. Through its Comfort Fund, the Marie Keating Foundation provides financial assistance to people who are receiving treatment for any kind of cancer and who find themselves in financial difficulty as a result. In 2016 alone, over 445 families received assistance from the Comfort Fund. The Foundation also supports cancer survivors through its free Survive & Thrive programmes which are held for men and women nationwide"



Stand W23: Bell Time Magazine

Bell Time Magazine is delighted to launch School Summit - A national two-day event to be held in 2017 that will cater for all Senior Cycle students and their teachers. With over **100 exhibitors and keynote speakers**, it will offer an opportunity to **explore, experience, and engage** with the many opportunities



that are available across a number of disciplines. It will showcase many vibrant aspects that are **prevalent in Irish Education today, including the arts, education opportunities, careers, TY, apprenticeships, languages, travel, competitions, sport, technology, STEM, environmental issues, arts, etc.**

We will have over **100 exhibitors and Keynote Speakers** attending the event as well as **theatrical performances** across a range of the art forms including Shakespeare, Music, Poetry etc.

School Summit 2017 takes place in the National Show Centre, Swords, Co. Dublin on the 11th & 12th of September 2017.

For more details please visit our Stand at BTYSE



Stand W24: BioPharmaChem Ireland

BioPharmaChem Ireland, and the Irish Medtech Association are the two Ibec associations that represent the biopharmaceutical, chemical and the medical device sectors respectively. We are delighted to be joined again by the Royal Society of Chemistry, Eli Lilly and UCD Chemical Society representing Biopharmachem along with Cook Medical and Depuis Synthes representing Medtech.

We will be showing 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 including live chemistry experiments, demonstrations of innovative medical technology instruments and a few surprises!

This is a great opportunity to find out about the range of careers in both the biopharma and medtech sectors. The biopharmaceutical, chemical and medtech sectors are vital for Ireland's economy. These growth sectors generate around 60% of the total country exports, employing over 58,000 people and representing significant and exciting career opportunities for future graduates.



Stand W25: Analog Devices

Analog Devices is a world leader in the design and manufacture of semiconductor and software solutions used in a broad spectrum of electronic equipment. Our solutions play a key role in translating real-world phenomena like motion, sound, light and electromagnetic forces into electronic signals and back again. Innovation has always been a hallmark of Analog Devices, since our inception in 1965. Headquartered in Boston, USA, Analog Devices' has over 40 years presence in Ireland, our European base; with development centers in Limerick and Cork employing over 1200 people addressing our customers' toughest problems and enabling important new discoveries. Discoveries that help solve some of the most complex and impactful challenges of our time: from the detection of gravitational ripples in the fabric of space-time to helping farmers optimize how tomatoes grow (and taste). Innovations that stem from engineers with the passion and vision to stay ahead of what's possible.

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 and scientific understanding with some of the demos 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? Create your own worlds with an interactive topographical map. Don't fall down the well! Test your brain-power 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 W26: BetterExaminations.ie

BetterExaminations.ie is the user friendly way for students and teachers to access past exam material and study notes. Our website and app features allow you quickly and easily search papers for any specific topic, check out grade statistics

about every Junior Certificate and Leaving Certificate subject and customise your profile with the subjects that You study!

Our highest quality notes system powered by JCLearn and 625Points, provides you with study material written for the student's perspective by some of the best students in Ireland! Access them through our website and use them to structure your answers to get the best grades possible!

BetterExaminations is the study tool that will help you reach your highest potential by making it easier to study to become a Better student!



Stand W27: An Gaisce

Gaisce "The President's Award is a self-development programme that encourages young people to find their passion, get active and make a difference in their community. Gaisce is a direct challenge from the President of Ireland to young people aged 15-25 to dream big and realise their potential. To achieve a Gaisce Award, participants set and achieve goals in four areas:

Community Involvement: volunteering with a local charity or community group.

Personal Skill: developing a skill or trying something entirely new!

Physical Recreation: becoming more active through sport or exercise.

Adventure Journey: discovering the great outdoors on a team journey.

There are three levels to Gaisce: Bronze, Silver and Gold. The more time and energy given, the greater the reward.



Stand W28: Bristol-Myers Squibb

Bristol-Myers Squibb is a global BioPharma company firmly focused on its mission to discover, develop and deliver innovative medicines that help patients prevail over serious diseases.

BMS employs over 27,000 people worldwide, and approximately 550 people in Ireland in its Global Manufacturing and Supply (GMS) and Commercial operations.

BMS' operations in Ireland include two Active Pharmaceutical Ingredient Manufacturing sites in Swords, Co. Dublin and Cruiserath, Dublin 15, a Global Biologics Drug Product Testing Laboratory based in Cruiserath, Dublin 15 and the External Manufacturing division is based in Cruiserath, Dublin 15 and Shannon, Co. Clare.

BMS is a publicly traded company listed on the New York Stock exchange (BMY).

Around the world, our medicines help millions of people in their fight against such diseases as cancer, cardiovascular disease, diabetes, hepatitis B, HIV/AIDS, rheumatoid arthritis and psychiatric disorders.

NOKIA Bell Labs

Stand W29: Nokia Bell Labs

Nokia Bell Labs, Nokia's research and innovation arm, creates the disruptive technologies that are shaping the way the world communicates and connects. With expertise in analytics, cloud, fixed, optics and wireless and by collaborating openly with the global innovation community, Nokia Bell Labs is seeking the technology solutions that will transform the connected world, enhancing the speed, capacity, efficiency and reliability of data, and the increasing automation and digitization of our lives and entire industries. For 90 years, scientific breakthroughs at Nokia Bell Labs have fundamentally transformed the Information Communications Technology (ICT) industry and its effect on humankind which have led to many distinguished awards including 8 Nobel Prizes.



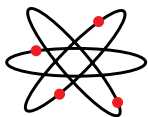
Stand W30: European Union

There's so much to see and do at the European Union stand this year!

Dr How's Science Wows Needs You – Fun, interactive science with Dr. How's Science Wows; check out a wide range of science experiments from making mini fire extinguishers to inflating balloons, making our own slime, volcanoes, mini explosion, smoke rings and lots more. Hands-on, educational and imaginative science!

Want to know a new way to learn about science? ERCcOMICS is a creative and

THE WORLD OF SCIENCE & TECHNOLOGY



ambitious project that exploits the power of visual storytelling to innovate the way European science is communicated.

Free resources about the European Union will be available for all visitors and Information Officers will be available to answer any queries you may have.

Contact us: The European Commission Representation in Ireland

Tel: 01 6341 111 Website: www.eurireland.ie

Facebook: @EUIreland Twitter: @eurireland #EUIr



Stand W31: CoderDojo

CoderDojo is an open source volunteer led movement of free coding clubs for young people aged 7-17. CoderDojo clubs (Dojos) run all over the world giving young people the opportunity to learn how to develop computer code, websites, apps, programs, games, digital media and to explore technology. In addition to technology skills, young people enjoy the opportunity of being involved in a highly social community and experience a fun, collaborative and energetic learning environment. Learn more at coderdojo.com



Stand W32: Abbott

At Abbott, we're committed to helping you live your best possible life through the power of health. For more than 125 years, we've brought new products and technologies to the world "in nutrition, diagnostics, medical devices and branded generic pharmaceuticals" that create more possibilities for more people at all stages of life. Today, 74,000 of us are working to help people live not just longer, but better, in the more than 150 countries we serve.

Abbott serves the Irish market with a diverse range of health care products including diagnostics, medical devices and nutritional products. In Ireland, Abbott employs almost 3,000 people across 10 sites. We have six manufacturing facilities located in Clonmel, Cootehill, Donegal, Longford and Sligo and a third party manufacturing management operation in Sligo. Abbott has commercial and support operations in Dublin and shared services in Dublin and Westport. We have been operating in Ireland since 1946.



Stand W33: Veterinary Council of Ireland

Vets are Vital! The work of the veterinary professions (vets and nurses) is vital to our everyday lives. They deal not just with animal health and welfare but with food safety, livestock healthcare, research, new food sources, and environmental protection. This year's stand, which reflects the theme "Vets are Vital", explains the broad scope of the profession. It has been put together with the help of the UCD School of Veterinary Medicine, and is staffed by veterinary students who will answer all your questions.



Stand W34: 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 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 Junior Cycle Science specification, which was introduced to schools in September 2016. The team can discuss the ongoing CPD for teachers of science and provide planning support. JCT is delighted to be at the BTSTE 2016 and look forward to engaging with teachers at the event.

@jctscience



An Roinn Ealaíon, Oidhreochta,
Chultúir Phléimneacha, Taidhle agus Gaeltachta
Department of Arts, Heritage,
Regional, Rural and Gaeltacht Affairs

Stand W35: The Irish Architecture Foundation

The Irish Architecture Foundation is a vibrant and passionate not-for-profit organisation founded in 2005 that excites people about the cultural value of architecture. We truly believe that architecture transforms lives. It influences our everyday experience, from the interiors of our houses to our landscape, our cities and our towns. We believe that the impact of our awareness and education initiatives will create a better-built environment, and we do everything within our power to make that happen.

We are supported by The Arts Council, the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DAHRRGA) and the OPW, with additional project funding from the Department of Education and Skills, Dublin City Council and DLR County Council.

Our partnership with the BT Young Scientist and Technology Exhibition is made possible by the DAHRRGA, under the Government Policy on Architecture 2009-15.



DEER PARK
SCHOOLWEAR • EST. 1984

Stand W36: Deer Park

Deer Park is Ireland's leading School Jumper manufacturer. For over 33 years they have been manufacturing the highest quality school knitwear. Apart from creating employment in Ireland, they 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 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 and other imported jumpers. Also check out their range of Irish Made School Scarves not to mention that large range of School Jackets & Fleeces. Plus they have competitions & giveaways all week.

Facebook www.facebook.com/DeerParkSchoolwear or www.deerpark.ie



An initiative by



Stand W37: Bord Bia Origin Green

Bord Bia (The Irish Food Board) is the Irish government agency charged with the promotion, trade development and marketing of the Irish food, drink and horticulture industry. Its mission is to deliver effective and innovative market development, promotion and information services to assist companies grow and win new business.

Bord Bia has its Head Office in Dublin and 13 strategically located offices in key export markets.

Origin Green is the national sustainability programme for the Irish food and drink industry. It is the only sustainability programme in the world which operates on a national scale, uniting government, the private sector and food producers, through Bord Bia, the Irish Food Board. Independently verified at every stage, Origin Green enables Ireland's farmers and food producers to set and achieve measurable sustainability targets, reduce environmental impact and serve local communities more effectively. www.origingreen.ie



Stand W38: Science and Technology in Action

Have you ever wondered how the science taught at school really links to what is practiced in our leading organisations?

Would you like to learn more about how the curriculum relates to real applications of 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 12th edition of the hard copy packs has been delivered to each school free of charge (during November). Each lesson in the pack relates to the activities of the participating organisations whilst also linking to 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 raise awareness and engage students in the real world of science and technology.



Stand W39: The Irish Science Teachers' Association (ISTA)

The Irish Science Teachers' Association (ISTA), Eol Oidí na hÉireann, is the Professional Association for the Teachers of Science in the Republic of Ireland. It is one of the largest voluntary subject associations in the country with branches in the following areas: Cork, Donegal, Dublin, Galway, Kerry, Kildare, Kilkenny, Limerick, Monaghan, Midlands (Athlone), Sligo, Tipperary, Waterford and Wexford. ISTA was founded in 1961 and has almost 1200 members from all sectors of education in fourteen Branches nationwide.

INTELLECTUAL VENTURES®

Stand W40: Intellectual Ventures

Intellectual Ventures believe that ideas are valuable. We're here to ensure a market for invention continues to thrive.

IV invests in all stages of the invention pipeline. We build—bringing together industry-leading minds to develop inventions that change the world. We buy—selecting only the highest-quality assets for our portfolio. We partner with others to bring inventions to market.

Intellectual Ventures - Invention Investment Ireland (III) is the Dublin-based managing entity for Intellectual Ventures' newest Intellectual Property (IP) investment fund. The team in Dublin specialize in IP evaluation, management and licensing.



Stand W41: 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 the health products we regulate are as safe as possible and do what they are intended to do. Our broad remit includes the regulation of: Human medicines; Veterinary medicines; Clinical trials; Medical devices; Controlled drugs; Blood and blood components; Tissues and cells; Organs intended for transplantation; The protection of animals used for scientific purposes; and Cosmetic products.



An Phríomh-Oifig Staidrimh
Central Statistics Office

Stand W42: The Central Statistics Office (CSO)

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. The CSO has a number of projects to encourage young people to use our products - our John Hooper poster competition, the Apps4gaps app design competition and our annual school survey - CensusAtSchool. The CSO has partnered with the BTYSTe to sponsor an award for the best use of official statistics in a project presented at the competition. Visit the CSO stand and talk to us about the many innovative services that the CSO has to offer!

RTÉ

Stand W43: RTÉ

Explore RTÉ at the BT Young Scientist & Technology Exhibition 2017!

Join us for an exciting line-up of activity across television, radio and digital services. There promises to be lots of lights, cameras and action as RTÉ broadcasts programmes from the stand, including live RTÉ Weather bulletins!

RTÉ 2FM, RTÉ Raidió na Gaeltachta and RTÉ Pulse will also be getting in on the action, broadcasting live from the radio studio. Visitors can try their hand at presenting the weather forecast and you might even get the chance to interview your favourite presenter! Be sure to come along and enjoy lots of music and entertainment.

Check-in at the RTÉ stand and keep up-to-date with RTÉ on Twitter, Facebook and Instagram.



Stand W44: BT

We use the power of communications to make a better world. We're passionate about technology. Come find us and hear all about the innovative history of BT, from where we started in 1896, right up to our merger with EE! We'll show you where the internet comes from; from the network to your home, and what the future holds. Our 'Connected Home' section shows the amazingly clever ways that internet can be used, where we will showcase Virtual Reality, using BT Sport and global meetings in our demos.

We're running a 'Twitter Selfie' competition, so tweet us with your selfie at the BT stand to be in with a chance to win a Surprise Prize (**don't forget #BTYSTe!**) – the most creative wins!



Stand W45: BTYSTe Alumni

The BTYSTe Alumni Showcase, a new feature for 2017 features previous participants exhibiting their commercial ventures before the general public at the exhibition.

A competition took place to allow Alumni of the BT Young Scientist & Technology Exhibition or BT Young Scientist Business Bootcamp who qualified for the Exhibition and now have an a company based on their BTYSTe project. The goal of the Alumni Showcase is to shine a light on the myriad of successful commercial enterprises born at the Exhibition since its beginnings in 1965. Those that are featured in the Showcase are:



For further information, see page 23.



Stand E1: Waterford Science Region

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 macro-invertebrates 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. Fun science shows will take place throughout each 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 Sanofi who are working together to make Waterford a Region of Science.

We are delighted to support the BT Young Scientist and Technology Exhibition for the 15th year running.



Stand E2: Geological Survey & Petroleum Affairs, Ireland

Underground Wonder

What's underneath Ireland's sea bed? How do I know if I've struck gold? What makes the ground shake during an earthquake? Where is the oil and gas offshore Ireland?

The Underground Wonder stand is here to help you discover the world beneath our feet. Let us show you the tools and techniques that Ireland's geoscientists use to investigate the secrets that lie under the earth's surface and how they affect our daily lives!

Underground Wonder is brought to you by the Geological Survey Ireland and the Petroleum Affairs Division, both divisions of the Department of Communications, Climate Action and Environment. We are proudly joined by our partners from the Dublin Institute for Advanced Studies and the National Museum of Ireland.



Stand E3: 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, based in the Garda National Roads Policing Bureau and established in 2001, delivers presentations on Road Safety to a number of groups in the community including:-

- Schools and colleges • Youth Clubs • 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, fatigue, distractions and consequences. It is delivered in a shock/ humorous manner and is designed to change attitudes and behaviour.

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 E4: Dublin Zoo

Dublin Zoo.... Learn something new!

Dublin Zoo, home to some 400 animals, is an environment where education and conservation combine for an exciting and unforgettable visitor experience. Dublin Zoo's Discovery and Learning Department offers a range of exciting, interactive and structured educational programmes, workshops and resources, tailored to meet the specific needs of all groups.

Our school programmes and primary outreach sessions are designed to support the curriculum while capturing the curiosity of your students in a stimulating environment.

Meet our Discovery and Learning Team at Stand No: E4 for lots of fun and learning including bio facts, details about careers with animals and the chance to enter an exciting competition to win a class trip to Dublin Zoo!

For more information on our education programmes call (01) 474 8932, email education@dublinzoo.ie or visit www.dublinzoo.ie



Stand E4A: 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 E5: Environmental Protection Agency

Come visit our stand to see our hovercraft and drone in action! Also find out about our new competition, "The Story of Your Stuff". 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 E6: Petroleum Infrastructure Programme

The Petroleum Infrastructure Programme is a government/industry/academic research initiative that reduces risk in 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; and 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 an exploration geologist.



Stand E7: Young Scientists Tanzania

Young Scientists Tanzania (YST) is a unique event in East Africa, providing a platform for young people from across Tanzania to demonstrate their innovation and showcase their scientific talents. Schools participating in YST are supported through an extensive science outreach program. Teachers and students receive mentoring and practical advice on research and scientific methodologies. The centre-piece of YST is an annual exhibition which is modeled on the internationally acclaimed BT Young Scientist and Technology Exhibition in Ireland.



Stand E8: WorldWide Global Schools (WWGS) & Gorta Self Help Africa

WorldWide 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 supporting secondary schools with interactive workshops and activities on themes like 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. Both organisations sponsor the Science for Development Award-awarded for using science to address global inequality & injustice. More info at www.worldwiseschools.ie and www.selfhelpafrica.org/ie/education/



Irish Aid

An Roinn Gnóthaí Eachtracha agus Trádála
Department of Foreign Affairs and Trade

Stand E9: Irish Aid, Department of Foreign Affairs and Trade

Irish Aid is the overseas aid programme of the Irish Government, and a leader in the fight against world hunger and poverty. Come and visit us this year in the EcoZone to view our displays, farming tools and produce, learn about our partner countries, and find out more about life for farming communities in Africa. Visitors to the Irish Aid stand can also sign up for African Drumming workshops, win prizes by taking part in our quiz, and get information about entering our annual Our World Awards, our Africa Day writing competition, and the Science for Development Award. We'll also have information for teachers on how school groups can follow up on what they learn and get involved with Irish Aid.



ORDER OF MALTA
IRELAND
AMBULANCE CORPS

Stand E10: 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.



An Roinn Ealaíon, Oidhreacht,
Gnóthaí Réigiúnacha, Tuaithe agus Gaeltachtaí
Department of Arts, Heritage,
Regional, Rural and Gaeltacht Affairs

Stand E11: The National Parks & Wildlife Service

The National Parks and Wildlife Service has responsibility for the protection and conservation of Ireland's natural heritage and biodiversity at national government level. The NPWS stand in the EcoZone will have exhibits, information and other materials available plus a chance to meet with our staff to discuss activities and school programmes available within the NPWS.

Our Education & Visitor Centres

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. Further information is available on www.npws.ie



Stand E12: 112 ECAS

112, the pan European emergency number to dial across 35 countries when you need an ambulance, fire brigade, police or coastguard.

With the increased frequency of travel across the EU, 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 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, the call will be handled in the same manner.

112 is accessible in the following EU countries:

Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Turkey and United Kingdom.

Exploring
STEM careers



www.smartfutures.ie

Science Foundation Ireland

SFI / Smart Futures

Smart Futures is the national awareness programme promoting careers in science, technology, engineering and maths (STEM) to young people. It is managed and coordinated by Science Foundation Ireland in partnership with Engineers Ireland.

The website www.SmartFutures.ie provides secondary school students, teachers and parents with access to over 170 STEM career stories, searchable by school subject, as well as careers videos, downloadable career sheets and a facility for teachers to register for free STEM career talks for their school.

The website also has a calendar of upcoming STEM events, competitions and other useful resources to help students explore more about a career in science and technology.



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 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 even 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 of cell life and microscopic structures or using a Scanning Electron microscope study the fine details of insects and parasites.



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



2013

Ciara Judge,
Emer Hickey,
Sophie Healy-Thow

S OF INNOVATION



1970

Maria Edgeworth



1971

Peter Short



1972

Seán Mac Fheorais



1973

Tadgh Begley



1974

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



2014

Paul Clarke



2015

Ian O'Sullivan,
Eimear Murphy



2016

Diana Bura,
Maria Louise Fufezan



2017

Winner announced
Friday 13th January



Jack Restan Displays

proud **display partner** of the
BT Young Scientist & Technology Exhibition

t: +353 1 450 6006

www.jrdisplays.ie



● Tel +353 (0) 1 25 73 111
● Fax +353 (0) 1 25 73 112

● Email info@vne-logistics.com
● Web www.vne-logistics.com

Supporting the BT Young Scientist & Technology Exhibition 2017

www.vne-logistics.com

Events schedule

Thursday 12th January

2017



BT ARENA

WORLD OF ROBOTS

CONCERT HALL

CLYDE ROOM FOYER

09:45				
10:00	The Ultimate Science Show			Drumming Workshop
10:15				
10:30		World of Robots		
10:45	David Meade Show			
11:00			Discover the cosmos 3D	Drumming Workshop
11:15				
11:30	Titan the Robot	World of Robots		
11:45				
12:00			Discover the cosmos 3D	Drumming Workshop
12:15	David Meade Show			
12:30		World of Robots		
12:45				
13:00	Titan the Robot		Discover the cosmos 3D	
13:15		World of Robots		
13:30				
13:45	David Meade Show			
14:00		World of Robots	Discover the cosmos 3D	Drumming Workshop
14:15				
14:30	The Ultimate Science Show			
14:45		World of Robots		
15:00				Drumming Workshop
15:15	Titan the Robot			
15:30				
15:45		World of Robots		
16:00				Drumming Workshop
16:15				
16:30				

Events schedule

Friday 13th January

2017



	BT ARENA	WORLD OF ROBOTS	CONCERT HALL	CONCERT HALL FOYER
09:45	Titan the Robot			
10:00		World of Robots		Drumming Workshop
10:15			Discover the cosmos 3D	
10:30	David Meade Show			
10:45				
11:00		World of Robots		Drumming Workshop
11:15	Titan the Robot		Discover the cosmos 3D	
11:30				
11:45		World of Robots		
12:00	The Ultimate Science Show			Drumming Workshop
12:15			Discover the cosmos 3D	
12:30		World of Robots		
12:45	Titan the Robot			
13:00				
13:15			Discover the cosmos 3D	
13:30	David Meade Show	World of Robots		
13:45				
14:00				Drumming Workshop
14:15	Titan the Robot		Discover the cosmos 3D	
14:30		World of Robots		
14:45				
15:00	The Ultimate Science Show			Drumming Workshop
15:15			Discover the cosmos 3D	
15:30		World of Robots		
15:45	David Meade Show			
16:00				Drumming Workshop
16:15				
16:30				

Events schedule

Saturday 14th January

2017



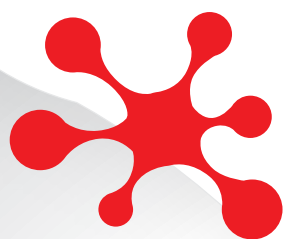
BT ARENA

WORLD OF ROBOTS

CONCERT HALL

CONCERT HALL FOYER

09:45	The Ultimate Science Show			
10:00		World of Robots	Discover the cosmos 3D	Drumming Workshop
10:15				
10:30	David Meade Show			
10:45				
11:00		World of Robots		Drumming Workshop
11:15	Titan the Robot		Discover the cosmos 3D	
11:30				
11:45				
12:00	David Meade Show	World of Robots		Drumming Workshop
12:15			Discover the cosmos 3D	
12:30				
12:45	Titan the Robot			
13:00		World of Robots		
13:15			Discover the cosmos 3D	
13:30	The Ultimate Science Show			
13:45				
14:00		World of Robots		*Drumming Workshop *CLYDE ROOM FOYER
14:15			Discover the cosmos 3D	
14:30	David Meade Show			
14:45				
15:00		World of Robots		*Drumming Workshop *CLYDE ROOM FOYER
15:15				
15:30	Titan the Robot			
15:45				
16:00		World of Robots		*Drumming Workshop *CLYDE ROOM FOYER
16:15	The Ultimate Science Show			
16:30				



THE BT YOUNG SCIENTIST BUSINESS BOOTCAMP

Driven by innovation, delivered by BT



BT's 8th Business Bootcamp Programme for students



A number of the exhibiting intermediate and senior students from the 2017 BT Young Scientist & Technology Exhibition will be invited to take part in a BT Young Scientist Business Bootcamp in March 2017 where they will experience the world of technology commercialisation and entrepreneurship.

We have created this programme to encourage further innovation by our young scientists and provide them with commercialisation skills to carry forward into their careers and lives. The bootcamp will be held at University College Dublin (UCD).

Expanding Business Leadership

As an extension of the BT Young Scientist & Technology Exhibition, the BT Young Scientist Business Bootcamp has 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 Bootcamp helps to bridge the gap between the worlds of education and business and mentor the next generation of young innovators and entrepreneurs.



in association with NovaUCD

Scan here to watch
the 2016 highlights





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>.



BT is one of the world's leading providers of communications services and solutions, serving customers in 180 countries. Every day, we touch the lives of thousands of people on the island of Ireland, helping them communicate, collaborate, and be entertained and informed.

Science and technology are at the heart of our business

We're leading the industry in communications innovation, using technology to transform the way businesses operate. With more than 14,000 scientists and technologists around the world, we've invested more than €3.8 billion in research and development in the last five years.

In the Republic of Ireland,

BT is trusted to help multi-national corporations and indigenous exporters to solve complex communications problems on a global scale.

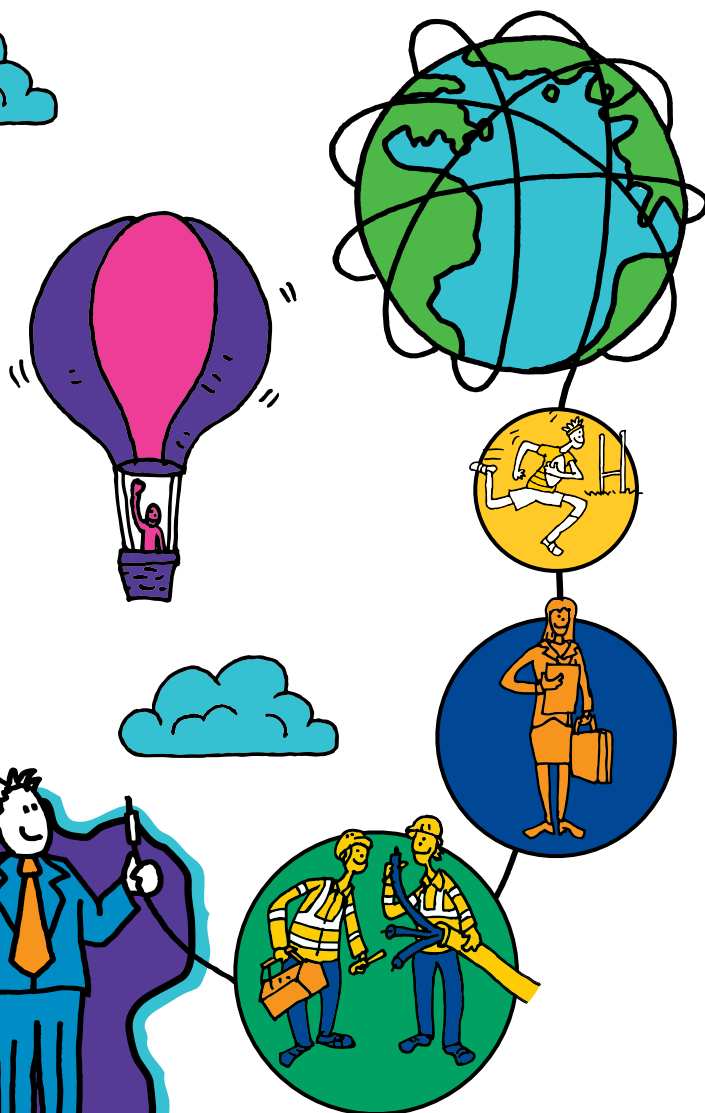
We process millions of transactions through our state-of-the-art data centres, develop agile contact centres, pre-empt and solve emerging cyber threats, build networks for other communications companies and more. We also serve major public sector organisations, operating the 999/112 emergency call answering service on behalf of the Irish state.

In Northern Ireland,

BT is one of the largest private sector employers in the province. We are leading the way in delivering 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.

In 2013, BT launched BT Sport,

its very own TV sports channels, covering soccer, rugby, UFC, motorsports and more. Irish rugby legend Brian O'Driscoll joined BT Sport as a presenter in 2014.



BT in the Community

We're committed to using the power of communications to make a better world, connecting people and society, protecting the environment, and using our skills and resources to benefit good causes throughout the world.

Last year, BT Ireland employees spent 9,200 hours volunteering across the island. Our BT Shop for Change campaign raised almost €158,000 for the Irish Cancer Society and Marie Curie Northern Ireland.

We're committed to the local communities in which we live and work. That's why we're proud to have organised the BT Young Scientist & Technology Exhibition for 17 years, helping to nurture young talent and entrepreneurship in Ireland.

Find out more at
btireland.com and btyoungscientist.com

