



BT YOUNG SCIENTIST
& TECHNOLOGY Exhibition

2023

EXHIBITION GUIDE



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BT YOUNG SCIENTIST & TECHNOLOGY Exhibition

CONTENTS

3 Foreword from Shay Walsh

4 Sponsors, partners and exhibitors

6 The awards

8 Special awards

9 BTYSTE 2023 Judges

10 2023 Projects - Quick search

14 Chemical, Physical &
Mathematical Sciences

20 Technology

26 Biological & Ecological
Sciences

36 Social & Behavioural Sciences

47 On stage

50 Exhibit halls

58 Past winners

60 The Primary Science Fair

62 BT Business Bootcamp

64 Daily event schedules

BTYSTE 2023 WEB | PORTAL | APP | SOCIAL MEDIA

Keep in contact with what is going on at BTYSTE through our **social media** channels, why not put some comments up there yourself! Go to **www.btyoungscientist.com** for direct links to all of our social media platforms and portal.

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



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FOREWORD

A message from Shay Walsh



We are delighted to be able to welcome you all here to the 59th annual BT Young Scientist & Technology Exhibition this week. The buzz and excitement of the live exhibition is second to none, and we're excited to be bringing everyone back together after two sensational virtual exhibitions in 2021 and 2022.

It's great to be able to throw open the doors of the BT Young Scientist & Technology Exhibition to students from across the island of Ireland who are blazing a trail with their creative takes on science, technology, engineering, and mathematics (STEM). This year we will see students tackling challenges across a diverse range of areas, with the environment, health, sport science, agriculture, and new technologies just some of the key trends emerging from their project entries.

Our judges whittled down over 1,700 project entries to the 550 exceptional projects that will be on show this week, and I would like to wish both the students and the judges well for the judging sessions. Your commitment and dedication to the BT Young Scientist & Technology Exhibition is truly outstanding.

The Exhibition is a fantastic celebration of science, technology, and curiosity. Visitors to the exhibition will be able to marvel at the ingenuity of our young people in the exhibition hall, visit the Primary Science Fair, stop by some of the 14 live science shows a day and interact with the fantastic stands of our partners and supporting organisations, for whom we are very grateful.

I hope you have a wonderful time at this year's BT Young Scientist and Technology Exhibition.

Thank you for joining us

Shay Walsh
Managing Director, BT Ireland

**Proud sponsor and organiser of the BT Young Scientist
& Technology Exhibition**

Exhibition partners

The **BT Young Scientist & Technology Exhibition 2023** is proudly sponsored and supported by;



An Roinn Oideachais
Department of Education



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine





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Tithíochta
The Housing Agency

IOP Institute of Physics

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Government of Ireland

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Ollscoil Chathair
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Dublin City University



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& na hInnealtóireachta
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Engineering



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AWARDS

Main awards

BT Young Scientist & Technologist(s) of the Year 2023

Individual or Group

- BT Young Scientist(s) of the Year Trophy (perpetual)
- Cheque for €7,500 / £6,750
- The chance to represent Ireland at the European Union Contest for Young Scientists

Best Individual or Best Group

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

Runner-up Individual and Runners-up Group

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

Please note if the 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 of the Year is awarded to a Group, a Best Individual Award will also be made.

Category awards

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



Social & Behavioural Sciences

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



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.



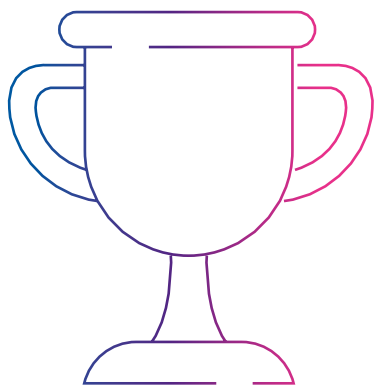
Biological & Ecological Sciences

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

The prizes are:

		
1st prize €300/£270	2nd prize €225/£202	3rd prize €150 / £135
for both Individual and Group projects	for both Individual and Group projects	for both Individual and Group projects

In the event of a tie in any category, the prize money will be split equally. A number of highly commended and display awards will also be awarded in each category by the panel of judges.



Gold Partner awards

Student awards

Analog Devices Technology Award

Analog Devices will present an award in the Technology category to the best placed project for outstanding work exhibited in the Technology category, 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. 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*.

Horizon Biological and Ecological Sciences Award

Horizon 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 Social and Behavioural Sciences 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.

Stripe Chemical, Physical and Mathematical Sciences Award

An award will be presented in the Chemical, Physical and Mathematical category to the best placed project, either group or individual, except where the project has been selected as the BT Young Scientist & Technologist(s) of the year.

*Analog Devices will contact winner with details, terms and conditions.

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 a bursary of €2,000 and an Analog Devices Trophy.

Horizon Educator of Excellence - Biological and Ecological Sciences

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

Stripe Educator of Excellence - Chemical, Physical & Mathematical Sciences

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

BT Educator of Excellence - Social and Behavioural Sciences

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



Rev Dr Tom Burke bursary

Fr Tom was one of the co-founders of the project and sadly passed away in 2008. In memory of his contribution to the project, a €1,000 bursary is awarded in his name to an individual participant who is deemed by the judges 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.

Founders medal

A medal will be awarded in the name of the co-founders of the exhibition, Dr Tony Scott and Fr Tom Burke, a €1,000 award will be made to an individual who has made a remarkable and long standing contribution to the BT Young Scientist and Technology Exhibition. This is chosen by the Co-Founder Dr Tony Scott.



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 BT and one for Best School in the 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.



CHEMICAL, PHYSICAL & MATHEMATICAL SCIENCES

Prof. Claire Gormley
Prof. Elaine O'Reilly
Prof. Emma Sokell
Fergal O'Reilly
Dr. Graeme Horley
Prof. Maria Meehan

• Dr. Martina Nolan-Jones
• Prof. Orla Feely
• Prof. Pat Guiry
• Prof. Peter Lynch
• Dr. Rachel Quinlan
• Dr. Shane Bergin

• Prof. Stephen Connon
• Prof. Susan Quinn
• Dr. Tony Scott

TECHNOLOGY

Aaron McCormack
Anna-Marie Turley
Barry Kennedy
Brian O'Mara
Claire McGee
Lorna Ross

• Dr. Helen McBreen
• Prof. John Dunnion
• Julie Spillane
• Lean Doody
• Leonard Hobbs
• Noel King

• Dr. Peter Taylor *2001
• Ray Goggin
• Prof. Sarah Jane Delany
• Prof. Vincent Wade

BIOLOGICAL & ECOLOGICAL SCIENCES

Prof. Ann Cullinane
Dr. Colin Kelleher
Prof. Donal O'Shea
Dr. Eoin Lettice
Prof. Evelyn Doyle
Dr. Fidelma Butler
Dr. Fiona Wilson

• Prof. Fionnuala McAuliffe
• Prof. Geraldine Butler
• Prof. Grace McCormack
• Prof. Helen French
• Prof. John O'Halloran
• Prof. John Morrissey
• Dr. John Monahan *1965

• Dr. Kathy O'Boyle
• Prof. Mark Crowe
• Mary Kelly-Quinn *1976
• Prof. Niall Moyna
• Dr. Richard O'Hanlon
• Dr. Stephen Butler
• Dr. Tadhg O Croinin

SOCIAL & BEHAVIOURAL SCIENCES

Aidan Ryan
Annette Cahalane
Dr. Barry Brunt
Brendan O'Sullivan
Prof. Catherine Darker
Dr. Ciara Greene
Conor Faughnan
David Silke
Prof. Des McCafferty
Dr. Edel Higgins

• Esther Doyle
• Fiona O'Callaghan
• Prof. Ian Robertson
• Prof. James O'Higgins Norman
• Dr. Jean Cushen
• Prof. Joe Barry
• Prof. Jo-Hanna Ivers
• Dr. Jones Irwin
• Prof. Liz Nixon
• Lynda Mc Sweeney

• Dr. Maeve Martin
• Dr. Marion Palmer
• Dr. Roisin Lyons
• Dr. Sinéad Smyth
• Dr. Tara Cusack
• Prof. Yseult Freeney
• Dr. Helen Connaughton
• Orla Feeney
• Darran Heaney
• Sadhbh Byrne

Additional screening judges

Prof. Bernie Capraro

Julie Byrne

Prof. Sean Corish

Carol Gibbons

BT Chairperson
Therese Gunning

Special Awards Chairperson
Professor Padraig Dunne

★ Young Scientist of the Year past winner

2023 PROJECT QUICK SEARCH

Project category

Chemical, Physical and
Mathematical Sciences

1100 - 1609

Technology

2100 - 2610

Biological and
Ecological Sciences

3100 - 3612

Social and Behavioural
Sciences

4100 - 4607

School name/County

Antrim

Ballymena Academy	2507
South Eastern Regional College - Lisburn	3305, 3606
St Dominic's High School	4222
Wellington College	1407

Carlow

Tullow Community School	3549
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Cavan

Breifne College	2522
Coláiste Dún an Rí	1218, 4590
Loreto College	3503

Clare

Mary Immaculate Secondary School	1212, 1533 2205, 3210, 3217, 3410, 3411, 3412, 3607
Meánscoil na mBráithre	1608, 2106, 3543
Scoil Mhuire	1304
St Joseph's Community College	3600
St Joseph's Secondary School	3610

Cork

Árdscoil Uí Urmoltaigh	2218, 3213, 3218
Ballincollig Community School	4225, 4508 3310, 4528, 4530
Bandon Grammar School	3205, 3542, 4569
Christ King Girls' Secondary School	2214
Clonakilty Community College	1506, 3501, 3508 3509, 4510
Coachford College	4105
Colaiste An Phiarsaigh	1507, 3525, 4200, 4400 4401, 4407, 4512
Coláiste an Spioraid Naoimh	4592

Coláiste Choilm	1509, 2201, 2502, 3502, 4201 4210, 4219, 4223, 4502, 4504, 4527 4532, 4535, 4542, 4573, 4591
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Coláiste Daibhéid	4518
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Coláiste Fionnchua	3510, 4408
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Colaiste Muire Crosshaven	1221, 1538, 3404, 3406 3520, 4112, 4220, 4555
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Coláiste na Toirbhirte	3554
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Coláiste Pobail Bheanntaí	3545, 4541
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Colaiste Treasa	3515, 3529, 3537, 4230, 4531
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Douglas Community School	3539, 4414
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Gaelcholáiste Charraig Uí Leighin	1512, 2101, 4234 4519
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Glanmire Community College	2200, 4584
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Kinsale Community School	1543, 2105, 2111, 2532 3105, 3106, 3419, 3556 3561, 4111, 4214, 4418, 4419, 4421, 4422, 4594
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Loreto Secondary School	3550, 4228
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Midleton College	4540
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Millstreet Community School	2537, 3546, 3551 4529, 4563, 4599
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Pobalscoil na Tríonóide	4108
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Sacred Heart Secondary School	1508, 4204 4514, 4515
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Schull Community College	3220, 4106, 4107, 4509
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Scoil Mhuire	3206
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Scoil Mhuire gan Smal	2500, 2538, 4403
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Skibbereen Community School	3216
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St Aloysius College	1220, 1545, 4579
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St Aloysius School	3214, 4238
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St Mary's High School	1546, 4572
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St Mary's Secondary School Macroom	2504, 3200 3540, 4511, 4516, 4517, 4522, 4564
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School name/County

St Mary's Secondary School Mallow 1404, 1607

St. Brogan's College, Bandon 1207, 3504, 3506
3526, 4402, 4404, 4600

Derry-Londonderry

St Mary's College 1213, 1215, 1217, 1535

Donegal

Abbey Vocational School 1206, 1300, 2102
3100, 3604, 4213

Carndonagh Community School 3612

Coláiste Ailigh 1105, 1405, 3416, 3417, 4423

Coláiste Cholmcille 3530, 4245, 4598

Loreto Community School 1402

Moville Community College 1204

Pobalscoil Ghaoth Dobhair 2212, 4587, 4589

Rosses Community School 4420, 4586

St Columba's Comprehensive School 1211, 3300

Down

Abbey Christian Brothers School 3603

South Eastern Regional College
- Bangor Campus 1208

St Colman's College 3407

Dublin

Adamstown Community College 1301

Alexandra College 4417

Belvedere College S.J. 2103

Blackrock College 3104, 3224

Bremore Educate Together Secondary School 2524

Castleknock College 2108, 2306, 2503

Christian Brothers, Synge St. 1603

Coláiste Íosagáin 1505, 4411, 4412

Coláiste Phádraig CBS 2406, 2501, 2603

Dominican College 4513

Gonzaga College 2104, 2400, 2407

Holy Faith Secondary School 4556

Home School 2220

Kishoge Community College 2509, 2513

Loreto College 1528, 1606, 3608, 4110, 4565
4597

Loreto High School 1216, 1517, 2521, 2523, 3212
3536, 4547

Loreto Secondary School 3611, 4578

Lucan Community College 4224

Malahide Community School 3409, 4405

Mount Anville Secondary School 3107, 4416

Muckross Park College 3308, 4413

Newpark Comprehensive School 1541, 4305, 4415

Oatlands College 1527

Old Bawn Community School 3221

Our Ladys School 3225

Rockford Manor Secondary School 1510, 3201
3512, 3605, 4221, 4601

Sandford Park School Ltd 2305, 4226

Sandymount Park Educate Together
Secondary School 4206, 4602

St Andrews College 2204, 2308, 3101, 3211

St Joseph's Secondary School 1203, 1219, 2408
2411, 2539, 2600, 3222
3309, 3413, 3415, 4500

St Kilian's Deutsche Schule 2209, 2533

St Mary's Secondary School 4501

St Patricks Cathedral Grammar School 3302

St. Aidan's C.B.S. 2610

St. Tiernan's Community School 4561

Stratford College 2216, 2217, 3304

Sutton Park School 2531, 2602

Tallaght Community School 4551

Terenure College 4582

The Institute of Education 3303

Galway

Coláiste Iognáid S.J. 2307, 4583

Coláiste Muire Máthair 1605, 2107, 3209, 3306

Coláiste Naomh Eoin 1406, 2412

Colaiste Sheosaimh 2221

Dominican College 3307, 4241, 4308

Glenamaddy Community School 4524

Jesus & Mary Secondary School 4581

Mercy Secondary School 3528, 4558

2023 PROJECT QUICK SEARCH

School name/County

Presentation College	1103, 1104, 2401, 2410
Seamount College	4588
St Brigids College	4233

Kerry

Castleisland Community College	4244, 4593
Community College Killorglin	3414
Gaelcholáiste Chiarraí	1205
Killarney Community College	1600
Mercy Secondary School Mounthawk	1209, 1302 1305, 1526, 2210, 2211 3408, 3524, 4103, 4109
Pobalscoil Inbhear Scéine	1401, 1502, 1503 1513, 1534, 3505
Presentation Secondary School Listowel	2534 3548, 4559
Scoil Phobail Sliabh Luachra	3555
Tarbert Comprehensive School	2536

Kildare

Celbridge Community School	2100
Colaiste Lorcaín	4409
Coláiste Naomh Mhuire	2520, 2527, 4306
Confey Community College	2222
Gaelcholáiste Mhaigh Nuad	1102, 2109, 2405
Maynooth Post Primary School	4580
Newbridge College	1107, 1531, 4102, 4304
St Pauls Secondary School	2606

Kilkenny

Castlecomer Community School	2515, 2516 4562, 4574
Coláiste Pobail Osraí	2512, 3558, 3560, 4237 4239, 4243
Loreto Secondary School	1536, 2529, 3207, 3511 3532, 3535, 3541, 3557 3559, 4543, 4544, 4567
Meánscoil na mBráithre Criostaí	1544
Presentation Secondary School	3514, 4406 4505, 4506
St Kieran's College	1501, 1504, 4523

Laois

Mountrath Community School	3538
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Leitrim

Carrick-on-Shannon Community School	2223
Mohill Community College	2303
St. Clare's Comprehensive School	1214, 3547 4231, 4235

Limerick

Colaiste Chiarain	1101, 1202, 2202, 2601
Coláiste Iósaef	4549
Coláiste Nano Nagle	2203, 2402, 2510, 4202
Desmond College	1100, 1200, 1400, 1500 1609, 2300
Gaelcholáiste Luimnigh	4554
John The Baptist Community School	1532, 1539 2525, 4520
Laurel Hill Secondary School FCJ	1523, 3531 4300, 4568
Mungret Community College	1601, 3219
Salesian Secondary College	2208, 2535, 3223 4236, 4521
Scoil Pól	1537, 1542, 4553, 4577

Longford

Ardscoil Phadraig	4526
Lanesboro Community College	4212, 4301 4302, 4303

Louth

Coláiste Chú Chulainn	1604
Colaiste Rís	3602, 4552
Dundalk Grammar School	2301
St Mary's Diocesan School	4104
St Oliver's Community College	2607
St Vincent's Secondary School	3544

Mayo

Coláiste Cholmáin	4203
Mount St Michael	2609, 4307, 4566
Sacred Heart School	4604



School name/County

Meath

Boyne Community School	2506, 2519
Eureka Secondary School	4575
St. Joseph's Secondary School, Navan	3418, 3519

Monaghan

Castleblayney College	1403, 3405, 4534
Largy College	1201, 4533
Our Lady's Secondary School	3513, 4229

Offaly

Gallen Community School	2518
Sacred Heart Secondary School	1106, 2213
Tullamore College	2505, 3401, 3601, 4603

Roscommon

Abbey Community College	1521
Castlerea Community School	4607
Coláiste Chiaráin	2508, 3552, 4100
Roscommon Community College	1518, 3301 3523, 4537, 4545
Scoil Mhuire	1529, 2528, 4216, 4557
Scoil Muire gan Smal	4546

Sligo

Coola Post Primary School	2514, 3517, 3527, 4536
Sligo Grammar School	3563
Summerhill College	1516, 3609, 4507, 4550
Ursuline College	2604, 2605

Tipperary

Borrisokane Community College	2540
C.B.S. Thurles	3103
Cistercian College	1514, 1515, 1524, 3522
Coláiste Mhuire Co-Ed	4548
Presentation Secondary School Thurles	3564
Rockwell College	2215
St Josephs College	1519, 1520
St. Anne's Secondary School	4585
The Abbey School	4606
Ursuline Secondary School	4571

Tyrone

St Ciaran's College	2403
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Waterford

Blackwater Community School	2302, 3202, 3204 4101, 4205, 4209
Gaelcholáiste Phort Láirge	1530

Westmeath

Athlone Community College	1210, 1522, 2207 2517, 3208, 3533 4208, 4211, 4215
Castlepollard Community College	4410
Colaiste Mhuire	2110, 2219, 2404, 4240, 4605
Loreto College	1511
Marist College	2511, 2608, 4218, 4539
Meán Scoil an Chlochair	3553, 3562, 4538, 4595
Moate Community School	3400, 3402, 3403 3507, 3516, 3518 3534, 4503, 4525
Our Lady's Bower	2409, 3203
St Finian's College	1306, 4232
St Joseph's Secondary School	4242, 4596

Wexford

F.C.J. Secondary School	4576
Meanscoil Gharman	2530, 4570

Wicklow

Colaiste Chraobh Abhann	3500
Dominican College	1540
Greystones Community College	1525
SEK-Dublin International School	2206
St David's Holy Faith Secondary	3102
St Marys College	3521, 4207, 4217

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JUNIOR INDIVIDUAL

1100

Title: Dying to look good.

Overview: Investigate the stated contents of make-up and face paints versus actual contents, to see if companies are hiding more than your imperfections.

School: Desmond College

County: Limerick

Teacher: Donal Enright

Student(s): Winnie Garcia

1101

Title: How to Make an Aircraft Invisible to Radar

Overview: I will test what shapes reflect the least light to discover the best shapes to use to design stealth aircrafts.

School: Colaiste Chiarain

County: Limerick

Teacher: Edel Farrell

Student(s): Matthew Furlong

1102

Title: Cluichí Teaglamacha: Conas a athraíonn na réitigh nuair a athraíonn na rialacha?

Overview: Féachfaidh mé ar éagsúlachtaí ar an gcuiche clasaiceach Nim. Ba mhaith liom tuiscint a fháil ar chonas a athraíonn seo na straitéisí agus na torthaí.

School: Gaelcholáiste Mhaigh Nuad

County: Kildare

Teacher: Maria Ní Ghóillidhe

Student(s): Niamh Másún

1103

Title: A Faster Method of Finding Micrometeorites

Overview: I aim to use a computer vision algorithm to more efficiently find micrometeorite candidates.

School: Presentation College

County: Galway

Teacher: John Toner

Student(s): Freya Phillips

1104

Title: Making Plastic out of Fish scales

Overview: I intend to make plastic out of fish scales and test it against existing plastic/bioplastics.

School: Presentation College

County: Galway

Teacher: John Toner

Student(s): Angelina O'Neill

1105

Title: "Le dó nó gan a dó" – Forbairt retardant dóiteáin éiceabhách chun caipeadh tinte fiáine a rialú.

Overview: To develop an eco-friendly liquid flame retardant to control the spread of wildfires and to characterise its thermal flame resistance using a home-made test rig.

School: Coláiste Ailigh

County: Donegal

Teacher: Aidan Burke

Student(s): Lorcán Ó Fearáil

1106

Title: Is professional rugby more physical than it was before?

Overview: An investigation into the force of collisions in rugby since the game went professional.

School: Sacred Heart Secondary School

County: Offaly

Teacher: Laura Walsh

Student(s): Saorla Whelan

1107

Title: Optimising wind turbine efficiency

Overview: This project investigated varying blade orientations for optimal performance using a consistent flow rate of air.

School: Newbridge College

County: Kildare

Teacher: Anne Marie Davis

Student(s): Emily Johnson

INTERMEDIATE INDIVIDUAL

1200

Title: Solution for adhesive capsulitis and other common shoulder complications.

Overview: Versatile device for shoulder/arm rehabilitation & exercise. It strengthens and improves a range of motions in the shoulder while providing feedback to the user.

School: Desmond College

County: Limerick

Teacher: Donal Enright

Student(s): Madison Brouder

1201

Title: Acid attack! what is really going on with your oral health?

Overview: My project, is about finding out how the pH of saliva is affected, by different drinks and how this effects the teeth.

School: Largy College

County: Monaghan

Teacher: Paula McGonnell

Student(s): Mariia Yaroshchuk

1202

Title: Using a plasma globe to teach about electric and magnetic fields

Overview: In this project I will design activities to teach students

about electric and magnetic fields and how they interact with each other.

School: Colaiste Chiarain

County: Limerick

Teacher: Edel Farrell

Student(s): Emily Ceban

1203

Title: Investigating how people generate their own oxidation field and change the indoor chemistry around them.

Overview: This project will investigate how people generate their own oxidation field due to ozone reacting with lipids, creating hydroxyl radicals which are a respiratory irritant

School: St Joseph's Secondary School

County: Dublin

Teacher: Daryl Dunne

Student(s): Eliza Bielak

1204

Title: Proteins are not alike

Overview: My Project is about how useful it is, to consume protein supplements.

School: Moville Community College

County: Donegal

Teacher: Maura McFadden

Student(s): Jara Schaufler

1205

Title: Reduce energy bills by producing biogas

Overview: The aim of my project is to reduce the cost of energy bills for households by producing cooking gas from waste products.

School: Gaelcholáiste Chiarraí

County: Kerry

Teacher: Tríona Uí Mhaolchatha

Student(s): Grace Ní Ifearnaín

1206

Title: What colour is pi? An analysis of patterns in the visible representation of number sequences using colours observed by people with synesthesia

Overview: I wish to construct numerous colour sequences based on numerical values using data collected on colours seen by people with synesthesia and analyse them.

School: Abbey Vocational School

County: Donegal

Teacher: Donna Furey

Student(s): Samaire Fern

1207

Title: which fuel is most efficient for a blacksmith

Overview: The purpose of this project is to determine which fossil fuel is more efficient for burning

in a blacksmiths forge, Propane, Coke, Coal or Charcoal

School: St. Brogan's College, Bandon

County: Cork

Teacher: Michael Connern

Student(s): Peter Lawlor

1209

Title: How Effective is the Carotenoid Lycopene in regards to UV Protection?

Overview: My project is about investigating how much UV protection is provided by lycopene and if a regular dosage of lycopene further protects against UV exposure.

School: Mercy Secondary School Mounthawk

County: Kerry

Teacher: Fiona O'Connor

Student(s): Yasmine Odugbesan

1210

Title: Does Heat make you "Pitch Perfect"

Overview: How temperature can affect the frequency of sound waves emitted from certain materials.

School: Athlone Community College

County: Westmeath

Teacher: Emma Buckley

Student(s): Lucas Carlin

1211

Title: A comparative study Physicochemical characteristics and health-promoting properties of Donegal heather honeys Vs Maunka Honey

Overview: The comparison of the worlds healthiest honey (Manuka) vs Our Donegal heather honey, I will investigate the difference in health properties (vitamins, pathogens, minerals, monosaccharides).

School: St Columba's Comprehensive School

County: Donegal

Teacher: Ruth McPolin

Student(s): Ethan Dewhirst

1212

Title: A statistical analysis of the relationship between precipitation and river discharge in the Aille River catchment area

Overview: I am looking at the relationship between precipitation in the Aille River catchment area and the discharge of the Aille River

School: Mary Immaculate Secondary School

County: Clare

Teacher: John Sims
Student(s): Oisín Jackson

1213

Title: Investigating the effect of activated charcoal on the absorption of glucose in the digestive system

Overview: This project is about diabetes and how activated charcoal may be employed to slow down the absorption of glucose in the digestive system.

School: St Mary's College
County: Derry-Londonderry
Teacher: Ann Blanking
Student(s): Lexie Melrose

1214

Title: PharmaCheck: A Medicine Interaction Checker

Overview: PharmaCheck is an app that uses text recognition software to identify medicines from their packaging and test their interactions on drugs.com using web automation software.

School: St. Clare's Comprehensive School
County: Leitrim
Teacher: Edel Mc Phelim
Student(s): Conor Gibney

1215

Title: The investigation, development and evaluation of natural sunscreen preparations

Overview: Investigating a range of natural substances to determine their SPF's and using them to produce natural sunscreen preparations

School: St Mary's College
County: Derry-Londonderry
Teacher: Ann Blanking
Student(s): Kaycee Deery

1216

Title: Home is where the arc is- Mathitecture of Dublin

Overview: Use knowledges from different fields of mathematics to investigate the features of Irish buildings from different eras.

School: Loreto High School
County: Dublin
Teacher: Lisa Ryan
Student(s): Christine Xinyue Huang

1217

Title: Investigating the effect of acid rain on metals used in construction and metal compounds found in soil

Overview: This project investigates the effect of simulated acid rain on a range of metals used in construction and on metal

compounds in soil.

School: St Mary's College
County: Derry-Londonderry
Teacher: Ann Blanking
Student(s): Rebecca Lewis

1218

Title: An investigation into alternative feed stock for the production of Biodiesel fuel contributing to a cleaner environment

Overview: I aim to find alternative feedstocks for the production of biodiesel in hopes to reduce carbon emissions and positivity impact our environment

School: Coláiste Dún an Rí
County: Cavan
Teacher: Robert Lorenz
Student(s): Rachael Burns

1219

Title: A chemical analysis on the effect of a seaweed fertiliser on different soil types.

Overview: Using different soil testing kits and various pasco sensors, I will analyse the impact seaweed fertiliser has on the chemical composition of soil.

School: St Joseph's Secondary School
County: Dublin
Teacher: Helen Teehan
Student(s): Katie McBride

1220

Title: Reduction of nitrates in fresh water by use of immobilised enzymes.

Overview: My project will investigate the reduction of nitrates in freshwater by immobilised enzymes found in shiitake mushrooms. Increased nitrates in water results in eutrophication.

School: St Aloysius College
County: Cork
Teacher: Ryan Gallagher
Student(s): Chiara Smith

1221

Title: Mathematically modelling animal vocalisations.

Overview: I aim to create my own graphs that closely resemble the graphs of the sounds that the animals generate and model these vocalisations mathematically.

School: Colaiste Muire Crosshaven
County: Cork
Teacher: M McMahon
Student(s): Hazel Keohane

SENIOR INDIVIDUAL

1300

Title: Using silica nanoparticles to

create self-sustaining antimicrobial surface coatings

Overview: My aim is to create lasting antimicrobial surfaces using silica which I will then test on bacterial cultures grown on nutrient agar.

School: Abbey Vocational School
County: Donegal
Teacher: Donna Furey
Student(s): Ciara Cannon

1301

Title: AI-energy

Overview: Creation of air-aluminium cell capable to power relative small devices or larger ones by combining the cells into battery.

School: Adamstown Community College
County: Dublin
Teacher: Sean O'Donnell
Student(s): Adrian Dragomir

1302

Title: A Surgical Forceps Incorporating Frustrated Total Internal Reflection For Energy Efficient Sealing and Cutting of Tissue Using Light Energy

Overview: A surgical forceps that incorporates optics to create conditions of frustrated total internal reflection to facilitate energy-efficient sealing and cutting of tissue using light energy.

School: Mercy Secondary School Mounthawk
County: Kerry
Teacher: Eimear Nolan
Student(s): Rachel Feeley

1304

Title: An Analysis of Routing Algorithms for Electronic Design

Overview: I am investigating the use of routing algorithms in designing computer chips and developing my own improved algorithm for use in the field

School: Scoil Mhuire
County: Clare
Teacher: Sue-Ann Sheridan
Student(s): Alanna Hayes

1305

Title: Optimising Packing Problems With Computational Analysis And Further Mathematics

Overview: An attempt to reduce excessive packaging waste through the use of a 3D scanner and using convex hulls to help find the minimum packaging needed.

School: Mercy Secondary School Mounthawk
County: Kerry
Teacher: Patrick Lyne
Student(s): Coren Hughes

1306

Title: An investigation into the optimisation of swimming tumble turns

Overview: I will calculate the criteria for an optimal tumble turn which maximises speed and minimises effort

School: St Finian's College
County: Westmeath
Teacher: Martina Roache
Student(s): Brian Gaffney

1208

Title: Testing Aspirin Project

Overview: Testing different brands of aspirin via IR, to investigate whether the price of each reflects the quantity and quality of constituents.

School: South Eastern Regional College - Bangor Campus
County: Down
Teacher: Hannah Shields
Student(s): Thomas Jake Stothers

JUNIOR GROUP

1400

Title: A Rubbish Physics Project

Overview: Creative ways to encourage scientific exploration, using repurposed products and produce a user-friendly book with step-by-step instructions for primary school students.

School: Desmond College
County: Limerick
Teacher: Donal Enright
Student(s): Padraig Doherty, Madison Reddin

1401

Title: Pollution is not the Solution

Overview: this project will review air pollution in our surrounding area we will also be using a survey to see how much pollution people producing.

School: Pobalscoil Inbhear Scéine
County: Kerry
Teacher: Sarah Abbott
Student(s): Rebecca O'Sullivan, Éadaoin Healy

1402

Title: Quantitative Water Analysis of Mulroy Bay to Measure the Efficacy of a New Sewage System.

Overview: Testing water samples before and after the operation of a new sewage treatment plant. To see if water quality has improved.

School: Loreto Community School
County: Donegal
Teacher: Siobhan Herron
Student(s): Darcy Mc Granaghan, Rose Gaffey, Ava Molloy

1403

Title: U'Ve Been Framed?
Overview: If there is a correlation between the value of sunglasses and the level of UV protection they provide.
School: Castleblayney College
County: Monaghan
Teacher: Celine Keith
Student(s): Caoimhe Quinn, Hannah Quinn

1404

Title: An investigation into atmospheric microplastic contamination in both indoor and outdoor environments in the North Cork area of Mallow and potential health risks for humans.
Overview: An in-depth analysis of airborne microplastics that we might better understand their entry into the atmosphere and subsequently enter our bodies through inhalation or ingestion.
School: St Mary's Secondary School Mallow
County: Cork
Teacher: Rory Coote
Student(s): Katie Mae O'Neill, Anna O'Brien, Aimee Renton

1405

Title: An bhfuil dírlitheoirí gruaige ag déanamh do ghruaig níos laige?
Overview: Tá muid chun éifeacht dírlitheoirí gruaige ag teochtanna éagsúla ar láidreacht gruaig a mheas
School: Coláiste Ailigh
County: Donegal
Teacher: Shane Ó Breacáin
Student(s): Saoirse Gallagher, Sienna Devine, Aimee Quinlivan

1406

Title: Cumhacht na dtonn ar Inis Meáin- An féidir le fórsa nach féidir a stopadh rud dochorraithe a bhogadh
Overview: imscrúdú a dhéanamh ar an gcaoi a bhfuil na tonnta ag athrú cruth an oileáin trí chreimeadh costa, ag faire gluaiseacht bolláin agus monatóireacht aimsire chainníochtú.
School: Coláiste Naomh Eoin
County: Galway
Teacher: Mairead Ní Fhatharta
Student(s): Chloe Ní Chonghaile, Mairtin O Conghaile, Amy Ní Chléirigh

1407

Title: Why does my hot chocolate sing?
Overview: An investigation into

the Hot Chocolate effect, when you tap the cup why does the note change?
School: Wellington College
County: Antrim
Teacher: David Cardwell
Student(s): Jackson Buchanan, Jack Davison, Maxwell Buchanan

INTERMEDIATE GROUP

1500

Title: Measure the speed of light using a microwave
Overview: To measure the speed of electromagnetic waves in the microwave portion of the spectrum by measuring the spacing between hot spots in a microwave oven.
School: Desmond College
County: Limerick
Teacher: Donal Enright
Student(s): Elissa Shiels, Caoimhe Greene

1501

Title: Bambú v ash
Overview: How do bamboo hurls compare to the traditional ash hurl
School: St Kieran's College
County: Kilkenny
Teacher: David Hennessy
Student(s): Pierce Costello, Gregg Ruane

1502

Title: Derustifier
Overview: This is an organic homemade rust remover for surface rust
School: Pobalscoil Inbhear Scéine
County: Kerry
Teacher: Sarah Abbott
Student(s): Sebastian Abram-Pavlov, Tiarnan O'Shea

1503

Title: It's Getting Hot In Here - Aerosols in the Atmosphere.
Overview: Testing different aerosol products to see which are the most harmful to the planet, what makes them harmful and can we find a substitute?
School: Pobalscoil Inbhear Scéine
County: Kerry
Teacher: Sarah Abbott
Student(s): Ciara Stauch, Laura Scanlon

1504

Title: Footwear experiment
Overview: We're experimenting does dearer or cheaper footwear affect your performance
School: St Kieran's College

County: Kilkenny
Teacher: David Hennessy
Student(s): Noah Walsh-Brennan, Michael Kenneally, Sam Hayes

1505

Title: An féidir linn foinse teasa inmharthana a ghiniúint tríd imoibrú aigéad sulfarach agus ceallalós
Overview: An sprioc atá againn ná chun a chruthú gur féidir fuinneamh glan a fháil ón imoibrú idir ceallalós agus aigéad sulfarach. Ní scaoiltear CO₂.
School: Coláiste Íosagáin
County: Dublin
Teacher: Sophie Ní Bheacháin
Student(s): Michelle Riordan, Shona Ní Shionóid, Béibhinn Duffy

1506

Title: Carbon Scrubber
Overview: A device that will absorb carbon dioxide fumes that are emitted from car exhaust pipe using Soda Lime and Olivine Sand
School: Clonakilty Community College
County: Cork
Teacher: Patrick O Keffe
Student(s): Jack Tobin, Matthew Eke, Ben Hastings

1507

Title: Toilleadh Oibriú Fisiceach Déagóirí Fireanna a Chuir i gComparáid lena Chéile coibhneasta le hairde agus meachain
Overview: Ba mhaith linn foirmle a fháil a thabharfaidh toradh cruinn dúinn mar gheall ar conas gur féidir toilleadh buachaillí a chur i gcomparáid lena chéile
School: Colaiste An Phiarsaigh
County: Cork
Teacher: Caoimhín Ó Buachalla
Student(s): Seán Mac Craith, Stiofan de Búrca, Liam Abernethy

1508

Title: Cycle 4 Charge
Overview: We cycle a bike to create kinetic energy, we then change this energy into electrical energy, allowing us to charge a phone sustainably
School: Sacred Heart Secondary School
County: Cork
Teacher: Claire Holland
Student(s): Sarah Harte, Meabh O Sullivan

1509

Title: Identifying patterns in Top Hit music using Fourier analysis
Overview: Using Fourier analysis to investigate similarities between number one hit pop songs and within genres.
School: Coláiste Choilm
County: Cork
Teacher: Paudie Scanlon
Student(s): Fiona O Sullivan, Siobhán Carter

1510

Title: Under the lamp! An investigation into the impact of nail salon UV lamps in causing skin damage and comparing protective methods to provide UV light protection.
Overview: We will attempt to find out if people who are exposed to UV light getting their nails done are more likely to get skin damage.
School: Rockford Manor Secondary School
County: Dublin
Teacher: Kelly Ryan
Student(s): Maria Talhi, Rosheen Sharma

1511

Title: Driving to Save Fuel
Overview: Using map contour lines to determine the optimal speed for the best fuel economy
School: Loreto College
County: Westmeath
Teacher: Sarah Moran
Student(s): Muireann Donohue, Catriona Ruane

1512

Title: Mata sa léim cuaille
Overview: Ag tomhais cad é an poll is fearr gur féidir duine a úsáid chun an léim is airde a fháil ag braith ar na athróga
School: Gaelcholáiste Charraigh Uí Leighin
County: Cork
Teacher: Seán O Finn
Student(s): Gráinne Cronin, Alex Neff, Dylan Ó Muirí

1513

Title: Clash of the Ash
Overview: Best Alternative materials for Hurleys due to the disease that is killing ash. Which is the most common material for Hurleys
School: Pobalscoil Inbhear Scéine
County: Kerry
Teacher: Sarah Abbott
Student(s): Ollie Shea, Jack Atlantic, Jack Tangney

1514

Title: A Comparative Study of the Levels of Electrolytes in Sports Drinks and the Impact they have on Physical Performance

Overview: The aim of our project is to measure the levels of electrolytes in different sports drinks and see if electrolytes have an impact on us.

School: Cistercian College

County: Tipperary

Teacher: Jennifer Denny

Student(s): Glen Elliott, Paul MacCarthy, James Morkan

1515

Title: Does the different types of kicking tee affect the flight of the ball?

Overview: We are seeing the difference between kicking tees and seeing the difference in the height, the distance and the speed

School: Cistercian College

County: Tipperary

Teacher: Jennifer Denny

Student(s): Fionn Carney, Sean Killeen, Billy Hayes

1516

Title: Living Light: how modern light affects our lives

Overview: Studying modern light sources eg screens and bulbs and looking at the impact of modern lighting on our eyesight, mood and sleep patterns.

School: Summerhill College

County: Sligo

Teacher: Deirdre Feeney

Student(s): James Mackey, Aodhan Shovelin

1517

Title: Sparky sports

Overview: To create a kinetic powered powerbank to use during sports training to see if it will produce enough energy to charge our phones.

School: Loreto High School

County: Dublin

Teacher: Eimear Maloney

Student(s): Laura Kiely, Ella Cotter, Lucy Mellon

1518

Title: Radon Revelations: An investigation to create public awareness of the relationship between radon levels and ventilation in homes in Ireland

Overview: We aim to investigate the relationship between radon levels and ventilation in homes and to enhance public awareness across Ireland, given Ireland's

current retrofitting targets.

School: Roscommon Community College

County: Roscommon

Teacher: Niamh Conway

Student(s): Bailey Kelly, Cian Escosio

1519

Title: "Back To Basics". A study into the ineffectiveness of the current PH scale and our efforts to find a new method of calculating PH.

Overview: An investigation into the accuracy of the current PH scale and our efforts to create a superior scale to calculate PH.

School: St Josephs College

County: Tipperary

Teacher: Mary Gorey

Student(s): Lisa Carr, Aoife Kennedy, Sarah Brophy

1520

Title: The New Sliotar

Overview: To slow down the speed of the sliotar so it cannot be hit as far without changing its dimensions including weight.

School: St Josephs College

County: Tipperary

Teacher: Mary Gorey

Student(s): Emer Moroney, Chloe Whyte, Caoimhe Delaney

1521

Title: Nature within the walls

Overview: We want to investigate natural insulation materials in a designed cavity wall.

School: Abbey Community College

County: Roscommon

Teacher: Damien Coman

Student(s): Caoimhe Reilly, Saoirse Supple

1522

Title: A chemical examination of the biological effects of alcohol-based hand sanitizers on overall health.

Overview: In this project we will investigate the potential health hazards associated with persistent use of alcohol-based hand sanitizers in the long term.

School: Athlone Community College

County: Westmeath

Teacher: Emma Buckley

Student(s): Daniel Sierpinski, Matthew Parker

1523

Title: Turn it off or keep it on - which is more energy efficient

Overview: We will examine

whether or not it's more energy efficient to keep the heat on at a lower temperature or turn it on and off.

School: Laurel Hill Secondary School FCJ

County: Limerick

Teacher: Eoghan O'Brien

Student(s): Maebh Collins, Vivian Amaeze, Aisling Farrell

1524

Title: Will the energy output of a hydrogen fuel cell charged by hydrogen and oxygen extracted from water meet the energy requirements to power a small scale wheelchair.

Overview: We plan to investigate if the energy output of a hydrogen fuel cell meet the energy requirements of 2 small motors which power a wheelchair.

School: Cistercian College

County: Tipperary

Teacher: Jennifer Denny

Student(s): Dylan Cafferty, Lukis Declair, Denny O'Hara

1525

Title: Do Alpha Particles Behave as Waves?

Overview: We will test whether alpha particles behave as waves or Newtonian particles using a modified Double Slit experiment.

School: Greystones Community College

County: Wicklow

Teacher: Zoe Devlin

Student(s): Jack Walsh, Oisín O'Brien, Jack Killilea

1526

Title: Using piezoelectric crystals to generate electricity

Overview: Our project is based on the unique attributes of piezoelectric crystals, which are materials that can convert mechanical stress into an electric charge.

School: Mercy Secondary School Mounthawk

County: Kerry

Teacher: Eimear Nolan

Student(s): Cian Hennessy, Fionn O'Brien

1527

Title: Developing a device for economically viable desalination of seawater for individuals in developing countries.

Overview: My aim is to create a device that will efficiently desalinate seawater and will be economically viable for individuals in developing countries.

School: Oatlands College

County: Dublin

Teacher: Avril Gaynor

Student(s): Oisín O'Neill, Darragh Henderson

1528

Title: An Investigation into the Efficiency of Renewable Energy Sources

Overview: Experimenting the efficiency of solar and wind energy, as well as researching the cost of production and comparisons with non-renewable energy resources.

School: Loreto College

County: Dublin

Teacher: Katie Kinkaid

Student(s): Saranne Fajou, Mia Hodson, Ellen McAdam

1529

Title: Coffee fuel: biofuel made from used coffee grounds

Overview: We'll investigate if coffee bean waste (coffee grounds) can be converted into a biofuel, producing a more sustainable and less harmful fuel for our planet

School: Scoil Mhuire

County: Roscommon

Teacher: Mairead Glynn

Student(s): Darragh Hoare, Tadhg Carroll

1530

Title: An bfuil tionchar ar cruth cosantaí cósta eagsúla ar frithcathreamh tonnta?

Overview: Chruithanna éagsúla a chur i gcomparáid lena chéile ó thaobh ifeachtach tonnta a frithcathreamh ón gcósta

School: Gaelcholáiste Phort Láirge

County: Waterford

Teacher: Cionnaith Ó Dubhthaigh

Student(s): Sarah Blackett, Erica Ni Sheaghda, Alex Mac an Bhaird

1531

Title: An investigation into the quickest path of an object under gravity

Overview: To investigate if the quickest path is to follow a cycloid curve and to investigate other curves

School: Newbridge College

County: Kildare

Teacher: Dermot Walsh

Student(s): James Brophy, Ruby Hennessy, Louis Hayden

1532

Title: Are eco-friendly,

sustainable make-up brands the future of beauty products?

Overview: We're hoping to compete with our chemical project. Our project is testing the ingredients in environmentally friendly makeup the non-environmentally friendly makeup.

School: John The Baptist Community School

County: Limerick

Teacher: Jennifer Ahern

Student(s): Aisling Ennis, Roisin Murphy

1533

Title: Mobile phone coverage and the topography of North Clare

Overview: We are looking at the mobile phone coverage in an area of North Clare and how it is affected by the topography of the area

School: Mary Immaculate Secondary School

County: Clare

Teacher: John Sims

Student(s): Aisling Vaughan, Alana Mckinnon

1534

Title: Chemical Hand Warmer

Overview: Our project is a Chemical project where we are making a homemade Chemical hand warmer.

School: Pobalscoil Inbhear Scéine

County: Kerry

Teacher: Sarah Abbott

Student(s): Cathal Kelleher, Ben O'Callaghan, Mort O'Shea

1535

Title: Investigating the Effect of Different pHs on the Use of Hydrogels as Drug Carriers Part II

Overview: This project investigates the effect of different pHs that would be found in the digestive system on the release of drugs in hydrogels

School: St Mary's College

County: Derry-Londonderry

Teacher: Ann Blanking

Student(s): Nikitta Morrison, Becca Connolly

1536

Title: An investigation into the quantity of protein in protein supplements

Overview: The aim of our project is to investigate the quantity of protein in different protein supplements to see if the packaging information is truthful.

School: Loreto Secondary School

County: Kilkenny

Teacher: Brendan Williams

Student(s): Ciara Dunne, Aoife Shealy, Emily Smith

1537

Title: To investigate how the reservoir height affects the hydroelectric energy production

Overview: We will be making a model of a dam to investigate the locations where the pressure and potential to generate energy is at its greatest

School: Scoil Pól

County: Limerick

Teacher: Jennifer Kelly

Student(s): Eoin O Leary, Shane Tobin, Paul Sheahan

1538

Title: Wide Smiles Deep Graves: A chemical analysis of toothpaste to uncover the presence of Titanium Dioxide as a dangerous additive

Overview: We want to investigate a toxic food additive known as titanium dioxide or Ci 77891 and the dangers of ingesting this substance present in toothpaste.

School: Colaiste Muire Crosshaven

County: Cork

Teacher: Matilda Miniussi

Student(s): Seanán McQuillan, Aaron Kearney,

1539

Title: An investigative study into whether artificial ultraviolet light (UV) aids the process of photodegradation causing plastic to degrade quicker

Overview: We are going to investigate if Ultraviolet Light influences the rate of degradation faster on the breakdown of plastic compared to natural degradation

School: John The Baptist Community School

County: Limerick

Teacher: S Walsh

Student(s): Kate O'Dwyer, Karen Cusack, Karen Harty

1540

Title: Understanding the chemical processes in photosynthesis

Overview: Using chemical methods to investigate the chemistry of chlorophyll in photosystem II

School: Dominican College

County: Wicklow

Teacher: Brian O Reilly

Student(s): Keelin Campbell

Rawson, Rosie Armstrong,

1541

Title: Fuelling Newpark with food waste

Overview: Using food waste to create Biofuel. We will build a school biodigester turning our waste food into free biogas, saving us money!

School: Newpark Comprehensive School

County: Dublin

Teacher: Karen Cashman

Student(s): Natan Gorzelanczyk, Tom Lenehan, Allegra Zipser

1542

Title: Are you being charged?

Overview: To compare OEM (original equipment manufacturer) chargers to alternatives, in terms of cost, safety, temperatures, power and running costs.

School: Scoil Pól

County: Limerick

Teacher: Aisling O'Connor

Student(s): Evan Lowe, David O'Brien,

1543

Title: Sustainable Cleaning Detergent

Overview: To experiment with different cleaning detergents to make a sustainable cleaning detergent with as much sustainable ingredients as possible

School: Kinsale Community School

County: Cork

Teacher: Aishling Kelleher

Student(s): Anthony Coughlan, Ellie Coughlan,

1544

Title: How does your Food and Water Intake Affect your Physical Performance?

Overview: This project will test how different diets affect our physical performance.

School: Meánscoil na mBráithre Criostaí

County: Kilkenny

Teacher: Eanna Collins

Student(s): Cathal O'Reilly, Shane Phelan,

1545

Title: Designing an olivine filtration system to reduce domestic CO2 emissions from typical household chimneys

Overview: Our project will develop a carbon dioxide filtration system to reduce

emissions from chimneys using olivine. Olivine is a magnesium iron silicate and is the component the upper

School: St Aloysius College

County: Cork

Teacher: Ryan Gallagher

Student(s): Ellen O'Callaghan, Aobh Mohally, Sarah O'Connell

1546

Title: How to accelerate the production of S.A.F. (Sustainable Aviation Fuel)

Overview: We are looking into how to accelerate production of S.A.F so it can be used worldwide and for commercial planes

School: St Mary's High School

County: Cork

Teacher: Veronica McCourt

Student(s): Amelia Cooper, Alannah Hannigan, Annette Walsh

SENIOR GROUP

1600

Title: Investigating Generalisations of Pythagoras' Theorem Using Iterated Function Systems and Hutchinson Attractors

Overview: One can prove Pythagoras theorem as a consequence of the self-similar exact covers of right-angled triangles. Are there other structures satisfying this property?

School: Killarney Community College

County: Kerry

Teacher: Maire Spillane

Student(s): Liam Waldron, Luke O'Sullivan, Rachel Griffin

1601

Title: Factors Affecting Muon Flux Density

Overview: We built a muon flux detector, and will investigate factors affecting flux density.

School: Mungret Community College

County: Limerick

Teacher: Simon Hill

Student(s): Aaron Waldron, Conor Quinlivan

1603

Title: Solving Reaction-Diffusion Equations - Reflections on Some Mathematical Problems Arising in Alan Turing's Theory of Morphogenesis

Overview: Turing's theory of how shapes and patterns are formed in animals and plants contains



equations that are difficult to solve. Are exact solutions possible?

School: Christian Brothers, Synge St.

County: Dublin

Teacher: Shane Freeman

Student(s): Mahdi Abass, Abdullah Abid

1604

Title: Oxidation Of Apples: Does the pH of an Apple Change as it Ripens?

Overview: An investigation of the effect of the oxidation process on the pH of apples.

School: Coláiste Chú Chulainn

County: Louth

Teacher: Deirdre Dunford

Student(s): Ayodeji Sofola, Breanna Winters

1605

Title: How we could have saved the Pirates! An analysis of the best cooking methods to save Vitamin C

Overview: An investigation into the factors affecting Vitamin c yield in potatoes. By Iodine titration of solutions of different variables against a control solution.

School: Coláiste Muire Máthair

County: Galway

Teacher: Anthony Carey

Student(s): Liam Murphy, Cathal O'Grady-Corcoran

1606

Title: Can Luminol determine iron concentration in water?

Overview: In this project we will be investigating if luminol can determine iron concentration in ionised water.

School: Loreto College

County: Dublin

Teacher: Katie Kinkaid

Student(s): Beth Lynam, Anna Laura Pisanelli Messina

1607

Title: An investigation into the biomechanics of heading a football with implications for the design of protective, wearable technology for measuring and recording cumulative non-concussive cranial impacts.

Overview: To study the biomechanics of heading a football and develop wearable technology to monitor the frequency, severity and implications of non-concussive cranial impacts that result.

School: St Mary's Secondary School Mallow

County: Cork

Teacher: Rory Coote

Student(s): Lydia O Leary Kelleher, Sophie Creedon

1608

Title: Realities of Imaginary Numbers

Overview: The goal of our experiment was to discover new applications of Complex Numbers in the real world

School: Meánscoil na mBráithre

County: Clare

Teacher: Sean Murphy

Student(s): Daniel Vaughan, Rory Linnane

1609

Title: Treatment of myocardial infarction using magnetic fields

Overview: Applying magnetic fields to blood flow to reduce blood viscosity and risk of blockages in blood vessels that can lead to myocardial infarction.

Teacher: Donal Enright

School: Desmond College

County: Limerick

Student(s): Ethan Kirwan, Jack Kelly

1610

Title: Universe's Foundation

Overview: Detecting, sub-atomic particles, Muons on a high-altitude balloon and measuring the amount detected in relation to altitude.

School: Our Lady's Bower

County: Westmeath

Teacher: Samantha Fox

Student(s): Xhesika Gica, Ritcha Lee

Young Scientist & Technology of the Year Limited

The BT Young Scientist and Technology Exhibition is the main activity of a charitable trust, Young Scientist and Technology Exhibition Limited. The charitable trust which has been in existence since 2003 and was set-up in order to create a separate corporate entity to protect and act as custodian for the YS&TE. The Company aims to build on the successful track record of the Young Scientist and Technology Exhibition ("Exhibition") and maintain and develop the integrity and identity of the Exhibition.

Development of Internationalisation of Young Scientist & Technology of the Year

The trust has worked with some important entities outside and has granted licensing arrangements to stakeholders in Tanzania, Kenya, United Arab Emirates and Jordan to allow them to operate the Young Scientist model in these countries.

The first Young Scientist Tanzania took place in 2011. In 2018 the first Young Scientist Kenya was held in Nairobi and in 2019 the first United Arab Emirates edition took place. A pilot national Jordan Young Scientist and Technology initiative was launched in June 2022.



**YOUNG SCIENTISTS
TANZANIA**



**JORDAN YOUNG SCIENTIST
علماء الغد**



**YOUNG SCIENTISTS
KENYA**



JUNIOR INDIVIDUAL

2100

Title: Sláinte-Link: A Web3 based secure medical records system.

Overview: A decentralised application based on blockchain technology that securely stores medical records, preventing ransomware and other cyber attacks from taking the data.

School: Celbridge Community School

County: Kildare

Teacher: Zita Ann Murphy

Student(s): Addison Carey

2101

Title: Iniúchadh ar claontacht algartam I gcoráis intelleacha saorga (An investigation into Algorithmic bias in artificial intelligence systems)

Overview: Iniúchadh ar claontacht algartam. Tá sé seo fadhb ag meadú sa domhan teicneolaíocht. Tarlfaíonn an fadhb seo nuair mar timpiste cuireann ríomhchlairithe eolas claontacht isteach sa ríomhaire.

School: Gaelcholáiste Charraig Ui Leighin

County: Cork

Teacher: Seán O Finn

Student(s): Cian Spillane

2102

Title: Back Air Gravitational Support -BAGS

Overview: A smart bag that alleviates the weight issues kids are experiencing with heavy school bags.

School: Abbey Vocational School

County: Donegal

Teacher: Donna Furey

Student(s): Michael Thomas Masterson

2103

Title: Reduce Emergency Department Waiting Times using AI to read X-rays

Overview: Emergency Department waiting times average over 11 hours. Could Machine Learning auto-diagnose X-Rays to reduce waiting times and workload on radiologists.

School: Belvedere College S.J

County: Dublin

Teacher: Liam Hennelly

Student(s): James Molloy

2104

Title: Creating New AI Proof Captchas

Overview: I plan to program new captchas to protect websites from ai that are easier to understand for

humans yet even more secure from artificial intelligence.

School: Gonzaga College

County: Dublin

Teacher: Stephen McGrogan

Student(s): Joe Molloy

2105

Title: An investigation into the impact of kinetic flooring as a renewable energy source in schools.

Overview: I aim to investigate the viability of kinetic flooring as a source of renewable energy in school.

School: Kinsale Community School

County: Cork

Teacher: Ellen McCarthy

Student(s): Oscar Green

2106

Title: The Normandy Landings: As They Happened

Overview: A look into the Normandy landings and the following campaign known as the Normandy breakout

School: Meánscoil na mBráithre

County: Clare

Teacher: Sean Murphy

Student(s): Oisín Coughlan

2107

Title: Watch Out! helping to detect unnoticed falls amongst the aged

Overview: Watch made to prevent undetected falling, when falling is detected an emergency contact number is alerted if not answered the emergency services are alerted.

School: Coláiste Muire Máthair

County: Galway

Teacher: Anthony Carey

Student(s): Aoibheann O'Grady-Corcoran

2108

Title: Landing rockets with rocket stabilization system

Overview: I've built a stabilization system for rockets to land. I've built avionics to control stabilization systems. I'll launch a model rocket with it to test

School: Castleknock College

County: Dublin

Teacher: Sarah Anne Fitzpatrick

Student(s): Basil Amin

2109

Title: An gcuireann claonadh sa mheán isteach ar torthaí AI bunaithe ar íomhánna cosúil le Google Lens?

Overview: Táim chun fáil amach an bhfuil claonadh i dtorthaí AI, cosúil le GoogleLens, i dtreo ábhair Meiriceánach, de bharr níos mó meán Meiriceánach na

Éireanneach.

School: Gaelcholáiste Mhaigh Nuad

County: Kildare

Teacher: Maria Ní Ghóillidhe

Student(s): Aoibhinn Ní Chonnalláin

2110

Title: Pet Tracker App

Overview: This app would notify you when you have to give your pets food & water.

School: Colaiste Mhuire,

County: Westmeath

Teacher: Eva Acton

Student(s): Darragh Cory Filtness

2111

Title: SteriAir - A portable UV sterilising breathing pack

Overview: Compact and environmentally friendly UV LEDs in a portable air mask to kill harmful respiratory germs. Based on award winning project scientific results from 2022.

School: Kinsale Community School

County: Cork

Teacher: Catherine Coughlan

Student(s): Conan O'Brien

INTERMEDIATE INDIVIDUAL

2200

Title: Sustainable Calculator

Overview: A barcode scanning app that scores products based on their 'sustainable impacts' to help consumers make better informed choices when buying products.

School: Glanmire Community College

County: Cork

Teacher: William Horgan

Student(s): Toby Tangney

2201

Title: Statistical Investigation and Development of an Adolescent Digital Communications Watchdog

Overview: A statistical investigation of threats posed to adolescents online, then using the data to create a solution by developing, coding and testing an algorithm.

School: Coláiste Choilm

County: Cork

Teacher: Karina Lyne

Student(s): Anne O'Donovan

2202

Title: Investigating The Viability of Micro-Level Wind Generation

Overview: An investigation into the viability of micro-level wind generation as a solution for offsetting the effects of the current energy and cost of living crisis.

School: Colaiste Chiarain

County: Limerick

Teacher: Edel Farrell

Student(s): Seán O'Sullivan

2203

Title: Whistleblower

Overview: Whistleblower is an app designed to give women a platform in which they can protect themselves with.

School: Coláiste Nano Nagle

County: Limerick

Teacher: Samantha Prior

Student(s): Flourish Olushola

2204

Title: Self-Supervised Cross-Modal Representation Learning

Overview: Exploring the use of self-supervised learning in the field of medical image interpretation and clinical diagnosis.

School: St Andrews College

County: Dublin

Teacher: Emily Casey

Student(s): Weichen Huang

2205

Title: Can Artificial Neural Networks Aid Hearing Impaired Individuals to Lipread?

Overview: I intend to use neural network technology to build a model in Python which will recognize words spoken from a dataset from visual input alone.

School: Mary Immaculate Secondary School

County: Clare

Teacher: Máire Morrissey

Student(s): Fionn Rush

2206

Title: Intelli-Pantry

Overview: My project is a technological invention that reduces the amount of food wasted.

School: SEK-Dublin International School

County: Wicklow

Teacher: Carla Soledad Zucchetti

Student(s): Smaran Pandey

2207

Title: Can Magnets be used to Fuel Cars?

Overview: I plan to investigate, through practical experiments, the relation between opposite magnets and if the repellent force present can be used to power vehicles sustainably.

School: Athlone Community College

County: Westmeath

Teacher: Catherine O'Meara

Student(s): Heather McDermott

2208

Title: An investigation into the use of external electrical impulses in the treatment and management of Raynaud's disease

Overview: This projects investigates the use of external electrical impulses in the treatment and management of Raynaud's disease and develops a 3D printed Raynaud's alleviation device.

School: Salesian Secondary College

County: Limerick

Teacher: John O'Flynn

Student(s): Sadie Loftus

2209

Title: NativeJS - simplifying microcontroller programming

Overview: I aim to create a way to run JavaScript on microcontrollers efficiently to make development easier and reduce code duplication.

School: St Kilian's Deutsche Schule

County: Dublin

Teacher: Donal Earls

Student(s): Piotr Stelmaszek

2210

Title: A multifunctional device to assist people with ASD

Overview: We plan to create a device that assists people with asd (Autism Spectrum Disorder) to remain calm in stressful or overstimulating situations

School: Mercy Secondary School Mounthawk

County: Kerry

Teacher: Eimear Nolan

Student(s): Fintan Grimes

2211

Title: Investigating How Paste Extrusion can be used to make 3D Printing more Environmentally Friendly

Overview: I will investigate how paste extrusion 3d printing can be used to recycle materials (such as paper), and use them as an alternative to plastic.

School: Mercy Secondary School Mounthawk

County: Kerry

Teacher: Eimear Nolan

Student(s): Kai Seino

2212

Title: Low-cost bilingual computing for the education sector

Overview: The use of inexpensive single-board computers to provide equal ICT opportunities to all children in Ireland.

School: Pobalscoil Ghaoth Dobhair

County: Donegal

Teacher: Siobhan Uí Shearcaigh

Student(s): Conall Kavanagh

2213

Title: Engine tuning and it's Benefits

Overview: this project investigates the different types of engine tuning, how they work and are they beneficial to the environment

School: Sacred Heart Secondary School

County: Offaly

Teacher: Laura Walsh

Student(s): Danielle Fogarty

2214

Title: MentalMap

Overview: MentalMap is a mental health app that includes a journal and other features to help ease the backlog of Ireland's mental health system

School: Christ King Girls' Secondary School

County: Cork

Teacher: Denise Quilter

Student(s): Caoimhe Buckley

2215

Title: Analyze the point cloud map fusion algorithm of multi-UAV VSLAM in dynamic scenes and try to optimize the solution

Overview: Research visual SLAM technology of UAV platform based on camera sensor, make assumptions for the defects of traditional algorithms, solve processing problem of moving targets

School: Rockwell College

County: Tipperary

Teacher: Helen Murray

Student(s): HongYu Chen

2216

Title: エレキタイプ - A Hybrid Japanese Typewriter

Overview: A hybrid device for the Japanese language that combines a traditional typewriter experience with modern input technologies

School: Stratford College

County: Dublin

Teacher: Helen O'Kelly

Student(s): Joseph Mudrak

2217

Title: Commercialising Industrial robotic arm technology

Overview: This project aims to bring current advanced robotic arm technology to the consumer, at a much lower cost with the help of 3d printing innovations.

School: Stratford College

County: Dublin

Teacher: Helen O'Kelly

Student(s): Liam Fuller

2218

Title: Moveable calf crush

Overview: A moveable crush on wheels that allows farmers to tag, feed, inject, identify, move/hold Etc. safely and easily making both the calf and farmers life easier

School: Árdcoil Uí Urmoltaigh

County: Cork

Teacher: Paul Bouchier

Student(s): CJ Bryan

2219

Title: BSS - Bike Safety System

Overview: A safety system for cyclists using vehicle tracking to detect vehicles behind a cyclist and narrowband technology to notify a emergency contact in an emergency

School: Colaiste Mhuire,

County: Westmeath

Teacher: Eva Acton

Student(s): Killian McGrath

2220

Title: Statistical model to improve handwriting

Overview: I will build an app with an image recognition model that will score handwriting and identify ways to help the user improve their handwriting

School: Home School

County: Dublin

Teacher: Orna Collins

Student(s): Fionnán Ó Baoighill

2221

Title: Virus Spread, A Model and Simulation

Overview: Making a simple simulation of a virus spreading through a population and using it to answer questions about the effectiveness of social distancing.

School: Colaiste Sheosaimh

County: Galway

Teacher: Emma Costello

Student(s): Samuel Godswill

2222

Title: Creating a secure and accessible healthcare platform

Overview: A secure and accessible healthcare platform utilising blockchain technology

School: Confey Community College

County: Kildare

Teacher: Sean Murtagh

Student(s): Shaunak Mohapatra

2223

Title: 'SouthGain' reducing your energy bill through planning south facing windows during renovation

or construction

Overview: 'SouthGain' is an application that calculates the solar gain and solar loss of your windows and doors. It exhibits how you can utilize solar gain

School: Carrick-on-Shannon Community School

County: Leitrim

Teacher: Anna-Marie Kelly

Student(s): Hanora Brady

SENIOR INDIVIDUAL

2300

Title: Upstairs/ Downstairs, enabling people to navigate stairs more easily.

Overview: Device that can be retrofitted to any standard stairs banister to enable elderly and those with mobility issues navigate the stairs with ease in safety.

School: Desmond College

County: Limerick

Teacher: Donal Enright

Student(s): Edel McMahon

2301

Title: DermAI- Deep Neural Network Based Detection Tool for the Classification of Benign and Malignant Skin Lesions in Aid of Early Prognosis

Overview: My project is a CNN trained and built to be tool to detect whether or not a skin lesion is skin cancer or not.

School: Dundalk Grammar School

County: Louth

Teacher: Shane Lynch

Student(s): Solomon Doyle

2302

Title: Hydrogen Powered Viscous Boundary Layer Jet Engine Concept

Overview: A jet engine concept based around the tesla turbine, that uses the principle of the viscous boundary layer.

School: Blackwater Community School

County: Waterford

Teacher: Paul Joyce

Student(s): Tiernán Stevenson

2303

Title: A wind turbine design that is better for the environment and more cost effective.

Overview: I'll create an eco friendly wind turbine design from wood. I will build the generator for my home turbine. And full scale prototype blades.

School: Mohill Community College

County: Leitrim

Teacher: Natalie Tobin

Student(s): Sara O'Beirne

2305

Title: Detecting and responding to negative comments on social media
Overview: A sentiment analysis model that evaluates the attitude of comments on social media and a chatbot system that responds to severely negative users.

School: Sandford Park School Ltd
County: Dublin
Teacher: Dana Kilroy
Student(s): Yuan Li

2306

Title: Project Preserve
Overview: Project Preserve aims to address the upcoming challenges of global warming by incorporating an advanced AI algorithm to monitor plant resource usage and optimise efficiency.

School: Castleknock College
County: Dublin
Teacher: Tom Tierney
Student(s): Sachin Mahesh

2307

Title: Mathematics can keep us honest
Overview: Automated data and cloud storage systems require good data practice. I will design and develop mathematical methods to test for data integrity.
School: Coláiste Iognáid S.J.
County: Galway
Teacher: Eimear Hennelly
Student(s): Diarmuid Hayes

2308

Title: Music of the Universe: An algorithmic comparison of classical pieces to computer formalisation of galaxy catalogues
Overview: In this project I will use machine learning tools to formalise music and galaxy photographs to analyse their shared mathematical features
School: St Andrews College
County: Dublin
Teacher: Emily Casey
Student(s): Matthew O'Regan

JUNIOR GROUP

2400

Title: A Sustainable Method Of Storing Wind Energy For Days When Wind Is Not Available
Overview: Creating a sustainable method of storing excess wind energy for days with no wind using a hydro-electric battery.
School: Gonzaga College
County: Dublin
Teacher: Stephen McGroggan
Student(s): Eoin O'Herlihy, Oscar Malone

2401

Title: Motion sensor wristband to help the visually impaired cross the road
Overview: We are making a sensor wristband that will detect oncoming cars to help people who are visually impaired cross the road in traffic.
School: Presentation College
County: Galway
Teacher: John Toner
Student(s): Eve Kennedy, Alva Mullin, Ava Brennan

2402

Title: Keepin' it halal
Overview: We want to make an app that will scan barcodes of various food products to check if they are haram or halal.
School: Coláiste Nano Nagle
County: Limerick
Teacher: Samantha Prior
Student(s): Laiba Mir, Wagma Jan, Lana Qaddoura

2403

Title: Smart line – An automatic washing line to assist with the cost of living.
Overview: An automatic washing line, which is cost effective, convenient, and environmentally friendly. A moisture sensor will be fitted to ensure clothes are covered during precipitation.
School: St Ciaran's College
County: Tyrone
Teacher: Lauren Teague
Student(s): Liam Donnelly, Shane McElvogue, Jack McNelis

2404

Title: Autodoor.
Overview: This project assists the visually impaired to easily open doors. We aim to do this using a wristband for ease of access.
School: Colaiste Mhuire,
County: Westmeath
Teacher: Eva Acton
Student(s): Cillian Newcombe, Matthew Dugela

2405

Title: AEC le haghaidh AED (Aláram atá cost-éifeachtúil le haghaidh AED poiblí)
Overview: Chun aláram cost-éifeachtúil a chuir ar difhribileoir poiblí chun téacs a sheoladh chuig na CFR, nuair a osclaítear an cófra AED, ag tabhairt freagair láithreach.
School: Gaelcholáiste Mhaigh Nuad
County: Kildare
Teacher: Maria Ní Ghóillidhe
Student(s): Ethan Sykes,

Odhran Melia, Cathal O Cuinn

2406

Title: Buy or Rent? A predictive analytical algorithm to predict house prices using machine learning.
Overview: We are developing a machine learning algorithm that can predict house and rent prices.
School: Coláiste Phádraig CBS
County: Dublin
Teacher: Kevin Carey
Student(s): Hazem Ahmed, Muhammad Billal Ali Khan

2407

Title: Creating a Portable Gadget that Generates Renewable Electricity
Overview: Our project aims to create green energy from basic occurrences in daily life.
School: Gonzaga College
County: Dublin
Teacher: Stephen McGroggan
Student(s): Hugo Reddy, Ciarán Bowen

2408

Title: Using machine learning for biome recognition on Earth and beyond.
Overview: We have developed a machine learning program that can identify different biomes on earth and potentially other celestial bodies
School: St Joseph's Secondary School
County: Dublin
Teacher: Daryl Dunne
Student(s): Kamaya Gogna, Allison Joyce

2409

Title: From a Distance - A Risk Assessment Machine Learning Algorithm for Vulnerable Adults
Overview: A machine learning algorithm and mobile App to baseline normal behaviour for a vulnerable adult and inform caregivers of potential risk.
School: Our Lady's Bower
County: Westmeath
Teacher: Julie-Anne Greaney
Student(s): Emma Fallon, Sofia McGorisk

2410

Title: Design and develop a UPS (Uninterrupted Power Supply) using recycled laptop batteries that can be used to backup domestic appliances.
Overview: To investigate if we could create a simple UPS device using batteries recycled from old laptops, that could backup a fridge

during predicted brownouts
School: Presentation College
County: Galway
Teacher: Deirdre Halleran
Student(s): Gearoid Halleran, Daire Hanrahan

2411

Title: Using machine learning and classification algorithms to improve the UV index formula.
Overview: Using machine learning and classification algorithms to improve the UV index formula by taking into account cloud types from satellite images.
School: St Joseph's Secondary School
County: Dublin
Teacher: Daryl Dunne
Student(s): Éabha McBride, Layla Nolan,

2412

Title: Ag iompar sonraí ar thonnta micreach ó Inis Meáin chuig longa i bhfad i bhfarraige
Overview: Is mian linn easnamh i gcumarsáid sonraí muirí a réiteach agus feachas a ardú ar seo trí malairt teicneolaíocht ar shatailít nó ceallacha nach n-oireann.
School: Coláiste Naomh Eoin
County: Galway
Teacher: Mairead Ní Fhatharta
Student(s): Ellie-Mai Moroney, Saoirse Coughlan, Solomon Gleeson

INTERMEDIATE GROUP

2500

Title: A.A.H.M (Anxiety Attack Heart Monitor)
Overview: Our project is a monitor that senses incoming anxiety/panic attacks of students in class, by observing the heart rate and the movement of the individual.
School: Scoil Mhuire gan Smal
County: Cork
Teacher: Robert Nolan
Student(s): Katelyn Dineen, Ella Lesniak, Michelle O'Shea

2501

Title: ADHD Academy: A website that can improve the attention span of students with ADHD
Overview: An educational website intended for people with ADHD that struggle to keep focused when they are trying to learn.
School: Coláiste Phádraig CBS
County: Dublin
Teacher: Kevin Carey
Student(s): Joel Emmanuel, Rohit Tummala, Eamon Jaber

2502

Title: Investigation into the optimum design of heat pump fan technology for the Irish climate
Overview: We will be investigating, analysing and optimising the design of air to water heat pump fan technology for the Irish climate.

School: Coláiste Choilm
County: Cork

Teacher: Paudie Scanlon
Student(s): Jerry O Mathuna, Alex O Riordain

2503

Title: Visualising the effects of aerodynamics and drag on motor vehicles inside a wind tunnel
Overview: We will test different aerofoil shapes under various wind strengths inside a wind tunnel. After measuring their turbulence and lift, we will graph our findings.

School: Castleknock College
County: Dublin

Teacher: Tom Tierney
Student(s): Stephen Harcourt, Devesh Reddy, Samuel Thomson

2504

Title: Construction and Evaluation of a DIY Air Filter
Overview: We will make and test our own affordable DIY air filter and compare it to a commercial HEPA filter.

School: St Mary's Secondary School Macroom
County: Cork

Teacher: Jennifer Butler
Student(s): Holly Wenger, Leah Coakley

2505

Title: The Wrist Assist
Overview: We programmed 2 micro bits to send and receive icons via radio waves, to help solve issues in difficulty hearing instructions during certain sports.

School: Tullamore College
County: Offaly

Teacher: Noreen Flynn
Student(s): Isobel McAuliffe, Eva Flynn

2506

Title: To Dye or Not to Dye
Overview: Shows the affects of hair dye
School: Boyne Community School
County: Meath
Teacher: Maria Byrne
Student(s): Amber Rose Ratcliffe, Sophie Rispin

2507

Title: A.R.K
Overview: We have designed ARK

(Automated Robotic Kerbie), a machine that will auto-sort waste for recycling. This machine will help elderly and visually disabled people recycle.

School: Ballymena Academy
County: Antrim
Teacher: Kathryn Wylie
Student(s): Niall Manson, Ashton Mui, Callum Baillie

2508

Title: A Safer Swim
Overview: We'll develop an app that'll inform people looking to swim in outdoor bathing areas about how safe the water is to do so - pollution-wise.

School: Coláiste Chiaráin
County: Roscommon
Teacher: Patricia Buckley
Student(s): Éile McCarthy, Antoni Wawrzyniak, Keela Plunkett

2509

Title: Smart Bookmark for the mobility impaired
Overview: We want to create a machine that allows people with mobility impairments enjoy reading physical books more easily
School: Kishoge Community College
County: Dublin
Teacher: Micheal Griffin
Student(s): Naomi Okafu Enoyogyere, Amal Tomy

2510

Title: Hit The Books
Overview: Our app is an entertaining study app that is interlocking with a social media aspect and an in-game study buddy (Your own AI friend)
School: Coláiste Nano Nagle
County: Limerick
Teacher: Samantha Prior
Student(s): Minahil Mir, Tamima Abedin, Abbey McNamara

2511

Title: Here-ing Aid
Overview: To augment the use of tactile paving with an interactive mobile phone linked sensor to enable the vision impaired access real-time location relevant information.
School: Marist College
County: Westmeath
Teacher: Julie Coyle
Student(s): Michael Commins, Sean O'Neill, Luke Duffy

2512

Title: An Tuirbín Intitimeach
Overview: Phiocamar chun tuirbín intitimeach a dhéanamh. Ciallaíonn sé sin, thitfidh ár

dtuirbín isteach ar é féin nuair atá an tuirbín ag tairgiú méid vóltas áirithe.

School: Coláiste Pobail Osraí
County: Kilkenny
Teacher: Lughaidh Ó Néill
Student(s): Cate Ní Chatháin, Shane O'Neill, Daran Yalnazov

2513

Title: Smart guiding stick for visually impaired individuals
Overview: Our project is a guiding stick for visually impaired individuals. This stick will tell the person using it where to go.
School: Kishoge Community College
County: Dublin

Teacher: John Monaghan
Student(s): Mahnoor Hassan, Abiha Khan

2514

Title: The Perfect Wind Turbine
Overview: HAWT wind turbines are the most popular turbine on the market. But is there a more efficient alternative turbine?
School: Coola Post Primary School
County: Sligo
Teacher: Caroline Hopper
Student(s): Mark Cranley, Sean Jordan

2515

Title: Walking aid with GPS notification function for use on farm
Overview: A walking aid with a GPS notification button that when pressed will send the location coordinates to a designated phone to aid with farm safety.
School: Castlecomer Community School
County: Kilkenny
Teacher: Fiona Morrissey
Student(s): Ruby Roche, Aoife Royce Brennan

2516

Title: Vehicle Speed Control
Overview: Me and my group are going to construct a speed limiter for most to all modern vehicles on out roads, to try limit accidents.
School: Castlecomer Community School
County: Kilkenny
Teacher: Fiona Morrissey
Student(s): Saidhbh Mooney, Niamh Meagher, Sarah Dunne

2517

Title: Wrist Assist
Overview: We aim to make sports more inclusive whilst using technology, in the form of two micro:bits

School: Athlone Community College
County: Westmeath
Teacher: Emma Buckley
Student(s): Shauna Walsh, Rachel Rourke

2518

Title: Farm Safety Slurry Sensor
Overview: Our farm safety slurry sensor will be designed to improve farm safety in a bid to save people's lives on the farmyard.
School: Gallen Community School
County: Offaly
Teacher: Aideen Pettit
Student(s): Darragh Mannion, Calum Corcoran

2519

Title: Anytime Rain
Overview: A self-watering system to water plants for those who might not be able to, whether it be from not being around or a disability
School: Boyne Community School
County: Meath
Teacher: Maria Byrne
Student(s): Katie Devine, Aaron Kearney, Tara Redmond

2520

Title: Leonardo da Vinci's Inventions: Comparing Yesterday With Today
Overview: Our project aims to investigate Leonardo da Vinci's initial ideas for inventions and compare the composition and efficiency of his inventions to modern day equivalents.
School: Coláiste Naomh Mhuire
County: Kildare
Teacher: Nadine Hennessy
Student(s): Róisín Dunne, Arianna Petley

2521

Title: Taking steps to reduce your carbon footprint
Overview: An app that helps you reduce your carbon footprint in your daily life.
School: Loreto High School
County: Dublin
Teacher: Eimear Maloney
Student(s): Julia Clinch, Ailsa Marrinan, Rowan Harton

2522

Title: To see if interactive software is better than textbooks?
Overview: To see if students learn better from interactive software devices or if they learn more from textbooks
School: Breifne College
County: Cavan
Teacher: Kerri-ann Thornton
Student(s): Orlaith McGreevy,

Caitlyn O'Rourke

2523

Title: Mats That Matter!!!

Overview: We've designed a sustainable, durable, weather-proof mat for homeless people. A solution to lying on cardboard is needed, especially with climate change threatening extreme weather.

School: Loreto High School

County: Dublin

Teacher: Eimear Maloney

Student(s): Evanne Lyons, Isabelle Kealy

2524

Title: Creating a device that tracks the windows in our school to save energy

Overview: A device that will sense which windows are open in our school to save energy in a practical and time efficient way.

School: Bremore Educate Together Secondary School

County: Dublin

Teacher: Emma Sheeran

Student(s): Doran Ayub, Sebastian Zvanbergs

2525

Title: Bull Accelerate

Overview: We are endeavouring to identify an app that enables farmers to input costs associated with raising an animal which will help farmers become more efficient.

School: John The Baptist Community School

County: Limerick

Teacher: S Walsh

Student(s): Caroline Fitzgerald, Katie Halpin

2527

Title: Green habits- An app that helps users create eco-friendly habits

Overview: We aim to create a motivational app that will help users build eco-friendly habits. Each week the user will be set several small, achievable goals.

School: Coláiste Naomh Mhuire

County: Kildare

Teacher: Nadine Hennessy

Student(s): Sinead Byrne, Ellie Coffey

2528

Title: Built-in weight indicator for a child's car seat.

Overview: We hope to design and build a spring mechanism that may be installed into a child's car seat to indicate to parents when it is a

School: Scoil Mhuire

County: Roscommon

Teacher: Mairead Glynn

Student(s): Aoife Giblin, Jessica Jones

2529

Title: Technology overload....

The effects of technology on our generations daily lives.

Overview: We are investigating how the use of technology has impacted our generations daily lives and how attention spans have been affected as a result.

School: Loreto Secondary School

County: Kilkenny

Teacher: Eanna Heffernan

Student(s): Eva Lavelle, Aoife Foley, Ella Brennan

2530

Title: An fheirmeoireacht uirbeach, aon áit, am.

Overview: An online database which provides complete knowledge on growing plants within urban areas in Ireland, using HTML to create the website.

School: Meanscoil Gharman

County: Wexford

Teacher: Elaine Nic Reamoinn

Student(s): Ryan Mac Sandair, JJ McGrath, Will Redmond

2531

Title: A Solution to Coastal Flooding in Irish Cities

Overview: Investigating the effects of floods on Irish cities and residents, redeveloping flood walls, and creating a campaign to protect coastal cities in Ireland.

School: Sutton Park School

County: Dublin

Teacher: Joanne Hanratty

Student(s): Sebastian Galvin, Julian Lewandowski, Evan Wynne

2532

Title: A C++ based AI to translate a live video input of Irish Sign Language to English Text

Overview: A software program using C++, OpenCV and other libraries that translates ISL to English. We intend to build and test the functionality in real-world situations.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Ronan Hawkins, Ian Cullinane, Mark O Driscoll

2533

Title: Analysis of sentiment variation in news reporting and consequential user activity

Overview: We will analyze sentiment of specific event/ news across sources and its relation to generated user activity, by using natural language processing from numerous engines.

School: St Kilian's Deutsche Schule

County: Dublin

Teacher: Fiona Martin

Student(s): Aadishesh Mohan, Daniel Kaminski, Donncha McGrath

2534

Title: B.A.T.S (Blind. Assistance. Training. Sensor)

Overview: Our effort strives to make life that little bit easier for visually impaired people in society, especially those involved in sport.

School: Presentation Secondary School Listowel

County: Kerry

Teacher: Catherine Kennedy

Student(s): Eimear Buckley, Katie Trant, Noelle Dillon

2535

Title: Baby and Pet Car Sensor (BPCS)

Overview: We wish to create a device that will connect the user's phone to a sensor in the car to alert them of movement.

School: Salesian Secondary College

County: Limerick

Teacher: Lisa Downey

Student(s): Louise Wade, Isabel FitzGerald, Biel Amengual Garau

2536

Title: CPR Pedal Chest Compression Device Improved

Overview: Improved version of last year's BT CPR Device involving manual peddles, piston rotations which deliver chest compressions to required depth without any power source.

School: Tarbert Comprehensive School

County: Kerry

Teacher: Rachael O Donoghue

Student(s): Jim Culhane, Paula- Eve Culhane

2537

Title: Comparison Between Closed Loop Insulin Delivery System versus Conventional Insulin Therapy

Overview: Comparing results of a range of Type 1 diabetic patients treated using Closed Loop delivery system and diabetic patients using conventional insulin therapy

School: Millstreet Community School

County: Cork

Teacher: Jennifer O'Donoghue

Student(s): Evelyn McCarthy,

Danielle O Riordan, Ciara O Sullivan

2538

Title: Safe Sleeping - SIDS Temperature Monitor

Overview: Our project will monitor and help control the temperature of a baby while sleeping in a cot, hence contributing to reducing Sudden Infant Death Syndrome

School: Scoil Mhuire gan Smal

County: Cork

Teacher: Robert Nolan

Student(s): Nadia O Sullivan, Aishling Reeves

2539

Title: Slugger : An improved boxing score system and damage prevention device.

Overview: We wish to investigate the potential for biased judging, or personal interpretation of scoring, in boxing and help prevent potential brain damage associated with the.

School: St Joseph's Secondary School

County: Dublin

Teacher: Daryl Dunne

Student(s): Noah Rohio, Jasper Edwards

2540

Title: In loving memory of.. How QR code help bring peaceful messages to your home

Overview: We're creating QR codes which will be placed on family headstones. Scan the code and leave a comforting message or gain information about that person

School: Borrisokane Community College

County: Tipperary

Teacher: Rachel Ahern

Student(s): Darragh Egan, Cian Hayes

SENIOR GROUP

2600

Title: GaelTalk - a virtual reality immersive Irish Language learning experience that can promote the practice of the Irish language.

Overview: Our aim is to make an interactive, and enjoyable Irish learning experience through the use of Virtual reality so that students are inspired to learn Irish

School: St Joseph's Secondary School

County: Dublin

Teacher: Daryl Dunne

Student(s): Aaron Dignam, Ciaran Leddly

2601

Title: The development of a wearable device to alert and remind the user to apply sunscreen

Overview: Design and development of a smart wearable device that alerts the user when the UV index is high and have regular alerts to apply sunscreen.

School: Colaiste Chiarain

County: Limerick

Teacher: Edel Farrell

Student(s): Katelyn Prior, Caitlin Quain, Aiden Oscar

2602

Title: BloodBox: A Diagnostic Tool for Blood-Borne diseases

Overview: Using an ultra-low cost microscope with a camera and Machine Learning model to diagnose Malaria and Acute Lymphoblastic Leukaemia from blood smears.

School: Sutton Park School

County: Dublin

Teacher: Joanne Hanratty

Student(s): Vedh Kannan, Will Carkner

2603

Title: Exploring Apophenia and Pareidolia in Machine Learning, and Optimising for Predicting Stochastic Patterns

Overview: Exploring how machine learning models identify non-existent patterns in datasets of sound, images and sequences, and optimising for predicting stochastic patterns.

School: Coláiste Phádraig CBS

County: Dublin

Teacher: Kevin Carey

Student(s): Taha Fareed Farooqi, Jevin Joy

2604

Title: CoolAid

Overview: Our project aims to create an earpiece for people prone to hypothermia (for example; the elderly or sportspeople) to detect hypothermia and other related illnesses.

School: Ursuline College

County: Sligo

Teacher: Anthony Carolan

Student(s): Alex Scott, Anna Woodward

2605

Title: If you're happy and you know it flap your hands

Overview: An investigation into the necessity of self-stimulatory behavior and the way it contributes to the well-being of autistic people and people with ADHD.

School: Ursuline College

County: Sligo

Teacher: Anthony Carolan

Student(s): Ava Pastor, Ella Joyce

2606

Title: A Recreation of Pac-Man

Overview: We recreated the game Pac-Man to find out how it works.

School: St Pauls Secondary School

County: Kildare

Teacher: Emily Woods

Student(s): Dorian Pazur, Luca Gheorghiu, Lucas Casey Ryan

2607

Title: JAH0 -3D

Overview: Phone holder for a wheelchair user that can easily be removed for the user

School: St Oliver's Community College

County: Louth

Teacher: A Donnelly

Student(s): Hollie Taaffe, Aoife Lawlor, Jemma Winters

2608

Title: An Investigation into the Feasibility of Using Microcontrollers in Buoyancy Aids to Prevent Marine Casualties

Overview: This project involves creating a new, technically advanced buoyancy aid, that can detect and report the submersion of its wearer.

School: Marist College

County: Westmeath

Teacher: Georgina Clear

Student(s): Donal McDermott, Tega Awhinawhi

2609

Title: Adhd VRC

Overview: The VRC application is designed to improve understanding of ADHD (Attention-Deficit/Hyperactivity Disorder) cognitive functioning, helping users aged 8 and above gain understanding of the sensory and

School: Mount St Michael

County: Mayo

Teacher: Stephanie Hogan

Student(s): Ronnie Foley, Olivia Blitger

2610

Title: An Investigation into Global Gene Sequence Screening and the Development of a Novel Screening System

Overview: Existing gene sequence screening methods discourage the inspection of potentially dangerous sequences. GeneAtlas incentivises screening through unparalleled privacy and a novel approach to accountability.

School: St. Aidan's C.B.S.

County: Dublin

Teacher: Emma Dalton

Student(s): Andrei Florian, Ilya Solovjo

Looking for a specific project?

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Chemical, Physical and
Mathematical Sciences

1100 - 1609

Technology

2100 - 2610

Biological and
Ecological Sciences

3100 - 3612

Social and Behavioural
Sciences

4100 - 4607

BIOLOGICAL & ECOLOGICAL SCIENCES



JUNIOR INDIVIDUAL

3100

Title: Seasonal variation in the antimicrobial activity of native Irish seaweeds.

Overview: I wish to investigate the monthly change in antimicrobial activity of native seaweeds on staphylococcus aureus using an aseptic laboratory technique.

School: Abbey Vocational School

County: Donegal

Teacher: Donna Furey

Student(s): Jack Hannigan

3101

Title: The growth of pea in different humidity and temperature

Overview: My project aims to see the difference between the growth of pea in different humidity and temperature and the relation of it with ISS

School: St Andrews College

County: Dublin

Teacher: Emily Casey

Student(s): Haotian Sheng

3102

Title: A comparative analysis of beach litter in Wicklow, its environmental effects, and potential solutions for a more sustainable future.

Overview: A comparison of beach litter (by weight and composition) on a sample of Wicklow beaches, and the effect it has on the surrounding environment.

School: St David's Holy Faith Secondary

County: Wicklow

Teacher: Garry Lynch

Student(s): Alannah Lynch

3103

Title: A comparative study into the factors influencing the effectiveness of a natural fertilizer on different soils.

Overview: I will be investigating the effectiveness of various formats of a natural fertilizer and the link between them and different soil types.

School: C.B.S. Thurles

County: Tipperary

Teacher: Danielle Slattery

Student(s): Luke Blackwell

3104

Title: Automatic Self Watering Plant Pot

Overview: To build a self watering plant pot and compare it to a plant being watered once a day in growth, health and appearance

School: Blackrock College

County: Dublin

Teacher: Katie Buckley

Student(s): Lochlan Gulliver

3105

Title: Consuming Fish: The Carbon Footprint of Trawling

Overview: Finding the carbon footprint of Co2 from trawling released into our atmosphere from our consumption of fish.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Elma Pallone

3106

Title: How much time does it take for varying brands of cough sweets to dissolve in synthetic saliva.

Overview: Recording how much time it takes for different types of cough sweets to dissolve in synthetic saliva.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Billy Dennehy

3107

Title: Do we really look like our parents? Investigating whether we can really tell parent and child apart using only facial features

Overview: Investigating whether common phrase of looking like our parents is true by seeing if we can tell parent and child apart with just facial features

School: Mount Anville Secondary School

County: Dublin

Teacher: Niall McGrath

Student(s): Ellen Brosnan

INTERMEDIATE INDIVIDUAL

3200

Title: Can Ireland sustain producing its own quality baking flour with triticale amidst the current food crisis?

Overview: An investigation into whether Ireland can produce its own grain and flour without using imported fertilisers and pesticides and the factors necessary to do so.

School: St Mary's Secondary School Macroom

County: Cork

Teacher: Shannen Foley

Student(s): Lucy Murray

3201

Title: Stressed out Pooch: An Investigation on how different music genres affect dog behaviour

Overview: An investigation on how different music genres affect dog behaviour.

School: Rockford Manor Secondary School

County: Dublin

Teacher: Kelly Ryan

Student(s): Shonal D'costa

3202

Title: How much is a teenager's hearing range affected by their age

Overview: The project test the effect of ageing on the hearing range of teenagers and how effective and safe are noise suppression devices

School: Blackwater Community School

County: Waterford

Teacher: Brigid Barrett

Student(s): Roan Carey

3203

Title: Wanted - Dead or Alive?

Overview: I investigated if harvesting growing Sphagnum moss could provide an alternative to harvesting peat from out bogs for the horticulture industry

School: Our Lady's Bower

County: Westmeath

Teacher: Ellen Maguire Maguire

Student(s): Michelle Hughes

3204

Title: An ecological survey to examine effect of rhododendron and conifer trees on biodiversity of upland habitats.

Overview: My project aims to examine the effect that rhododendron and coniferous trees have on biodiversity in the upland regions of the Knockmealdown Mountains.

School: Blackwater Community School

County: Waterford

Teacher: Brigid Barrett

Student(s): Conor O'Brien

3205

Title: Investigation of the antimicrobial activity of Ilex aquifolium (common Holly tree)

Overview: It is aimed to determine the nature of the perceived antimicrobial activity observed when male Ilex aquifolium tree branches are hung in animal stalls.

School: Bandon Grammar School

County: Cork

Teacher: Maire Flynn

Student(s): Ruth Fair

3206

Title: The effects of when Bisphenol A is in contact with organisms

Overview: I want to prove that Bisphenol A when in contact with an organism can transfer onto that

organism and the duration of time it remains.

School: Scoil Mhuire

County: Cork

Teacher: Margaret Dennehy

Student(s): Catherine Angland

3207

Title: How biometrics affect our athleticism

Overview: I am going to test whether or not our genetics affect our performance differently in certain sports

School: Loreto Secondary School

County: Kilkenny

Teacher: Eanna Heffernan

Student(s): Abby Mccallum

3208

Title: Investigation of sustainable methods for waste water bioremediation: including Spent mushroom substrate (SMS) and alginate from seaweed

Overview: This project involves remediating water polluted with dyes and particulates using enzymes in Spent mushroom Substrate and alginate from seaweed, which is a natural coagulant.

School: Athlone Community College

County: Westmeath

Teacher: Catherine O'Meara

Student(s): Mia Olwill

3209

Title: The impact of microplastics on sea sand temperatures

Overview: My project aims to investigate the insulating impact of microplastics on sea sand at different levels.

School: Coláiste Muire Máthair

County: Galway

Teacher: Anthony Carey

Student(s): Ruihan Wu

3210

Title: Does damaging Kelp affect its breaking strength

Overview: I am looking to see if damage to kelp (Laminaria digitata) has either a positive or negative effect on the tensile strength of the seaweed.

School: Mary Immaculate Secondary School

County: Clare

Teacher: John Sims

Student(s): Ella Mooney

3211

Title: Which compostable bin liner is the best to home compost?

Overview: The aim of my project is to find if compostable bin bags are good for home-composting

and if they breakdown like they're advertised to do.

School: St Andrews College

County: Dublin

Teacher: Emily Casey

Student(s): Alisha Manoj

3212

Title: Permafrozen in Time?

Overview: This is an investigation into whether ancient viruses and bacteria from melting glaciers can affect modern day humans through animals, plant cells or direct infection.

School: Loreto High School

County: Dublin

Teacher: Eimear Maloney

Student(s): Anna Zhuang

3213

Title: Nematodes as possible bioindicators of the health of Irish freshwater bodies.

Overview: The purpose of this project is to investigate how nematodes work as Bioindicators for pollutants in freshwater habitats.

School: Árdcoil Uí Urmoltaigh

County: Cork

Teacher: Paul Bouchier

Student(s): Michael Crowley

3214

Title: Highlighting the lack of female participants in medical trials and the consequences that has for women's health

Overview: This project is about highlighting the lack of female participants in medical trials and then the consequences that has for women's health.

School: St Aloysius School

County: Cork

Teacher: Katie O'Donovan

Student(s): Emma Rose O'Reilly

3216

Title: Constructing a Microbial Fuel Cell to Investigate the Electrical Power Output of Copious Organic Waste Samples

Overview: I will construct my own microbial fuel cell and investigate the energy output of various organic waste mixtures, through the digestion of anaerobic bacteria oxidation.

School: Skibbereen Community School

County: Cork

Teacher: Noirin O'Brien

Student(s): Ava Scarlett

3217

Title: Is the Clumping Behaviour of Mussels (*Mytilus edulis*) affected by the Presence of a Predator?

Overview: I am looking to see if the clumping behaviour of mussels is affected by the scent of a predator in the water.

School: Mary Immaculate

County: Clare

Teacher: John Sims

Student(s): April O'Donnell

3218

Title: Investigation of a prototype tool belt to prevent musculoskeletal injuries in vets

Overview: Investigating the high rate of musculoskeletal injuries in large animal vets and methods of prevention such as my concept tool belt

School: Árdcoil Uí Urmoltaigh

County: Cork

Teacher: Paul Bouchier

Student(s): John Buckley

3219

Title: Natural fertilisation versus Artificial fertilisation

Overview: I want to create a sustainable system of fertilizing my tomato crop using a recyclable aquaponics system and compare it to an artificial fertilisation system.

School: Mungret Community College

County: Limerick

Teacher: Thomas Collins

Student(s): Ross O'Carroll

3220

Title: Investigating the connection between wrapping on silage bales and pinkeye in cattle.

Overview: I will be investigating whether silage that is fed to cattle straight out of the wrapping can cause pinkeye.

School: Schull Community College

County: Cork

Teacher: Jenny Dixon

Student(s): Stephen Hurley

3221

Title: Cellular Intelligence

Overview: I will order a "Living plate" with a slime mold that can navigate food sources in the most efficient way possible.

School: Old Bawn Community School

County: Dublin

Teacher: Lydia Burke

Student(s): Lorion Kai Lovrekovic

3222

Title: Keeping your Balance : Measuring the impact of a balance awareness activity

Overview: Participants' balancing ability will be measured both before and after strategies to improve

balance, by seeing how long they can stand on one leg

School: St Joseph's Secondary School

County: Dublin

Teacher: Helen Teehan

Student(s): Luke Brown

3223

Title: How muscle plays a role in disease prevention

Overview: An investigation into how muscle can prevent disease, how it protects the body and how to put on muscle

School: Salesian Secondary College

County: Limerick

Teacher: Lisa Downey

Student(s): James Conner

3224

Title: Should we have a 'No Shoes In the Bedroom' Rule?

Overview: Whether bedroom floors with a strict 'no shoe' rule are cleaner with respect to bacterial contamination than bedroom floors where outdoor shoes are worn.

School: Blackrock College

County: Dublin

Teacher: Katie Buckley

Student(s): Daniel Spencer

3225

Title: An investigation into the use of herbal plant extracts against antibiotic resistant bacteria in skin infections.

Overview: If I test certain herbal plant extracts against bacterial skin infections, in this case 'Staphylococcus epidermidis', 'Corynebacterium diphtheriae', and 'Methicillin-Resistant Staphylococcus Aureus' method, extract

School: Our Lady's School

County: Dublin

Teacher: Emma Griffin

Student(s): Nikishi Polgolla

SENIOR INDIVIDUAL

3300

Title: A qualitative study on the microbial community found on domestic dogs' coats

Overview: This project will be conducted by me, Kian Kennedy with help from my school and may be helpful in shaping our relationship with domestic dogs.

School: St Columba's Comprehensive School

County: Donegal

Teacher: Ruth McPolin

Student(s): Kian Kenendy

3301

Title: The long-term effects of a more sustainable method of keeping nutrients in the soil as an alternative to an artificially made granule

Overview: To find a more sustainable, cost-effective method of keeping nutrients in soil, compared with using artificial fertilizers. Determining the long-term effects of using the treatments.

School: Roscommon Community College

County: Roscommon

Teacher: Niamh Conway

Student(s): Sean Allen

3302

Title: Mermaid Purses and Shark/Skate Populations in Irish Waters

Overview: The aim of my project is to observe the presence of species and the diversity of shark and skate in Dublin Bay waters.

School: St Patricks Cathedral Grammar School

County: Dublin

Teacher: Ash Hussain

Student(s): Etienne Doyle

3303

Title: THE TOFU TAKEOVER: Irish attitudes towards plant based diets and a possible solution to our healthcare crisis

Overview: My project reviews the scientific evidence of health benefits and Irish population attitudes to a vegetarian/vegan diet

School: The Institute of Education

County: Dublin

Teacher: Wesley Hammond

Student(s): Ilona Lowney

3304

Title: Analysis of single-cell proteomic data to understand mechanisms of oncogenic transformation and how to control them

Overview: Computationally analysing single-cell proteomic data and building a data-driven model that explains how oncogenic transformations occur in breast cancer cells and mechanisms to reverse them

School: Stratford College

County: Dublin

Teacher: Helen O'Kelly

Student(s): Ayush Tambde

3305

Title: Cigarette smoke causes scarring of the lungs - how?

Overview: Cigarette smoke can

cause the long-term activation of lung fibroblasts, resulting in pulmonary fibrosis. My project aims to study the mechanism behind this.

School: South Eastern Regional College - Lisburn

County: Antrim

Teacher: Susan Stokesberry

Student(s): Cara Colvin

3306

Title: The Carbon Footprint of macrofauna

Overview: My project measures the Carbon Dioxide of macrofauna such as woodlice and millipedes in my local woodland

School: Colaiste Muire Máthair

County: Galway

Teacher: Anthony Carey

Student(s): Dan Carey

3307

Title: The Caffeine Effect

Overview: This project will explore the effect of caffeine in energy drinks on the human body using Daphnia as test subjects.

School: Dominican College

County: Galway

Teacher: Laura Thornton

Student(s): Yasmin Hadri

3308

Title: Does latitude effect wild yeasts tolerance to alcohol? And it's implications for climate change.

Overview: Using alcohol tolerance as an endpoint, an investigation into how wild yeasts strength varies with latitude.

School: Muckross Park College

County: Dublin

Teacher: Lisa Shine

Student(s): Aoife McMorrow

3309

Title: The design of a diagnostic application for the early detection of Colour Blindness in children.

Overview: My project is entered on expanding colour blindness tests to include children . I am to improve my diagnostic application for colour blindness detection.

School: St Joseph's Secondary School

County: Dublin

Teacher: Chris O'Connell

Student(s): Evan pollard

3310

Title: Parasites in domesticated horses

Overview: Parasites in domesticated horses that are resistant to commonly used wormers.

School: Bandon Grammar School

County: Cork

Teacher: Paula McGrath

Student(s): Ellie Fleming Hand

JUNIOR GROUP

3400

Title: Plan Bee: A Natural Nutritious Feed for Bees during Autumn

Overview: This project aims to develop an alternative feed for bees from flowering plants to support broods and improve the quality of honey produced during autumn.

School: Moate Community School

County: Westmeath

Teacher: Mairead Cusack

Student(s): Hannah Higgins, Aoife

Ross, Katie Creggy

3401

Title: Sleep Well

Overview: We want to investigate if natural remedies are as effective as prescribed medicine in helping people who find it difficult to fall sleep.

School: Tullamore College

County: Offaly

Teacher: Elaine Howlin

Student(s): Tess Flynn,

Clodagh Hynes

3402

Title: Garden Greening: Designing a Biodiversity Pillar to Remedy the Problems of Modern Gardening

Overview: To identify the impact of modern garden design on invertebrate diversity and design a biodiversity pillar to support and rebuild the wider ecosystem.

School: Moate Community School

County: Westmeath

Teacher: Irene O'Sullivan

Student(s): Kerry Sun,

Terry Heffernan, Domhnall Molloy

3403

Title: Bio Enzymes: A Cooler Way to Wash

Overview: To create an environmentally friendly clothing soak from fruit waste to remove stains allowing the use of low temperature wash cycles.

School: Moate Community School

County: Westmeath

Teacher: Mairead Cusack

Student(s): Leah Winters,

Lilly Daly, Millie O'Donovan

3404

Title: Water We Waiting For?

Overview: Investigating nutrient levels and overall water quality in our local area

School: Colaiste Muire Crosshaven

County: Cork

Teacher: Brian Kavanagh

Student(s): Cian Riordan,

Dziugas Panavas

3405

Title: If In Drought, Wool Will Help Out!

Overview: An investigation into the possibility of sheep's wool increasing crop yields when incorporated within soil.

School: Castleblayney College

County: Monaghan

Teacher: Celine Keith

Student(s): Rebecca Harris, Keira

Mc Laughlin, Rachel McLaughlin

3406

Title: Bee for Real: an investigation into Nosema disease in Cork County honeybee colonies

Overview: The aim of our project is to investigate the prevalence of the Nosema disease by assessing the quantity of Nosema spores present in honeybee colonies.

School: Colaiste Muire Crosshaven

County: Cork

Teacher: Bridget Lehane

Student(s): Gráinne Hankinson,

Isabelle Jeffers,

Mickenzie Kelly Noonan

3407

Title: Recycling Nutrients

Overview: Our project aims to investigate which organic waste produces the best leachate to use as a nutrient source in a hydroponic system.

School: St Colman's College

County: Down

Teacher: Pauline Crowl

Student(s): Anton O'Hare,

Se McCann

3408

Title: Could The ZZ Plant Survive In Martian Soil

Overview: We are experimenting if the Zamioculcas Zamiifolia plant could survive in a simulant martian soul.

School: Mercy Secondary School Mounthawk

County: Kerry

Teacher: Roisin Riordan

Student(s): Sam Gleasure,

Conan Seino

3409

Title: Can plant-based dyes be an environmentally friendly alternative to commercial dyes?

Overview: Our project is about making environmentally friendly dyes that are still efficient.

School: Malahide Community School

County: Dublin

Teacher: Orla Rooney

Student(s): Isabel Mitchell,

Sahasra Vivek Kumar

3410

Title: The lunar effect on periwinkle (Littorina littoria) movement

Overview: We are looking to see if the movement of common periwinkles (Littorina littoria) on shores in North Clare is influenced by the lunar cycle

School: Mary Immaculate

Secondary School

County: Clare

Teacher: Molly Crilly

Student(s): Patrick Byrne

O'Connell, Thomas O'Regan

3411

Title: How much plastic is washed up on our shores?

Overview: We are looking at the accumulation of marine plastics on 12 shores in Clare over a three month period.

School: Mary Immaculate

Secondary School

County: Clare

Teacher: John Sims

Student(s): Ella Enright, Áine Kelly

3412

Title: An examination of the effect that position in a turlough has on the morphology of the leaves of Ranunculus repens (creeping buttercup)

Overview: We are examining the effect that the level of submersion has on the morphology of the leaves of Ranunculus repens (creeping buttercup) growing in turloughs

School: Mary Immaculate

Secondary School

County: Clare

Teacher: John Sims

Student(s): Niamh Linnane,

Noelle Byrne

3413

Title: An investigation into the public's perceptions and fears of Avian Influenza

Overview: This project will survey the community of Rush to investigate knowledge of avian influenza and if the medium they learned about impacts on fear levels

School: St Joseph's Secondary School

County: Dublin

Teacher: Kevin Delahunty

Student(s): Martha Feely,

Lileth Carrick

3414

Title: Sargassum Muticum a threat to Biodiversity

Overview: We are investigating Sargassum Muticum in Tralee bay, it's growth rate, reasons for spreading and potential preventatives along with effect on biodiversity

School: Community College Killorglin

County: Kerry

Teacher: Kevin Foley

Student(s): Harry Hilliard, Holly Brown

3415

Title: An investigation which compares the effectiveness of fermented foods against E.Coli (K-12) compared to Lactic Acid Bacteria

Overview: We will test the effectiveness of fermented foods against E.Coli (K-12) compared to Lactobacillus acidophilus and Lactobacillus casei, two common probiotics

School: St Joseph's Secondary School

County: Dublin

Teacher: Helen Teehan

Student(s): Stephanie Cherish Dan, Leah Mullen

3416

Title: Fiosrú ar cumas atá ag plandaí eagsula cosc a chur ar chreimeadh uisce.

Overview: Smaoinigh muid ar an tionscnamh seo mar go bhfuil chreimeadh fadhb mór cois abhainn agus táimid ag iarraidh chuir deireadh leis.

School: Coláiste Ailigh

County: Donegal

Teacher: Shane Ó Breacáin

Student(s): Donnchadh O Tuairisg, Eoghan Cheevers

3417

Title: Fiosrú ar éifeacht lus an phiobair ar luas freagartha i ndéagóirí

Overview: An mbeidh luas freagartha níos gaiste ag déagóirí 40 bomaite tar éis dóibh lus an phiobair a ghlacadh?

School: Coláiste Ailigh

County: Donegal

Teacher: Shane Ó Breacáin

Student(s): Megan Ní Bhroin, Síomha Nic Séain, Róise Ní Bhaoill

3418

Title: Does an apple a day still keep the doctor away

Overview: The aim of the project is to test different categories of vegetables to compare their nutritional value based on soil quality, price and variety

School: St. Joseph's Secondary

School, Navan,

County: Meath

Teacher: Bronagh Farrell

Student(s): Manal Fantazi, Joud Abusinn, Grace Gibbs

3419

Title: Evaluate the impact of feeding strategies on Friesian Bull Calf Growth

Overview: Our aim is to determine a feeding strategy which is the most effective, profitable, sustainable, and least labor-intensive method for rearing Friesian bull calves.

School: Kinsale Community School

County: Cork

Teacher: Catherine Coughlan

Student(s): Paddy Canniffe, Ronan Moloney,

INTERMEDIATE GROUP

3500

Title: Sustainable Forest Fire Prevention

Overview: Can different Tree Families impact the rate in which they spread forest fires in high risks areas.

School: Colaiste Chraobh Abhann

County: Wicklow

Teacher: Gavin Kenny

Student(s): Grace Cullen, Aisling Doyle, Ava Smith McGarry

3501

Title: Investigation into the Effect of Sugar on the Establishment of Mycorrhizal Fungi and Enhancement of the Mycorrhizal Effect to Increase Crop Growth

Overview: Different sugars at different concentrations are fed to mycorrhizal fungi to see how it aids the establishment of the fungus and therefore helps crop growth.

School: Clonakilty Community College

County: Cork

Teacher: Patrick O Keffe

Student(s): Cal O Mahony, Desmond Kenneally, Ciarán Coakley

3502

Title: How Well Can Humans Differentiate the Sound of Hot and Cold Water Being Poured

Overview: We are investigating how close humans can differentiate between different temperature waters.

School: Coláiste Choilm

County: Cork

Teacher: Paudie Scanlon

Student(s): David O'Connell, Brian O Carroll, Thomas O'Regan

3503

Title: Brush Wizz

Overview: In an attempt to brush our teeth more efficiently and more thoroughly, we have created a Eco-friendly three-headed tooth-brush.

School: Loreto College

County: Cavan

Teacher: Michelle Rogan

Student(s): Ellie Brady, Ellie Brady

3504

Title: Human Neuro-Storage - A Contribution To Biological Memory And Learning

Overview: An investigation into the growing and stimulation of human neural colonies and the opportunities for creating efficient biological AI and data storage.

School: St. Brogan's College, Bandon

County: Cork

Teacher: Laura O'Regan

Student(s): Tomás Markey, Leah Lordan, Clodagh O Sullivan

3505

Title: Does Caffeine Affect Your Athletic Performance?

Overview: We are undergoing an investigation to see whether or not caffeine affects your speed.

School: Pobalscoil Inbhear Scéine

County: Kerry

Teacher: Sarah Abbott

Student(s): Cliona O Sullivan, Niamh Hurley, Laoise Carey

3506

Title: Have you HERD of Thermoduric?

Overview: To educate the farming community on thermoduric, the effect, the risk and how to reduce this bacteria in their herd.

School: St. Brogan's College, Bandon

County: Cork

Teacher: Laura O'Regan

Student(s): Kate Lehane, Sarah Keohane, Leanne Murray

3507

Title: A Sweeter Way to Treat Equine Parasites

Overview: To create a solution to antihelmintic resistance by creating a nutritious horse treat containing common herbs to act as a natural equine worm treatment.

School: Moate Community School

County: Westmeath

Teacher: Irene O'Sullivan

Student(s): Aine Shortall, Kate Whyte

3508

Title: Mycromediation An investigation into the ability of Oyster mushroom mycelium to break down and digest microplastics

Overview: Grow oyster mushroom (Pleurotus ostreatus) mycelium and testing its ability to decompose microplastics forming a sustainable way of treating water pollution.

School: Clonakilty Community College

County: Cork

Teacher: Patrick O Keffe

Student(s): Jack Chambers, Eoin McCarthy, Eoin Murphy

3509

Title: Investigation into the Antimicrobial Properties of Cinnamon and Development of a Cinnamon Based Surface Cleaner.

Overview: We are testing cinnamon for antimicrobial properties and seeing if it can be used to make a natural antimicrobial surface cleaner

School: Clonakilty Community College

County: Cork

Teacher: Patrick O Keffe

Student(s): Fergal Curtin, Emmet Curtin, Arjun Negi

3510

Title: The Effects of administration of antibiotics to cattle and the emergence of antibiotic resistant bacteria

Overview: We have undertaken a study of the bacteriological content of bovine excretions, an effort to identify bacteria present and their susceptibility to antibiotic treatment.

School: Coláiste Fionnchua

County: Cork

Teacher: Karen Murphy

Student(s): Hazel O'Brien, Darragh Sheehy,

3511

Title: An investigation into the potential for biogas production from wetland plant species as a possible farming alternative for rewetted wetlands

Overview: Measure the volume of methane produced from a variety of wetland plant species during anaerobic digestion and identify the highest producing species

School: Loreto Secondary School

County: Kilkenny

Teacher: Laura Heffernan

Student(s): Sinead Carroll, Angela Carroll, Millie Gilsenan

BIOLOGICAL & ECOLOGICAL SCIENCES



3512

Title: Flower Power: An investigation into the antimicrobial properties of rose petals and their effectiveness in treating acne.

Overview: The project aims to investigate the antimicrobial potential of different concentrations of rose water/oil using different extraction methods against a variety of bacterial strains.

School: Rockford Manor Secondary School

County: Dublin

Teacher: Kelly Ryan

Student(s): Alicia Duffy, Maeve Bilag, Emma Gojak

3513

Title: Waste Water Fertilizer

Overview: Trying to see if lake land waste water is a cheap/better fertiliser rather than chemical fertiliser

School: Our Lady's Secondary School

County: Monaghan

Teacher: Kevin Nolan

Student(s): Cormac Mc Nally, Calum Cunningham, Finian O'Neill

3514

Title: Is genetic modification ethical?

Overview: Our project aims to study the public's perception of genetic modification and to gather data to fathom whether genetic modification is ethical or not.

School: Presentation Secondary School

County: Kilkenny

Teacher: Lisa Carey

Student(s): Cora Roche, Zuzanna Kolodziejczyk

3515

Title: Population Dynamics and Reproduction of Invasive Australian Yabby in an Irish Lake

Overview: This project investigates the population and reproduction of the Australian Common Yabby. Unlike the native WCC this is an invasive species in Ireland.

School: Colaiste Treasa

County: Cork

Teacher: Joanne Corkery

Student(s): Thiha Kearney O'Sullivan, Ollie Cwikula

3516

Title: Driving the Elderly to a Safer Future: Using Video Games to Improve the Peripheral Vision of Elderly Drivers

Overview: Using a simple video game to improve the peripheral

vision of the elderly thereby reducing the likelihood of traffic accidents among age group.

School: Moate Community School

County: Westmeath

Teacher: Mairead Cusack

Student(s): Emily Winters, Evanna Farrell, Niamh Kelly

3517

Title: Groovy Growth

Overview: An investigation into the effect of sound on plant growth

School: Coola Post Primary School

County: Sligo

Teacher: Caroline Hopper

Student(s): Michael Gallagher, Lily Barber

3518

Title: Can Native Waterweeds

Solve Farmer's Feed and Pollution Problems?

Overview: To produce a prototype silage effluent tank in which native duckweed will remediate silage run-off into an environmentally friendly fertiliser providing a cheap cattle feed.

School: Moate Community School

County: Westmeath

Teacher: Mairead Cusack

Student(s): Nathan Downes, Daniel Lynam, Éanna Maxwell

3519

Title: P,E-riod

Overview: Analysis on the impact of periods/menstruation on teenagers PE (physical education) performance and participation.

School: St. Joseph's Secondary School, Navan,

County: Meath

Teacher: Fiona Leavy

Student(s): Mya Doocey, Mia Galligan

3520

Title: Spraint Spies- An Investigation into Otter Population

Overview: The project will look at the population of otters from Carrigaline to Fountainstown in Cork Harbour using the standard otter survey methods.

School: Colaiste Muire Crosshaven

County: Cork

Teacher: Bridget Lehane

Student(s): Lucy Jones, Amy Broderick

3521

Title: Lightning speed plant growth (Kachow)

Overview: Global warming is a huge problem today and artificial fertilizers don't help. We've come up with a plan to accelerate plant

growth without harmful substances.

School: St Marys College

County: Wicklow

Teacher: Joanne English

Student(s): Emma Seckington, Fifi Bentley, Isabel Ramirez

3522

Title: Preventing soil erosion and leaching with different types of plants

Overview: I am going to investigate to see how well different types of plants hold soil together.

School: Cistercian College

County: Tipperary

Teacher: Jennifer Denny

Student(s): Timothy Hartnett, Ludwig Arco-Zinneberg

3523

Title: Upcycling Waste Streams for Horticultural and Agricultural Use Through the Addition of Biofibre (Wool) B

Overview: We aim to create the optimum "blend" of waste products to form the best peat-free potting soil and soil conditioner.

School: Roscommon Community College

County: Roscommon

Teacher: Niamh Conway

Student(s): Shauna Mc Dermott, Conor Morris, Liam Naughton

3524

Title: UnBEETable - Investigating if beetroot juice can impact the performance of athletes

Overview: Our project aims to investigate how the inclusion of beetroot juice in an athletes diet could improve their endurance and overall performance

School: Mercy Secondary School Mounthawk

County: Kerry

Teacher: Eimear Nolan

Student(s): Sophie Hassett, Aoife O'Brien, Lilly Nowak

3525

Title: An éifeacht atá ag céatadán éagsúla de truailliú cothaitheach ar an ráta atáirgthe de fiteaplanctón

Overview: Táimid ag iarraidh féachaint ar an éifeacht atá ag céatadán éagsúla de truailliú cothaitheach ar an ráta atáirgthe de fiteaplanctón.

School: Colaiste An Phiarsaigh

County: Cork

Teacher: Caoimhín Ó Buachalla

Student(s): Faye O'Connell, Elizabeth Driscoll, Abbey Pyne

3526

Title: You've GUT to be kidding me

Overview: An investigation into the bacteria that occurs on processed and non-processed foods and the effect of these bacteria on the gut microbiome flora.

School: St. Brogan's College, Bandon

County: Cork

Teacher: Michael Connern

Student(s): Kate O'Leary, Lisa Nield,

3527

Title: Hydroponic Greenhouse Cultivation for Sustainable Agriculture

Overview: An investigation in Hydroponic cultivation in comparison to traditional agricultural practice in terms of sustainability and nutritive value

School: Coola Post Primary School

County: Sligo

Teacher: Caroline Hopper

Student(s): Ellie Harte, Leona Bruen, Leanne Galvin

3528

Title: What affects colour

perception and can we influence it

Overview: Our project aims to investigate the factors affecting colour perception, and to see if we can help people differentiate between more shades

School: Mercy Secondary School

County: Galway

Teacher: Katie Ward

Student(s): Sonya Blake, Niamh Harhen

3529

Title: Assessment of the persistence of the entomopathogenic nematode *Steinernema feltiae* in peat soil.

Overview: To investigate entomopathogenic nematode persistence at different temperatures (constant and outdoor) and in the absence and presence of host larvae (*Galleria mellonella*) in peat soil.

School: Colaiste Treasa

County: Cork

Teacher: Joanne Corkery

Student(s): Amy Roche, Catriona Browne,

3530

Title: Transforming HOT WASTE into HOT WATER

Overview: This project explores the use of compost as a renewable energy source to generate hot water through pipes held within the hot compost pile.

School: Coláiste Cholmille

County: Donegal

Teacher: Fenton McHugh
Student(s): Sean Murray,
 Thien Laitenberger, Adam Trimble

3531

Title: Taller Together
Overview: An investigation into the benefits of early diagnosis and treatment of Adolescent Idiopathic Scoliosis (AIS) in adolescents in Ireland.

School: Laurel Hill Secondary School FCJ

County: Limerick

Teacher: Mary Frawley

Student(s): Kate Murphy,
 Aoife Henry, Éabha Halley

3532

Title: Comparing the flora and fauna of city vs country hedgerows

Overview: We plan to investigate the plants and insects found in hedgerows in rural vs urban

School: Loreto Secondary School

County: Kilkenny

Teacher: Brendan Williams

Student(s): Aoife Fitzgerald,
 Orla Gleeson

3533

Title: A BSF Miracle?

Overview: Investigating the possibility of BSFL as a sustainable EU 'novel food' through study of its microbiome

School: Athlone Community College

County: Westmeath

Teacher: Catherine O'Meara

Student(s): Jasper Ryan,
 Seán Brennan, Shreyash Shukla

3534

Title: Reducing Laminitis Incidence among Connemara Ponies: A Practical Approach

Overview: Our project aims to develop a practical strategy and produce a mineral supplement to reduce the incidence of laminitis among Connemara ponies.

School: Moate Community School

County: Westmeath

Teacher: Irene O'Sullivan

Student(s): Lauren Finan,
 Trina Fox

3535

Title: Let Me Put A Filter On That: A Colourful View Into Dyslexia

Overview: Participants read randomly generated words/ paragraphs using different coloured screens whilst being timed/recorded. All results will be compared to different coloured screens/paper, both with/without

disability.

School: Loreto Secondary School

County: Kilkenny

Teacher: Eanna Heffernan

Student(s): Milly Bannon,
 Aoife O'Reilly, Chloe Kearney

3536

Title: Are we making a dogs dinner of our planet?-An investigation into the affect of dog food on our environment

Overview: Our project aims to raise awareness on the unexpected contributor to climate change: dog food, from this we hope to suggest a more sustainable alternative.

School: Loreto High School

County: Dublin

Teacher: Eimear Maloney

Student(s): Ciara Murphy,
 Ailbhe O'Neill

3537

Title: An investigation into the effectiveness of constructed farmland sediment ponds in promoting biodiversity as indicated by the presence of water beetles as bioindicators

Overview: This project investigates whether constructed farmland biodiversity and sediment ponds can act as a habitat for a variety of water beetle (Coleoptera) species.

School: Colaiste Treasa

County: Cork

Teacher: Brid Anne O'Donoghue

Student(s): Eve O'Driscoll,
 Susannah Guerin

3538

Title: Aquaculture- The Impact Of Crude Protein Supplementation On Dairy Cow Production and Nitrogen Excretion In Urine In Late Lactation and The Effects This Has On Irish Waterways.

Overview: Our project aims to show how feeding a low protein concentrate can impact nitrogen excretion in a cows urine in their to reduce overall nitrogen leaching.

School: Mountrath Community School

County: Laois

Teacher: Kelly Walsh

Student(s): Sarah Phelan,
 Doireann O'Connor,

3539

Title: Rainwater, suitable for drinking?

Overview: We want to test rainwater across Ireland, compare them to each other and ultimately discover if it's suitable for drinking.

School: Douglas Community School

County: Cork

Teacher: Cian O Mahony

Student(s): Michael Morley,
 Cormac Byrne

3540

Title: Should Rooftop Gardens be made mandatory in Irish Cities?

Overview: Our project aims to examine the benefit of rooftop gardens in Irish cities, using Cork City as a guide analysing rooftops per sq ft.

School: St Mary's Secondary School Macroom

County: Cork

Teacher: Jennifer Butler

Student(s): Cliona Burgoyne,
 Caoimhe O'Callaghan

3541

Title: Investigation into horse fitness

Overview: Investigation into how much a horses heart/respiratory rate and temperature changes before and after exercise for an unfit vs fit horse

School: Loreto Secondary School

County: Kilkenny

Teacher: Brendan Williams

Student(s): Abbie Oakey,
 Heather Byrne

3542

Title: Affects energy drinks have on your sport performance

Overview: Testing to see if the risk of taking energy drinks is worth the increase to your sports performance

School: Bandon Grammar School

County: Cork

Teacher: Ronan Haydon

Student(s): Scott Fuller, Joe
 Clover, Niall Miskella

3543

Title: An Investigation to determine if there is any correlation between the incidence of lung cancer in dogs and living in regions with high levels of Radon in County Clare.

Overview: Is there any correlation between the incidence of lung cancer in dogs and living

in regions with high levels as opposed to low levels of Radon.

School: Meánscoil na mBráithre

County: Clare

Teacher: Sean Murphy

Student(s): John Sheridan, Caimin
 McGlennon

3544

Title: The effect of aging on balance

Overview: An investigation into the effects of ageing on balance and a

comparison between the balance of different age groups using a series of different tests.

School: St Vincent's Secondary School

County: Louth

Teacher: John White

Student(s): April Conroy,
 Kathleen Campbell, Jessica Fergus

3545

Title: Lyme vs Deer is there a correlation?

Overview: Is there a correlation between high Deer population and incidence of Lyme Disease in humans?

School: Coláiste Pobail Bheanntaí

County: Cork

Teacher: Sharon Kingston

Student(s): Jack Murphy,
 Connor Crowley, Gustav Kowalski

3546

Title: Locating suitable areas for anaerobic digesters in the Republic of Ireland

Overview: This project will Develop a marking scheme, based on specific site criteria, to establish potential suitable locations for Anaerobic Digesters in the Republic of Ireland.

School: Millstreet Community School

County: Cork

Teacher: Francy Lyons

Student(s): Alan Gajkowski,
 Hugh Keane,

3547

Title: Energy usage in our school

Overview: Our project is about how much power we use on a day to day basis in our school and how much more we can save.

School: St. Clare's Comprehensive School

County: Leitrim

Teacher: Edel Mc Phelim

Student(s): Ciara Leigh Harte,
 Evanna Branley

3548

Title: To test if dried green algae will act as an insulator and a possible alternative to fiberglass

Overview: To test if dried green algae will act as an insulator and a possible biodegradable alternative to the harmful fiberglass insulation

School: Presentation Secondary School Listowel

County: Kerry

Teacher: Chris Kiely

Student(s): Méabh Kennelly,
 Trina Kennedy, Saoirse Whyte

3549

Title: The Floral Origins of Local Irish Honey- Do we have a taste bias?

Overview: Determine the floral sources of honey from different regions in Ireland and to examine if we prefer the unique flavour notes of our local honey

School: Tullow Community School
County: Carlow

Teacher: Emma Kavanagh

Student(s): Abi Hutton, Ódhrán Maxwell, Lauren Byrne

3550

Title: Natural Alternatives To Hair Dye And How They Work

Overview: Our project aims to find natural alternatives to hair dye. We also aim to discover which natural hair colouring methods damage hair the least.

School: Loreto Secondary School
County: Cork

Teacher: Brendan Moher

Student(s): Ugne Vasiliauskaite, Courtney Bane

3551

Title: A statistical analysis into whether modern farming practices are a detriment to the dung beetle and its ability to positively affect Irish agriculture.

Overview: Examining the impact modern farming practices have on dung beetles and the effect they have increasing biodiversity, lower agricultural carbon footprint, thus aiding the environment.

School: Millstreet Community School

County: Cork

Teacher: Jennifer O'Donoghue

Student(s): Rebecca OSullivan, Caoimhe O Mahony, Holly Saunders

3552

Title: An investigation into the microbial properties of pine tree sap

Overview: Our project aims to test the microbial properties of pine tree sap. We also aim to test the sap against other store-bought branded alcohol sanitisers.

School: Coláiste Chiaráin

County: Roscommon

Teacher: Patricia Buckley

Student(s): Abigail Fitzgerald, Emma Sharkey

3553

Title: Breakfast is the way to go!!

Overview: To assess the effects of eating and/or not eating breakfast has on a person's mental and

physical health.

School: Meán Scoil an Chlochair

County: Westmeath

Teacher: Padraic Earley

Student(s): Luca-Gabriel Fazekas, Sabrina Cunningham, Máireann Ward

3554

Title: Sustainable Produce: Honesty Boxes vs Supermarkets?

Overview: An investigation into the impact that farmers' market stalls have on Ireland's sustainability and the development of a mobile application to show honesty box locations

School: Coláiste na Toirbhirte

County: Cork

Teacher: Declan Cronin

Student(s): Grace O'Mahony, Eanna Hickey

3555

Title: does vaping negatively effect the fitness of senior cycle students.

Overview: Our project aims to find out the effect vaping has on the fitness of senior cycle students.

School: Scoil Phobail Sliabh

County: Kerry

Teacher: Gary O' Connor

Student(s): Micaela Moynihan, Ross Moriarty, Anna O'Mahony

3556

Title: The analysis of the effects of micro plastics on soil fertility

Overview: A comparative analysis of the biodegradability of biodegradable plastics in soil and the effect of microplastics on plant growth.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Martin Hickey, Skye Sheedy

3557

Title: Muscle memory vs visualisation : a comparative study

Overview: We are investigating which is more effective muscle memory or visualisation and combined how much can it influence your performance in sport

School: Loreto Secondary School

County: Kilkenny

Teacher: Eanna Heffernan

Student(s): Alex Brennan, Sarah Kehoe, Clodagh Farrell

3558

Title: Éifeacht dhíghalrú aibhneacha ar fhiadhúlra.

Overview: Déanamh taighde

ar an éifeacht don dífhachtán aibhneacha i Port Láirge ar fiadhúlra i agus timpeall an abhainn. Féachimid ar na hainmhí agus plandaí comhartha.

School: Coláiste Pobail Osraí

County: Kilkenny

Teacher: Julia Coffey

Student(s): Evie de Faoite Ferris, Saraid Ní hUaine

3559

Title: Does our genetic composition affect the ability of our tastebuds

Overview: An investigation on how our genetic affects the ability our tastebuds

School: Loreto Secondary School

County: Kilkenny

Teacher: Brendan Williams

Student(s): Huda Rahman, Breeanna Beirne, Emaan Zeb

3560

Title: Plaisteach sa farraige agus an eiffeacht ata againn ann

Overview: Ba maith linn feach isteach ar an faidbh ata ann le iascaracht agus ar iontógail iasc

School: Coláiste Pobail Osraí

County: Kilkenny

Teacher: Julia Coffey

Student(s): Lauren Sinnott, Daisy Croft

3561

Title: An bhfuil díobhlaíoch nádúrtha níos fearr na frithallasán?

Overview: Tá méadú da mhéid díobhlaíoch nádúrtha sna siopaí ach an bhfuil sé chomh éifeachtach leis na bhfrithallasán?

School: Kinsale Community School

County: Cork

Teacher: Catherine Coughlan

Student(s): Finola Gaffney, Caoimhe Hayden, Sarah Graham

3562

Title: Comparing the effects of a pre-workout supplement to coffee and a control on a workout

Overview: Comparing the effects of a pre-workout supplement to coffee and a control in an intense workout, monitoring heartrate and blood pressure.

School: Meán Scoil an Chlochair

County: Westmeath

Teacher: Padraic Earley

Student(s): Eric Martin, Nathan Gowran, Daniel Keenan

3563

Title: Evaluation of a school 's canteen food for boarders!

Overview: Our project takes a look at the canteen food of the boarding schools in Ireland and

how it affects the health of their students

School: Sligo Grammar School

County: Sligo

Teacher: Sandra Tiernan

Student(s): Gwen Catharina Gutberlet, Inka Menrad, Shawna Kienbaum

3564

Title: Are fruit stickers necessary and is there a better alternative?

Overview: We will be investigating the ecological impact of fruit stickers and try to find a potential alternative.

School: Presentation Secondary School Thurles

County: Tipperary

Teacher: Charlene O'Brien

Student(s): Emily Flanagan, Faye Twomey

SENIOR GROUP

3600

Title: Kelpoleum: Sugar kelp biofuel as an alternative to petroleum fuel.

Overview: Our project aim is to extract biofuel from Sugar Kelp (*Saccharina Latissima*) biomass, using chemical pretreatment and hydrothermal liquefaction.

School: St Joseph's Community College

County: Clare

Teacher: Laura Egan

Student(s): Caragh Killeen, Ailish Marrinan, Cian McInerney

3601

Title: Testing Daphnia's heart rates in different teas.

Overview: Our scifest project is to test the heart rate of daphnia in different teas to see if they can help us relax.

School: Tullamore College

County: Offaly

Teacher: Noreen Flynn

Student(s): Lana Barisic, Caitlyn Coyne,

3602

Title: Investigating the Immunosurveillance properties of erythrocyte-bound toll-like receptors

Overview: We plan to investigate the immunosurveillance properties of erythrocyte-bound toll-like receptor 9 when bound to CpG DNA, and if it can trigger a proinflammatory response

School: Colaiste Rís

County: Louth

Teacher: Kaya Kalyoncuoglu

Student(s): Conall Mullins, TJ McDonnell



3603

Title: An investigation into methane release from permafrost using satellite data

Overview: My team and I are investigating how methane release from permafrost affects local and global temperatures using satellite data

School: Abbey Christian Brothers School

County: Down

Teacher: Maeve Carey

Student(s): Michael Hearty, Luke McKeveney

3604

Title: An investigation into the most effective household agents at preventing fungal mould on fruit.

Overview: We aim to test at least five different types of natural remedies to see how effective they are at preventing microbe growth.

School: Abbey Vocational School

County: Donegal

Teacher: Donna Furey

Student(s): Jane Faulkner, Amy McGroary, Robyn Given

3605

Title: A statistical analysis of the impact of Menstrual Cycle syncing on Performance in elite females sports teams.

Overview: This project will attempt to find out if female sports teams menstrual cycles sync and how does this affect their performance.

School: Rockford Manor Secondary School

County: Dublin

Teacher: Kelly Ryan

Student(s): Leah Loughlin Carragher, Sarah Campbell

3606

Title: The effect of hypoxia-induced lung injury on fibroblast activation

Overview: Long-term activation of lung fibroblasts can cause Pulmonary Fibrosis. Our project aims to study the effects of hypoxia-induced lung injury on fibroblast activation.

School: South Eastern Regional College - Lisburn

County: Antrim

Teacher: Susan Stokesberry

Student(s): Natalie Arnaudova, Taneesha McCaughan

3607

Title: An evaluation of the use of Biochar in reducing greenhouse gas emissions from urea

Overview: We are looking to see if adding different amounts of biochar to urea would reduce emissions of greenhouse gases from the urea

School: Mary Immaculate Secondary School

County: Clare

Teacher: John Sims

Student(s): Alice Davoren, Emily Cullinan

3608

Title: The Einstein of Enzymes: A Battle Against Plastic Pollution

Overview: An investigation into the degradation of bioplastics in home-composting and how enzymes are able to accelerate this process

School: Loreto College

County: Dublin

Teacher: Katie Kinkaid

Student(s): Juliette Kelleher, Aoife Lynn, Honor Lynch

3609

Title: An examination of bacteria cultures cultivated from open water bodies, with additional research into possible antibiotic resistance.

Overview: We intend to take samples from various bodies of water in our area, cultivate colonies on agar, and identify the species found in each sample.

School: Summerhill College

County: Sligo

Teacher: Kathy Mc Morrow

Student(s): Diarmait Fennelly, Andrew Connell, Tom Murphy

3610

Title: The root of water - An investigation into the ability of native hedging to absorb water

Overview: Investigating which one of 4 native hedge species can absorb the most water

School: St Joseph's Secondary School

County: Clare

Teacher: Catherine Clair

Student(s): Aoife Corry, Tara Dwyer, Nadine Clancy

3611

Title: Can we save the common ash?

Overview: An investigation into the Jasmonic and Salicylic acid interplay and its effect on the plant - pathogen interaction of Common Ash and H.fraxineus.

School: Loreto Secondary School

County: Dublin

Teacher: Chloe White

Student(s): Olivia O'Shea, Erica O'Brien Murray, Abigail O'Brien Murray

3612

Title: Reactivation of the Epstein Barr Virus (Glandular Fever); is there a connection between the reoccurrence of it and Post-Acute COVID-19? - A Statistical Analysis

Overview: A statistical analysis of data collected on initial diagnosis and reactivation of the EBV, following post-acute COVID.

School: Carndonagh Community School

County: Donegal

Teacher: Christine Gilmore

Student(s): Ciara Gilmore, Beth Doherty

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2023





HALL 1



EXHIBIT HALL 2

**WINNERS AREA
(SATURDAY)**

14

13

**THE PRIMARY
SCIENCE
FAIR**

BT YOUNG SCIENTIST
& TECHNOLOGY Exhibition

12

16

15

SCREEN 3D

MAP KEY

- 01** School visits ticketing
- 02** Coffee Bar
- 03** Information Desks
- 04** Organisers Office
- 05** Student Projects
- 06** BT Arena
 - Opening/Awards Ceremonies
 - Secrets of Superhero Science
 - Strong Women Science
 - Smash your goals secrets to success
 - Freestyle Physics
- 07** RSA Interactive Shuttle
- 08** Food Court
- 09** Ring Bistro
- 10** Exhibit Hall 1
- 11** Meeting Points
1 & 2 for coach party departure
- 12** Packed lunch area
- 13** The Primary Science Fair
- 14** Exhibit Hall 2
- 15** Screen 3D & Student Club
- 16** Global Goals Game with Irish Aid
(Drumming Workshop - Clyde Room Foyer)
- 17** Results video wall

JUNIOR INDIVIDUAL

4100

Title: Music + Maths = a Perfect Pair

Overview: Investigate the relationship between music and mathematics and assess the benefits of learning/playing music for the development of maths for secondary school students.

School: Coláiste Chiaráin

County: Roscommon

Teacher: Hannah Conroy

Student(s): Aristide Selve

4101

Title: Where Is The Truth: The Effects of Media Propaganda on Ireland

Overview: An investigation into the use of propaganda in the media, especially during times of conflict on the opinions of Irish teenagers, and on this country.

School: Blackwater Community School

County: Waterford

Teacher: Danielle Murphy

Student(s): Cathal Barry

4102

Title: What is the best way to communicate complex topics with a non-expert?

Overview: I will use data analysis and look at views and comments on videos, etc. and see how we should communicate these topics best.

School: Newbridge College

County: Kildare

Teacher: Dermot Walsh

Student(s): Rian Hearne

4103

Title: The impact of going back to "normal" schooling post Covid-19 has had on teenager's stress & anxiety levels.

Overview: My project aims to find out if teenagers have been negatively impacted from a stress & anxiety perspective upon returning to school this September post-Covid.

School: Mercy Secondary School Mounthawk

County: Kerry

Teacher: Roisin Riordan

Student(s): Roanna Lawless O'Sullivan

4104

Title: Which is more Attractive Composite faces or Real Faces?

Overview: Why do people find certain faces more attractive than others. I will look at whether composite faces are more or less

attractive than real faces.

School: St Mary's Diocesan School

County: Louth

Teacher: Sophie Caine

Student(s): Kaelen Nulty

4105

Title: The Effects of Technology on the Literacy of Adolescents

Overview: The objective of my project is to examine the effects of using technology for homework on the literacy of students in secondary school.

School: Coachford College

County: Cork

Teacher: Michelle Kenneally

Student(s): Ash Balik

4106

Title: Can Peer Pressure Positively Influence Teenager's Diet

Overview: : I will find out if there is a way in which our peers can positively influence our food choices and thereby promote good health.

School: Schull Community College

County: Cork

Teacher: Jenny Dixon

Student(s): Robyn Whelton

4107

Title: How do our pets affect our mental health and wellbeing?

Overview: This project is a study of pet ownership and interaction with them among teenagers and the varying degrees of positive mental health and wellbeing

School: Schull Community College

County: Cork

Teacher: Jenny Dixon

Student(s): Emily Drinan

4108

Title: 'Big P' or 'little p'? A study of young people's conceptions of and engagement in politics.

Overview: A mixed methods research into young people's conceptions of and engagement in established ('Big P') & alternative ('little p') politics.

School: Pobalscoil na Tríonóide

County: Cork

Teacher: Mary O'Neill

Student(s): Danny King

4109

Title: A Statistical Analysis of Neurodiversity in Junior Cycle Students.

Overview: My project is a case study of neurodiversity (focusing on ASD) in students using quantitative and qualitative methods.

School: Mercy Secondary School Mounthawk

County: Kerry

Teacher: Eimear Nolan

Student(s): Aoife-Kate Trant

4110

Title: An Investigation into the Effect of Ball Target Practice on Memory Function among Primary School-Aged Children.

Overview: Examining whether ball target practice can aid memory, and the potential for developing an integrated education strategy, combining physical activity and learning.

School: Loreto College

County: Dublin

Teacher: Seamus Hayes

Student(s): Maria Lenny

4111

Title: An analysis into peoples' bias towards people with vitiligo

Overview: I aim to see if society's perception of vitiligo is linked to bias towards imperfection, or because of miscommunication

School: Kinsale Community School

County: Cork

Teacher: Aishling Kelleher

Student(s): Lia D'Arcy

4112

Title: Binge drinking a problem BUT could it be all in the pour?

Overview: A study into the over consumption of alcohol by 18-24 year olds when pouring a "standard drink" at "home" and to identify a solution.

School: Colaiste Muire Crosshaven

County: Cork

Teacher: Sarah Fogarty

Student(s): Emily O'Regan

INTERMEDIATE INDIVIDUAL

4200

Title: Ar Thug an Riarachán de Vacsaíniú COVID-19 Dearcadh Difriúil de Glúin 'Z' ar Vacsaíniú i gComparáid le Ghlúnta Eile?

Overview: I gcoinne chúlra COVID-19, an bhfuil dearcadh difriúil ag Ghlúin Z maidir le vacsaíní i gcomparáid le glúnta roimhe.

School: Colaiste An Phiarsaigh

County: Cork

Teacher: Caoimhín Ó Buachalla

Student(s): Laura de Róiste

4201

Title: An investigation into the Barnum Effect and the Fallacy of Personal Validation.

Overview: Investigating how the Barnum/Forer Effect and the Fallacy of Personal Validation affect our way of interpreting information.

School: Coláiste Choilm

County: Cork

Teacher: Paudie Scanlon

Student(s): Ellie O'Callaghan

4202

Title: Homelessness

Overview: My project will be explaining the problems with homelessness.

School: Coláiste Nano Nagle

County: Limerick

Teacher: Samantha Prior

Student(s): Holly O'Keeffe

4203

Title: Tyrex

Overview: Can using tyrex a mobile application which educates, stores and alerts you to tyre issues change driver behaviours towards tyre maintenance and improve road safety?

School: Coláiste Cholmáin

County: Mayo

Teacher: Anne Mulkeen

Student(s): Cian Mangan

4204

Title: Would You Like A Cookie?

Overview: A study into how social media uses cookies to gather data on its users, as well as the data you aren't informed about.

School: Sacred Heart Secondary School

County: Cork

Teacher: Claire Holland

Student(s): Caoilin McCarthy

4205

Title: A Statistical Analysis of Secondary-level Students' Opinions Towards Third Level Education and Apprenticeships

Overview: My project aims to find out secondary school students' (13-18 Y.O) opinions on Third Level Education and Apprenticeships.

School: Blackwater Community School

County: Waterford

Teacher: Brigid Barrett

Student(s): Cormac Martin

4206

Title: Copy That

Overview: The aim of my project is to investigate if other people's actions can influence our own actions or decisions.

School: Sandymount Park Educate Together Secondary School

County: Dublin

Teacher: Conor Maxwell

Student(s): Autumn Kaiser

4207

Title: Has covid-19 lockdown resulted in increased rates of

juvenile sports injuries and what has the psychological impact been?

Overview: This project aims to investigate whether juvenile athletes have experienced increased levels of injury post Covid-19 lockdown and the associated psychological impacts

School: St Marys College

County: Wicklow

Teacher: Joanne English

Student(s): Grace Delaney

4208

Title: Giving forgotten girls a voice: How Successful is the HSE at treating girls with endometriosis?

Overview: Researching the type and quality of care teenagers with endometriosis receive in all branches of the Irish healthcare system

School: Athlone Community College

County: Westmeath

Teacher: Catherine O'Meara

Student(s): Kayleigh McNamara

4209

Title: How raising awareness of online disinhibition can lower cases of cyberbullying in teens

Overview: I will raise awareness of the online disinhibition effect through a series of presentations to find if knowledge of this phenomenon can lower cyberbullying cases

School: Blackwater Community School

County: Waterford

Teacher: Brigid Barrett

Student(s): Derval Gibney-Sheridan

4210

Title: The Impact of Misogynistic Online Influencers on Young People's Perception of Women.

Overview: Use 2 studies and statistical analysis on the impact of misogynists online on young people's (15-18-year-olds) perception of women.

School: Coláiste Choilm

County: Cork

Teacher: Karina Lyne

Student(s): Emily Duffy

4211

Title: Flies in Our Pies: why we should (and can) turn to environmentally friendly sources of protein.

Overview: I will explore why humanity has not yet adopted black soldier fly farming as a food source despite the positives compared with traditional meat

production.

School: Athlone Community College

County: Westmeath

Teacher: Emma Buckley

Student(s): George Whitarjans

4212

Title: Learning environments that LAST: An enquiry into student opinion on Light, Air quality, Space and Temperature in classrooms.

Overview: The aim of my project is to determine which type of classroom design students prefer and to see if Department designs are matching these preferences.

School: Lanesboro Community College

County: Longford

Teacher: Mary O'Brien

Student(s): Ronan Lyons

4213

Title: The possibility and profitability of introducing Donegal to the Irish national rail network to service a social, economical and environmental need.

Overview: I want to examine the financial and social effects of connecting the county of Donegal to the Irish Rail network.

School: Abbey Vocational School

County: Donegal

Teacher: Donna Furey

Student(s): Maya Lenehan

4214

Title: A statistical study into the link between possession of a crystal and effects on short term memory recall and pattern recognition in exam situations due to the influence of fake science in media.

Overview: A study into the effect of the possession of a crystal in exams and an effect on pattern recognition and short term memory recall, due pseudoscience media.

School: Kinsale Community School

County: Cork

Teacher: Shaun Holly

Student(s): Aengus Price

4215

Title: Do Schools Accommodate for the needs of Neurodivergent Individuals?

Overview: In this project I will investigate the struggles of neurodivergent individuals at school using surveys.

School: Athlone Community College

County: Westmeath

Teacher: Emma Buckley

Student(s): Oliwier Sikora

4216

Title: An investigation into the correlation between mobile phone use and stress amongst post primary students.

Overview: To investigate the coping mechanisms students use and the impact mobile phones have on students stress.

School: Scoil Mhuire

County: Roscommon

Teacher: Mairead Glynn

Student(s): Victoria Geraghty

4217

Title: The creation of retirement villages to impact the housing crisis in Ireland

Overview: I aim to find out if the creation of retirement villages will help with the housing crisis and will this benefit the elderly in Ireland

School: St Marys College

County: Wicklow

Teacher: Joanne English

Student(s): Eva Duffy

4218

Title: Does Lego make you more creative?

Overview: My project will investigate whether or not Lego the toy makes someone more or less creative.

School: Marist College

County: Westmeath

Teacher: Adele Brown

Student(s): Martin Murray

4219

Title: A Statistical Investigation into the Correlation between Joint Hypermobility and Anxiety

Overview: I will investigate the theory that Joint Hypermobility and anxiety are correlated by surveying students aged 12-16 years old.

School: Coláiste Choilm

County: Cork

Teacher: Karina Lyne

Student(s): Lily O'Keeffe

4220

Title: I've got 99 problems but age ain't one

Overview: An investigation into the positive aspects of ageing among the over 65's.

School: Colaiste Muire Crosshaven

County: Cork

Teacher: M McMahon

Student(s): Karen Cotter

4221

Title: Press play to remember - investigation into memory retention improving when the brain is reactivated during sleep.

Overview: The aim of this project

is to investigate if memory retention improves when the brain is reactivated during sleep.

School: Rockford Manor Secondary School

County: Dublin

Teacher: Kelly Ryan

Student(s): Batool Mansoor

4222

Title: Investigating the Placebo and Nocebo Effects

Overview: I'll investigate how the placebo and nocebo effects have implemented themselves upon one's standard lifestyle and how they can be evoked through common habitual behaviour

School: St Dominic's High School

County: Antrim

Teacher: James Geddis

Student(s): Katrina Villasfer

4223

Title: An Investigation to Ascertain the Differences Between the Coping Mechanisms of Male and Female Teenagers

Overview: An investigation into the differences between the coping mechanisms of the two biological sexes, males and females.

School: Coláiste Choilm

County: Cork

Teacher: Karina Lyne

Student(s): Kellie-Anne Holmes

4224

Title: The Colour of Sound and Its Effect on the Brain

Overview: The project I have chosen is to investigate how the different colours of sound affect people's concentration, relaxation and sleep.

School: Lucan Community College

County: Dublin

Teacher: Clare Healy

Student(s): Alba Cooney-Mercadal

4225

Title: Prejudice against music in foreign languages

Overview: I will be investigating the prejudice people of multiple ages and backgrounds have against music in Korean, French, Polish, Spanish and Chinese.

School: Ballincollig Community School

County: Cork

Teacher: Michael McCarthy

Student(s): Aoife Skinner

4226

Title: A statistical analysis on the effects of pro-anorexic and diet culture social media content on teenagers.

Overview: My project aims to investigate if there is a correlation between restrictive eating behaviors in teenagers and social media usage.
School: Sandford Park School Ltd
County: Dublin
Teacher: Dana Kilroy
Student(s): Sophie Mullett

4228

Title: Vaping Under The Influence: An investigation into the impact of social media on adolescent attitudes towards vaping
Overview: Given the increase in adolescent vaping from 2015-2019, I am investigating the impact of social media and online advertising on adolescent attitudes towards vaping.
School: Loreto Secondary School
County: Cork
Teacher: Brendan Moher
Student(s): Leah Nolan

4229

Title: The True Cost of The Accommodation Crisis in Ireland
Overview: My project is about the lack of Student Accommodation in Ireland/Rising cost of accommodation and how this can impact on Irish students attending university/college.
School: Our Lady's Secondary School
County: Monaghan
Teacher: Kevin Nolan
Student(s): Annabel Bogue

4230

Title: Examining the experiences and effects of overtraining in young athletes.
Overview: The goal of this project is to quantify the training load of adolescent GAA players and establish its effects on injury, sleep and burnout patterns.
School: Colaiste Treasa
County: Cork
Teacher: Joanne Corkery
Student(s): Eoin O Keeffe

4231

Title: A comparative study of Consent knowledge awareness of secondary school students and college students.
Overview: My project on consent will highlight its importance before engaging in anything intimate with another person even when in a relationship.
School: St. Clare's Comprehensive School
County: Leitrim
Teacher: Edel Mc Phelim
Student(s): Erin Chester

4232

Title: An Investigation into 'Gym Bro' culture in adolescent males
Overview: An investigation on whether Gym Bro culture is masking unhealthy and disordered body image in male adolescents.
School: St Finian's College
County: Westmeath
Teacher: Martina Roache
Student(s): Alanna Corroon Glavin

4233

Title: G.E.T together - Girls in Engineering and Technology
Overview: A Statistical analysis of factors impacting girls choosing engineering and technology subjects in secondary school, and a plan to improve female participation in these areas.
School: St Brigid's College
County: Galway
Teacher: Annette Lambe
Student(s): Ava Conerney

4234

Title: An ba chóir do cannabis a bheith déanta dleathach in Éirinn?
Overview: Tá mo tairiscint i gcomhair an Eolaí Óg mionstáidear ar an druga cannabis agus an ba chóir de a bheith déanta dleathach in Éirinn?
School: Gaelcholáiste Charrraig Uí Leighin
County: Cork
Teacher: Seán O Finn
Student(s): Caoimhe Ní Spiolláin

4235

Title: A Study into the attitudes of Transgender Individuals and their Experiences with Social Prejudice
Overview: I am researching if knowing the distress of transgender individuals and their experiences with social prejudice benefits everyone that understands this unfamiliar yet important information.
School: St. Clare's Comprehensive School
County: Leitrim
Teacher: Edel Mc Phelim
Student(s): Aine Mitchell

4236

Title: Psychological Phenomena
Overview: I will investigate several psychological phenomena through various means including research, surveying and observation. E.G. 'Cognitive Dissonance', 'The Mandela Effect' and 'The Sunk Cost Effect'.
School: Salesian Secondary College
County: Limerick

Teacher: Lisa Downey
Student(s): Fardeen Khan-Lynch

4237

Title: An éifeacht trasnaíochta comhthéacsúla agus foghlaim i gcór déagóirí.
Overview: Beidh mé ag iniúchadh conas a cabhraíonn trasnaíochta foghlama rudaí a chur san cuimhne fadthéarmach.
School: Coláiste Pobail Osraí
County: Kilkenny
Teacher: Julia Coffey
Student(s): Tomás Ó hOldain

4238

Title: An investigation into the differences in how men and women are treated in online gaming
Overview: I'll be recording, observing and analyzing gameplay and people's reactions to a women playing and talking verses a women playing but a man is talking
School: St Aloysius School
County: Cork
Teacher: Katie O'Donovan
Student(s): Rachel Wallace

4239

Title: Glasbhealach nó iarnród?
 Anailís staitisticiúil ar sean-iarnród idir Mainistir na Corann agus Eochaill
Overview: Anailís staitisticiúil ar iarnróid agus glasbhealach in Éirinn chun teacht ar an ceart iarnród nó glasbhealach a thógáil ar shean-iarnród Mainistir na Corann – Eochaill.
School: Coláiste Pobail Osraí
County: Kilkenny
Teacher: Julia Coffey
Student(s): Iain Ó Coimín

4240

Title: The Economy of Cannabis
Overview: To investigate the potential economic and social impact of the legalisation of cannabis in Ireland.
School: Colaiste Mhuire,
County: Westmeath
Teacher: Eva Acton
Student(s): Hugh O'Sullivan Sexton

4241

Title: Comparing progression to STEM courses and careers between all girls' and co-educational schools
Overview: By carrying out this project, I plan to explore and compare the attitudes of female students towards STEM subjects with those of male students.
School: Dominican College
County: Galway
Teacher: Jean Carr

Student(s): Claire Leuridan-Slevin

4242

Title: Creating a subtle fidget toy to help people with sensory overload
Overview: My project aims to help people with sensory issues and to develop a product that will help them in hyper-sensitive environments
School: St Joseph's Secondary School
County: Westmeath
Teacher: Darragh Glynn
Student(s): Aoife Ní Fhearghail

4243

Title: Is horse play really a bad thing?
Overview: The role of the stall environment on horses well-being.
School: Coláiste Pobail Osraí
County: Kilkenny
Teacher: Julia Coffey
Student(s): Caoimhe Greene

4244

Title: Anailís Staitistiúil ar Dhearcadh Déagóirí na hÉireann vs Déagóirí na Breataine Bige i Leith a dTeanga Dhúchais a Fhoghlaim
Overview: Chun fáil amach na difríochtaí idir dhearcthaí déagóirí Éireannacha i leith foghlaim na Gaeilge agus dearcadh déagóirí Breatnaise ar foghlaim na Breatnaise.
School: Castleisland Community College
County: Kerry
Teacher: Donncha Hickie
Student(s): Caitríona Murphy

4245

Title: Napping, a clever use of your time or a complete snooze fest?
Overview: An investigation into whether napping affects the brain by testing several factors before and after napping.
School: Coláiste Cholmille
County: Donegal
Teacher: Fenton McHugh
Student(s): Alessandro Cian

4584

Title: An investigation into attitudes and awareness towards pain-medication in 15-19 year olds.
Overview: With the depth of the American opioid crisis, we aim to assess prevailing attitudes towards pain-medication in our cohort (ages 15-19) as future consumers.
School: Glanmire Community College
County: Cork
Teacher: Noreen Emerson
Student(s): Robert O'Halloran

SENIOR INDIVIDUAL

4300

Title: Nuclear Power in Ireland – is Stigma holding us Back?

Overview: An investigation into the stigma around nuclear power among people in Ireland, and if it's stopping us from meeting our net-zero carbon emission goals.

School: Laurel Hill Secondary School FCJ

County: Limerick

Teacher: Mary Frawley

Student(s): Rafiah Islam

4301

Title: How big an affect does Social Media have on gate receipts in the League of Ireland?

Overview: This is an insight into the rise and affect of Social Media promotion in the League Of Ireland and where it is building towards

School: Lanesboro Community College

County: Longford

Teacher: Michael Lyons

Student(s): Bryan Mullooly

4302

Title: Covid-19 Conspiracies and the Internet

Overview: A study looking to see if there is a correlation between the websites people browse and the likelihood of them engaging with covid-19 conspiracy theories.

School: Lanesboro Community College

County: Longford

Teacher: Michael Lyons

Student(s): Amy O Donohue

4303

Title: Running up that hill: Investigating the impact of school location, size and socioeconomic status on school performance at national cross country events from 2012 to 2022

Overview: To measure the impact of school location, size and socioeconomic status on school performance at cross country events from 2012-2022 using surveys and documentary sources.

School: Lanesboro Community College

County: Longford

Teacher: Michael Lyons

Student(s): Conor Lyons

4304

Title: Forecasting an individual's political leaning based-off their social media profile.

Overview: By searching public social media profiles, my personal neural network will learn indicators,

which will be used to predict who a person will vote for

School: Newbridge College

County: Kildare

Teacher: Dermot Walsh

Student(s): Tara Mulhall

4305

Title: Do 18 year olds have the cognitive ability to vote fairly?

Overview: Investigating the temporal gap created by neuromaturation rates in different areas of adolescent brains and its implications for age restrictions of societal rights, especially voting.

School: Newpark Comprehensive School

County: Dublin

Teacher: Karen Cashman

Student(s): Nakai Mudiwa

4306

Title: Hypo vs Hyper – An investigation into the awareness of the public into the differences between Hypoglycaemia and Hyperglycaemia.

Overview: Investigating awareness of the public of hypoglycaemia and hyperglycaemia in Type 1 Diabetics.

School: Coláiste Naomh Mhuire

County: Kildare

Teacher: Nadine Hennessy

Student(s): Amelia Read

4307

Title: STIGMA

Overview: STIGMA? Can a mobile application through tracking and monitoring make a positive impact on a teenagers understanding and recognition of their mental health?

School: Mount St Michael

County: Mayo

Teacher: Stephanie Hogan

Student(s): Órlaith Heaney

4308

Title: Is the Irish educational system inadvertently favouring morning larks?

Overview: To analyse the sleep habits of young people in school and how people with different circadian rhythms are being affected by early school times

School: Dominican College

County: Galway

Teacher: Dee King

Student(s): Ranya Kaushik

JUNIOR GROUP

4400

Title: An mbíonn tionchar ag ábhair éagsúla snámha ar do fheidhmíocht?

Overview: Táimid chun dul ag

snámh ag caitheamh ábhair éagsúla snámha agus féach an ndéanann sé difríocht.

School: Colaiste An Phiarsaigh

County: Cork

Teacher: Caoimhín Ó Buachalla

Student(s): Jennifer Ní Murchú, Clíodhna Nic Carthaigh, Elin Manson

4401

Title: Ag cabhrú leis an timpeallacht le bia áitiúil

Overview: Má tá bia atá foinse áitiúil níos coitianta cé có cabhrach a bheidh sé dón timpeallacht?

School: Colaiste An Phiarsaigh

County: Cork

Teacher: Caoimhín Ó Buachalla

Student(s): Tadhg O'Mara, Lauren Ni Bheirne

4402

Title: How has covid-19 impacted laboratory skills of 2nd and 3d level students

Overview: To investigate the impact of covid-19 on the laboratory skills of 2nd and 3rd level students in Ireland and how we can improve them.

School: St. Brogan's College, Bandon

County: Cork

Teacher: Sara Hurley

Student(s): Tegan McCarthy, Ella Rose Coomey

4403

Title: The Effects of iPads in the classroom

Overview: Seeing the effects on learning of using iPads in the classroom and what students think.

School: Scoil Mhuire gan Smal

County: Cork

Teacher: Colm Kiely

Student(s): Malachy Burns, Michael Bailey

4404

Title: Music and Studying - What Affects Do Background Music Have on Concentration and Accuracy?

Overview: Our project is investigating if music affects concentration and efficiency of simple tasks.

School: St. Brogan's College, Bandon

County: Cork

Teacher: Sara Hurley

Student(s): Owen O'Sullivan, Philip Straub

4405

Title: Peer pressure: Great minds think alike or do they?...

Overview: Rerunning the Solomon Asch experiment with

Irish adolescents looking at the influence of age and gender

School: Malahide Community School

County: Dublin

Teacher: Orla Rooney

Student(s): Nicholas Connolly, Matthew McCarthy

4406

Title: How sleep affects mental and physical challenges

Overview: Our projects aims to see how different hours of sleep affect various mental and physical challenges

School: Presentation Secondary School

County: Kilkenny

Teacher: Lisa Carey

Student(s): Emily Donohue, Ada Bambrick

4407

Title: Tionchar spóirt ar ár rata croi

Overview: Tá foinn orainn fhailt amach conas a bhíonn an rata croi ag athru ag deanamh spoirteanna eagsúla.

School: Colaiste An Phiarsaigh

County: Cork

Teacher: Caoimhín Ó Buachalla

Student(s): Max Hyland, Cillian Long, Evan Peel

4408

Title: An investigation into sustainability practices on Irish farms and the factors that affect them – particularly the cost of living crisis as an influencing factor.

Overview: Our project aims to find out how the cost of living crisis is impacting farmers and if it is encouraging them to be more sustainable Through hope where supported sustainable.

School: Coláiste Fionnchua

County: Cork

Teacher: Marie Muckley

Student(s): Zac Darcy, Colm King, Eoghan O'Donnell

4409

Title: Do slogans on bins boost recycling

Overview: We are going to test does the use of slogans increases recycling in a school environment

School: Colaiste Lorcain

County: Kildare

Teacher: Amy Sullivan

Student(s): Alex Gaffney, Oisín Hanbury

4410

Title: The Name Game; Do people judge you based on your first name rather than on observed ability?

Overview: Do people associate

certain characteristics with first names
School: Castlepollard Community College
County: Westmeath
Teacher: Stephen Melody
Student(s): Bartle D'Arcy, Adam Maxwell

4411

Title: An bhfuil ipads níos fearr na leabhair sa mhéanscoil?
Overview: Táimid ag iarraidh an chóir duinn ipads a úsáid in ár scoil nó fanacht le leabhair? agus ceard iad na míbhuntáistí agus buntáistí idir iad.
School: Coláiste Íosagáin
County: Dublin
Teacher: Tara Turner-Heaney
Student(s): Clíodhna Nic Conmara, Rachel Murphy

4412

Title: Ag Caomhnú Timpeallachta & Airgead sa Phóca
Overview: Eolas ar fáil do phobail ar an méid/costas a bhaineann lena n-úsáid fuinnimh agus dá thoradh seo, iad a spreagadh úsáid fuinnimh a laghdú.
School: Coláiste Íosagáin
County: Dublin
Teacher: Tara Turner-Heaney
Student(s): Ainnir Ní Dhonnacha, Kate Nic Cárthaigh

4413

Title: How can we increase the step students in our year
Overview: Use different methods we will attempt to increase steps in our year.
School: Muckcross Park College
County: Dublin
Teacher: Lisa Shine
Student(s): Molly MacNicholas, Lara Forsythe, Bella-Rose Feely

4414

Title: The link between sleep and exercise - an analysis with smart watch technology
Overview: Using data collected from 71 students over 8 weeks, from three schools, we study the link between sleep and exercise.
School: Douglas Community School
County: Cork
Teacher: Cian O Mahony
Student(s): Cillian Casey, Josh Healy, Nikolas Adamski

4415

Title: Do your perceptions affect your ability to succeed?
Overview: We will give different people different information on the difficulty of tasks and questions

and see if we get different outcomes.
School: Newpark Comprehensive School
County: Dublin
Teacher: Karen Cashman
Student(s): Oscar McGowan, Casper Ryan,

4416

Title: Applying polyvagal theory in the classroom to support students improve their wellbeing.
Overview: Polyvagal theory describes the autonomic nervous system(ANS) that relate to social behaviour and connection. We are using this theory to improve student's wellbeing.
School: Mount Anville Secondary School
County: Dublin
Teacher: Niall McGrath
Student(s): Leah McNulty, Grace Kearney

4417

Title: Agreement Between Child Self-report and Caregiver-Prox Report for Quality of Life, Substance Use and Suicidal Ideation of Irish Secondary School Children
Overview: A cross-sectional, prospective online survey study to investigate the congruence between child self-report and caregiver-proxy report of WHOQOL, ASSIST, and ATTS-20 in secondary school children
School: Alexandra College
County: Dublin
Teacher: Patrick Cushen
Student(s): Jiyu Ellie Kim, Louise Tempamy

4418

Title: A study on student and parent worries in the transition to secondary school
Overview: This project explores what makes students and their parents most anxious in their transition to secondary school.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Liam Riordan, Fintan Touhy

4419

Title: A statistical analysis examining people's sun protective behaviours and their knowledge of the SunSmart Code.
Overview: To uncover the measures people take to protect their skin from the sun and to find out if they are aware of the SunSmart Code.

School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Emily Bertoletti, Freya Mehigan

4420

Title: How boys view the female role in society
Overview: Our project is to ask boys about the female role in society and their views on stereotypes and stigmas against women.
School: Rosses Community School
County: Donegal
Teacher: Kevin Boyle
Student(s): Méabh Cannon, Grace Andrews

4421

Title: Imscrúdú ar nósanna athchúrsála cearta, ar dearthraí daoine agus cloí leis na treoirínte athchúrsála i measc an phobail i gcoitinne.
Overview: Tá sé mar aidhm ag ár dtionscadal an tábhacht a bhaineann le hathchúrsáil i mbealach ceart, na hiarmhairtí a bhaineann le hathchúrsáil go dona.
School: Kinsale Community School
County: Cork
Teacher: Shaun Holly
Student(s): Jessica O'Keeffe, Martha O'Sullivan, Edel Ryle

4422

Title: BEATS AND BOOTS - a study of the impact of music on a sporting performance
Overview: We will be investigating if listening to music or different tempos of music before a sporting performance can affect that sporting performance
School: Kinsale Community School
County: Cork
Teacher: Aishling Kelleher
Student(s): Miah O' Callaghan, Oran Monaghan

4423

Title: An bhfuil tionchar ag ardaíthe costas bhreosla ar an cinneadh fuinneamh in athnuaithe a úsáid sa teach
Overview: Beidh mé ag deannamh suirbhé ar bealach fuinnimh in athnuaithe a meadaigh i dteach mór le thart fá 2000sq ft a bhí tógtha roimh 2008
School: Coláiste Ailigh
County: Donegal
Teacher: Shane Ó Breacáin
Student(s): Caolan Mc Taggart, Matthew O Farrell, Daithi Mac Diaramada

INTERMEDIATE GROUP

4500

Title: An investigation to highlight gender differences in autistic traits.
Overview: An investigation which aims to make students aware of the lived experience of autistic girls, highlighting the possibility of under or mis-diagnosis in girls.
School: St Joseph's Secondary School
County: Dublin
Teacher: Helen Teehan
Student(s): Nikola Plata, Toni Rogan Byrne

4501

Title: Does music interfere with our Steering Wheels? A systematic investigation into the affects that different genres & styles of music have on driving ability and driving habits.
Overview: What affect does listening to different music genres or specific music characteristics have on our safe driving techniques, observations, speeds & response times?
School: St Mary's Secondary School
County: Dublin
Teacher: Bronwyn Mulvey
Student(s): Kate Ballance, Sadhbh Nolan, Alex Mc Elroy

4502

Title: History repeating itself?
Overview: Is vaping the new smoking? Why are teenagers in this day and age repeating the actions of teenagers 30 years ago?
School: Coláiste Choilm
County: Cork
Teacher: Paudie Scanlon
Student(s): Emma O'Sullivan, Amy O Riordan

4503

Title: Talent or Gender? The Real Secret to a Good Game
Overview: Our project aims to investigate whether players' gender affects the ability of spectators to identify 'good games'.
School: Moate Community School
County: Westmeath
Teacher: Irene O'Sullivan
Student(s): Sarah Jayne Hasson, Róisín Slevin

4504

Title: Athletes vs mental health
Overview: Our project examines the effect of sports on an athletes mental health. It also involves the differences between professional and amateur athletes. Team v Individuals

School: Coláiste Choilm
County: Cork
Teacher: Paudie Scanlon
Student(s): Aine Ryan, Cara O'Connell

4505

Title: To spread awareness of how nutrition effects young athletes lives?

Overview: Our project aims to investigate how the diet of a young athlete (10-16) can affect their overall performance.

School: Presentation Secondary School

County: Kilkenny

Teacher: Lisa Carey

Student(s): Hannah Quinn, Fiona Delaney

4506

Title: A Look Into Our MInds; When Are We At Our Most Dangerous

Overview: Our project aims to discover what influences cause teenagers to take more risks without considering the repercussions.

School: Presentation Secondary School

County: Kilkenny

Teacher: Laura Greene

Student(s): Morette Aylward, Roisin McElwee,

4507

Title: Sun Safety Attitudes and Awareness in Outdoor Work, Sports and Leisure in Ireland

Overview: An investigation into sun safety awareness and sun protection behaviours among people engaged in outdoor work and activities in Ireland

School: Summerhill College

County: Sligo

Teacher: Deirdre Feeney

Student(s): Samuel Regan, Finn Campbell, Matthew Darcy

4508

Title: To investigate the effects of frequent reading on academic success.

Overview: Our project aims to discover if those who read regularly are more successful academically than those who don't.

School: Ballincollig Community School

County: Cork

Teacher: David O'Brien

Student(s): Aoife de Baróid, Bláithín Browne

4509

Title: The effects of colour

Overview: We plan to test weather colour can have any effect on

students behavior in school.

School: Schull Community College

County: Cork

Teacher: Jenny Dixon

Student(s): Megan Brown, Jack Cullinane, Joe Melvin Caird

4510

Title: Eating Insects: Are Irish People on Board?

Overview: An investigation into Irish people attitudes to eating insects as part of their diet and the barriers to consumption

School: Clonakilty Community College

County: Cork

Teacher: Patrick O Keeffe

Student(s): Peter O Sullivan, Sean Flood, Michéal Kelly

4511

Title: Is the housing crisis deterring students from accepting their dream college courses?

Overview: Students are at breaking point due to rising housing prices. As students we will be facing this in the future and something needs to change.

School: St Mary's Secondary School Macroom

County: Cork

Teacher: Shannen Foley

Student(s): Nina O Donovan, Saoirse O'Leary

4512

Title: Scileanna fadhbréitgh madra

Overview: Beimid ag tástáil dhá mhadra féachaint cé acu ceann is cliste le tástálacha éagsúla

School: Colaiste An Phiarsaigh

County: Cork

Teacher: Caoimhín Ó Buachalla

Student(s): Fionn Ó Searcaigh, Briain Mac Óda

4513

Title: Do YOU Get Deja Vu?

Overview: This project is research on the phenomenon known as deja vu. We are investigating different sources, such as doctors, epilepsy organisations, etc.

School: Dominican College

County: Dublin

Teacher: Olivia Brien

Student(s): Rachel Hayes, Isabelle Fronda, Alice Herlihy

4514

Title: Can a Mandela effect be created to manipulate the memory of teenage girls?

Overview: We will attempt to create a Mandela effect that would help understand the science behind manipulation and false realities

created by the human brain.

School: Sacred Heart Secondary School

County: Cork

Teacher: Claire Holland

Student(s): Sinéad crowey, Orla Ryan

4515

Title: Quick Fix

Overview: An investigation into the reaction times of teenage girls when exposed to TikTok or Caffeinated drinks.

School: Sacred Heart Secondary School

County: Cork

Teacher: Claire Holland

Student(s): Ciara Barrett, Alison Brennan

4516

Title: Lights out! - An analysis into how the Irish people are dealing with the soaring energy prices.

Overview: We plan to do an analysis into the lengths Irish people have gone to in order to cope with the energy crisis.

School: St Mary's Secondary School Macroom

County: Cork

Teacher: Shannen Foley

Student(s): Geraldine McCarthy, Niamh O'Riordan, Ellen Kelleher

4517

Title: The future is female, but will it stay that way?

Overview: Our project aims to analyse and investigate women's health and preventative services and the information available to all age groups of women in Ireland.

School: St Mary's Secondary School Macroom

County: Cork

Teacher: Shannen Foley

Student(s): Annah Devine, Caoimhe Shiels

4518

Title: Dár le daltaí meánscoile an bhfuil tionchar ag dathanna sa timpeallacht ar a gcaighdeán foghlamtha agus leibhéal oideachas.

Overview: Dathanna agus leibhéil le bheith réidh don Foghlaim: Cad iad na tuairimí atá ag daltaí ar tionchar dathanna ar iad a bheith réidh don foghlaim?

School: Coláiste Daibhéid

County: Cork

Teacher: Amy Ní Laoire

Student(s): Aoife Keenan, Leah Norberg

4519

Title: Cén tionchar atá ag na

meáin sóisialta ar an eolas sláinte bia atá ag déagóirí?

Overview: Táimid chun suirbhé a úsáid chun eolas a fháil faoin eolas sláinte bia atá ag déagóirí agus an tionchar atá ag na meáin sóisialta ar.

School: Gaelcholáiste Charraig Ui Leighin

County: Cork

Teacher: Rónán Ó Muirí

Student(s): Aoife Ní Giollarnáth Ní Aicidín, Liath Ní Mhaoláin, Oisín Mac Piarais

4520

Title: "You've Got to Move It to Lose It" Can movement breaks in schools reduce stress in secondary school students?

Overview: Through this investigation we are endeavouring to identify if movement breaks included in class timetables can help reduce stress amongst secondary school students.

School: John The Baptist Community School

County: Limerick

Teacher: S Walsh

Student(s): Eva Murnane, Leah Dennehy, Katelyn Hickey

4521

Title: An investigation into the long term affects of peoples mental health during the COVID 19 pandemic

Overview: Our aim is to investigate and compare the statistics of mental health affects on secondary students and adults.

School: Salesian Secondary College

County: Limerick

Teacher: Claire Sheehy

Student(s): Emma O'Brien, Alison Sheehan, Lily heelan

4522

Title: Passenger Transport Emissions modelling to inform local and national school sustainable transport policy.

Overview: This study will examine the role of increased walking, cycling and public transport in schools using bottom-up energy systems simulation models.

School: St Mary's Secondary School Macroom

County: Cork

Teacher: Shannen Foley

Student(s): Lily O'Shea, Grace Kelleher, Caoimhe O'Brien

4523

Title: The effects of printing money and the realistic possibility of going cashless.

Overview: We will investigate the damaging and beneficial effects of printing money on the economy, environment, COVID-19, burglaries and the realistic possibility of going cashless.

School: St Kieran's College

County: Kilkenny

Teacher: David Hennessy

Student(s): Louis Fitzgerald, Dylan Muldowney

4524

Title: Are You Afraid of the Big Bad Germs?

Overview: A survey conducted to investigate if the COVID-19 pandemic has made people more conscious of germs in everyday life.

School: Glenamaddy Community School

County: Galway

Teacher: Deirdre Hardiman

Student(s): Rebecca Joyce, Evelynn Geoghegan,

4525

Title: Lifestyle vs Low Carbon Footprint: Identifying the Factors that Influence Public Support for Environmental Initiatives

Overview: Our project aims to identify the factors that affect the public's willingness to make sacrifices to reduce Ireland's Carbon Emissions.

School: Moate Community School

County: Westmeath

Teacher: Mairead Cusack

Student(s): Arina Tsarkova, Brendan Egan,

4526

Title: As we age technology literacy levels decrease

Overview: Old People = Bad at technology

School: Ardscoil Phadraig

County: Longford

Teacher: Michael Domican

Student(s): Harrison Cheyne, Orla Gilligan, Orla Gilligan

4527

Title: A statistical study to investigate the social, economic, environmental, health and wellbeing benefits of allotments.

Overview: Our project aims to determine the benefits of having an allotment by surveying people and researching documents and websites.

School: Coláiste Choilm

County: Cork

Teacher: Karina Lyne

Student(s): Emma Kennedy, Lydia Young

4528

Title: Can bedroom plants improve your sleep?

Overview: We want to investigate the effects of indoor plants in the bedroom on well-being and sleeping quality based on daily, self-reflection questionnaires

School: Ballincollig Community School

County: Cork

Teacher: Eimear Coholan

Student(s): Nik Adani Insiyira, Sarah-Kate McSweeney, Friederike Eichler

4529

Title: Will turning off the light save a fight?

Overview: This project focuses on two potential areas of conflict around increased energy costs. We examine conflicts within households and conflicts between communities.

School: Millstreet Community School

County: Cork

Teacher: Shane Guerin

Student(s): Aoife Casey, Blaithin Dennehy

4530

Title: The perception of beauty through the eyes of children in the 21st century

Overview: We aim to investigate the perception of beauty through the eyes of children in the 21st century and if it is distorted by media influence

School: Ballincollig Community School

County: Cork

Teacher: Eimear Coholan

Student(s): Senan Michael Nakajima, Evie Burke

4531

Title: 'Grubs up!' - An investigation into the attitudes of Irish adolescents towards entomophagy and liking of insect- containing foods.

Overview: Our project aims to evaluate the attitudes of Irish adolescents towards entomophagy and evaluate adolescents liking and purchase intent of cookies made with insect flour.

School: Colaiste Treasa

County: Cork

Teacher: Joanne Corkery

Student(s): Isabelle O Connor, Lisa Murphy, Gabriela Kudlanska

4532

Title: A Statistical Investigation into the Attitudes of Over 60s Towards Burial and Cremation and Their

Impact on Current Local Authority Medium/Long Term Planning.

Overview: Our project aims to investigate if current Local Authority medium/long term planning reflects the views of over 60s towards burial and cremation.

School: Coláiste Choilm

County: Cork

Teacher: Karina Lyne

Student(s): Grace Harris, Lisa Murphy

4533

Title: Person First - Player Second: Investigating the Extent of Abusive Side-line Behaviour in Underage Team Sport.

Overview: Person First - Player Second: Investigating the Extent of Abusive Side-line Behaviour in Underage Team Sport

School: Larcy College

County: Monaghan

Teacher: Holly May McGovern

Student(s): Zach Rooney, Amy Jo Kierans, Deirbhile Burns

4534

Title: The Impact of Various Motivation Methods on Sporting Outcomes of Students

Overview: An investigation into the effectiveness of various methods of motivation on sporting outcomes of students

School: Castleblayney College

County: Monaghan

Teacher: Celine Keith

Student(s): Tim McArdle, Lauren McCaghey

4535

Title: A study to Investigate the Negative Impacts of Verbal and Physical Abuse on Referees in terms of their Mental Health

Overview: Our project aims to investigate the extent referees mental health is affected by verbal and physical abuse, and if it negatively affects the way they

School: Coláiste Choilm

County: Cork

Teacher: Karina Lyne

Student(s): Jenny Mollaghan, Laura Murtagh

4536

Title: Does your mattress affect your sleep?

Overview: In this study we intend to investigate if upgrading your old mattress for a new one improves your overall sleep.

School: Coola Post Primary School

County: Sligo

Teacher: Caroline Hopper

Student(s): Adam Taylor, Dylan White, Keelan Murphy

4537

Title: An investigation into the effects of Technostress (TS), Compulsive Social App Usage (CSAU) and Fear of Missing Out (FOMO) on the academic performance of Post-Primary Students in Ireland.

Overview: A study to determine the physical, psychological and social effects of Technostress, CSAU and FOMO on the academic performance of post-primary school students in Ireland.

School: Roscommon Community College

County: Roscommon

Teacher: Niamh Conway

Student(s): Nathan Mac an Bhaird, Jack Campbell, Rian Kingi

4538

Title: How images affect your decisions

Overview: We want to see how images affect the choices people of varying age groups make.

School: Meán Scoil an Chlochair

County: Westmeath

Teacher: Padraic Earley

Student(s): Chloe O Sullivan, Áine Keegan

4539

Title: Lough Funsinagh; The Disappearing Lake That's Here to Stay

Overview: We are investigating if a solution can be found between flooded local residents and The Friends of the Irish Environment in this Ecological dispute.

School: Marist College

County: Westmeath

Teacher: Georgina Clear

Student(s): Michael Henehan, Finnan Kilcommons

4540

Title: The Science Behind Your Favourite TV Shows

Overview: We'll be investigating the reasons behind why certain TV shows get popular and if TV companies are using psychology to make us watch their shows.

School: Middleton College

County: Cork

Teacher: Stephanie Mannion

Student(s): Louise Cosgrave, Emma O'Neill, Laura Heaney

4541

Title: Food Miles: What is their impact on the consumer?

Overview: In this project, we hope to see if our shopping habits will change if we know the air miles attached to our food.

School: Coláiste Pobail Bheanntraí

County: Cork
Teacher: Sharon Kingston
Student(s): Anna Conlon, Anna Towns

4542

Title: A statistical investigation into the prevalence of loneliness/isolation among our elderly population in care homes compared with those in independent living
Overview: Our project aims to determine if living in a care home is lonelier and more social isolating than living independently.
School: Coláiste Choilm
County: Cork
Teacher: Karina Lyne
Student(s): Emma O'Sullivan, Fiona Hegarty, Lucy Dorney

4543

Title: Under what circumstances is Rote Learning worthwhile?
Overview: An investigation into how the way texts are presented to us affects our ability to memorise said text, while studying.
School: Loreto Secondary School
County: Kilkenny
Teacher: Eanna Heffernan
Student(s): Ceara Doocey, Ruth Cody, Aoibhín MacCormack

4544

Title: Are you a good person?
Overview: Our project aims to investigate how morals differ between different age groups.
School: Loreto Secondary School
County: Kilkenny
Teacher: Eanna Heffernan
Student(s): Pia Buckenham, Leah Kelly

4545

Title: An investigation into the prevalence of graffiti in post-primary school bathrooms and student motivations for graffiti involvement
Overview: The aim of project is to determine the psychology behind students who graffiti on school property within post-primary schools in Ireland.
School: Roscommon Community College
County: Roscommon
Teacher: Niamh Conway
Student(s): Erin Hayes, Hollie Thorpe

4546

Title: Paperback or Online: Which is most effective for students' learning?
Overview: Investigation into the amount of information absorbed

when reading from paper copies in comparison to reading from a screen, for example a Kindle.
School: Scoil Muire gan Smal
County: Roscommon
Teacher: Niamh Brogan
Student(s): Jane King, Emily-Rose Regan

4547

Title: Flow Forecast
Overview: An investigation into previous water usage and weather forecasts to predict future water demands.
School: Loreto High School
County: Dublin
Teacher: Eimear Maloney
Student(s): Sophie Brennan, Ava Clare

4548

Title: Period Poverty: An investigation into social and economics reasons for a stigma surrounding menstruation and women.
Overview: This project is based on accessibility in relation to feminine hygiene products. We will create an app to help reduce stigma surrounding periods.
School: Coláiste Mhuire Co-Ed
County: Tipperary
Teacher: Katie Carr
Student(s): Rebecca Jordan, Sarah Ryan

4549

Title: Prevalence of Eating Disorders in Adolescent Boys in an Irish School
Overview: We will investigate how eating disorders affect adolescent boys in our school. We want to see the difference in eating disorders in girls and boys.
School: Coláiste Iósaeaf
County: Limerick
Teacher: David Owens
Student(s): Darcy Hanley-Cronin, Sinéad harte, Marta Manero

4550

Title: A study of the behaviour of adolescents in relation to a suspected concussion in team sport and the long term impacts of playing through a head injury
Overview: Our project is a study of teenagers' response to a suspected concussion and how social pressures can lead to damage from overlooked head injuries.
School: Summerhill College
County: Sligo
Teacher: Caroline Mc Goldrick
Student(s): Naoise Fitzgerald, Patrick Murphy

4551

Title: COVID 2022: A new strain of spending
Overview: An investigation into why the spending habits of senior students and teachers changed during covid 19, and the factors that affected them
School: Tallaght Community School
County: Dublin
Teacher: Kate O'Gorman
Student(s): Ashlee Keogh, Aimee Keogh

4552

Title: Students' Perceptions Towards Science upon Transition to Secondary School
Overview: This research project investigates students' perceptions towards school science upon transition from primary to secondary school
School: Colaiste Rís
County: Louth
Teacher: Niamh Lennon
Student(s): Ben Martin Mccourt, Aaron Webb, Aaron Donnelly

4553

Title: An investigation into if young people are informed about the mental health of those around them and themselves
Overview: The aim of this project is to investigate if students in our school community are informed on the topic of mental well-being.
School: Scoil Pól
County: Limerick
Teacher: Grace Garvey
Student(s): Caoimhe O'Connor, Amy Mulcahy, Cliona Heffernan

4554

Title: Córás Oideachas VS Covid Oideachas !
Overview: A Quantitative Analysis of academic performance pre and post Covid in 1st class to 5th class students in Limerick primary schools.
School: Gaelcholáiste Luimnigh
County: Limerick
Teacher: Pól Ó Drisceoil
Student(s): Kate Hanafin, Aoife Nic Craith, Leigh Moloney

4555

Title: The Gender of the Joker - an investigation into the humour gender gap
Overview: An investigation into perceived differences in humour depending on the gender of the joker.
School: Colaiste Muire Crosshaven
County: Cork
Teacher: M McMahon

Student(s): Kate Harris O'Leary, Aoife O Halloran

4556

Title: "Turn Down The Volume" Which Sensory Stimuli Distracts People?, And Which Can Help
Overview: Our project aims to find out how different sensory stimuli affect concentration across different age groups and sexes.
School: Holy Faith Secondary School
County: Dublin
Teacher: Maria O'Sullivan
Student(s): Ella O'Carroll, Alice Carey

4557

Title: Why do girls outperform boys in the Leaving Certificate?
 - A Research Investigation
Overview: Our project is a research investigation into why girls consistently outperform boys in the Leaving Certificate examinations.
School: Scoil Mhuire
County: Roscommon
Teacher: Mairead Glynn
Student(s): Layna Tighe, Tara Kennedy, Isabel Glover

4558

Title: Investigation on Factors that affect Mental Health
Overview: Our project aims to investigate the increased problems with mental health and the factors affecting these problems.
School: Mercy Secondary School
County: Galway
Teacher: Katie Ward
Student(s): Mia Cooney, Lily McGough

4559

Title: How does colour affect the processing of information in 12-16 year olds.
Overview: To investigate the retention of knowledge using different coloured media in teenagers.
School: Presentation Secondary School Listowel
County: Kerry
Teacher: Catherine Kennedy
Student(s): Natalie Gorczyk, Saoirse Kelly

4561

Title: Factors affecting perception of color
Overview: We want to investigate the factors that affect how people perceive color by conducting interviews and showing them color related optical illusions.
School: St. Tiernan's Community School

County: Dublin
Teacher: Matt Curran
Student(s): Melissa A R Neuwald, Cristina Galmes Montero, Carla Gratti Nunez

4562

Title: How social setting can impact on performance; a study of individuals vs group performance in a video game Mario Kart
Overview: This project will see how people React differently to a single player vs multiplayer and how they play differently.
School: Castlecomer Community School
County: Kilkenny
Teacher: Fiona Morrissey
Student(s): Eoin O'Neill, Padraic Flaherty, Brooke Dowling

4563

Title: Are the current rules and regulations of the school bus scheme fair?
Overview: Investigating the current rules and regulations of the school bus / travel scheme and why they may be unfair.
School: Millstreet Community School
County: Cork
Teacher: Shane Guerin
Student(s): Patrick Murphy, Darragh Pierce, Eugene Crowley

4564

Title: How Productive is Productivity Culture?
Overview: Our project aims to investigate are the current standards of productivity that force people to sacrifice their well being worth it?
School: St Mary's Secondary School Macroom
County: Cork
Teacher: Jennifer Butler
Student(s): Roisin Doyle, Eabha O Sullivan

4565

Title: Does lighting affect people's perception of authenticity?
Overview: We plan to show participants sets of two pictures of objects and ask which is real but the only difference between pictures will be lighting.
School: Loreto College
County: Dublin
Teacher: Seamus Hayes
Student(s): Sophie Flannery Leclerc, Ria Gordon, Anna Collins

4566

Title: Foghlaim
Overview: Myths and Legends are at risk of being lost, like indigenous

languages, from Irish and worldwide cultures. Foghlaim is an interactive tool to preserve them.
School: Mount St Michael
County: Mayo
Teacher: Stephanie Hogan
Student(s): Maresa Moore, Sarah Curley

4567

Title: Can brain reaction time be improved by exercise, nutrition or the ingestion of stimulants?
Overview: Evaluating how caffeine, sugar and exercise affect how quickly the brain processes information, using the stroop test.
School: Loreto Secondary School
County: Kilkenny
Teacher: Brendan Williams
Student(s): Sarah Keher, Abby McEvoy, Róisín Brennan

4568

Title: The Link Between Misogyny and The Perception of Fan Culture
Overview: We aim to determine whether or not there is a connection between the way fans are perceived and their gender: Is it a misogynistic perception?
School: Laurel Hill Secondary School FCJ
County: Limerick
Teacher: Mary Frawley
Student(s): Mariam Yacoub, Ruarie Kramer

4569

Title: Is 'BeReal' actually authentic?
Overview: We want to investigate the popular social media app and its users to find out if BeReal provides an authentic and real insight into people's its and affected
School: Bandon Grammar School
County: Cork
Teacher: Maire Flynn
Student(s): Keshia Murphy, Chulainn Prendergast, Juliet Jolley

4570

Title: Imscrúdú ar an Éifeacht atá ag Binaural Beats ar an gcodladh
Overview: Our project will investigate the relationship between Binaural Beats and both the quality and quantity of sleep in teenage participants.
School: Meanscoil Gharman
County: Wexford
Teacher: Elaine Nic Reamoinn
Student(s): Clarisse Ní Chonchubhair, Sadbh Bonnington, Patrick Cox

4571

Title: Restrictions on Addiction

Overview: We will investigate if there is a need for tighter restrictions on online games, videogames and gambling ads and explore their link to problem gambling.
School: Ursuline Secondary School
County: Tipperary
Teacher: David O Heney
Student(s): Kate Fitzgerald, Rosa Ryan, Gillian Aherne

4572

Title: Online School: what's gained in academics is lost in social skills
Overview: Our project aims to find out the impact of transitioning to online schooling and what effects limited social interaction had on 12-17 year olds.
School: St Mary's High School
County: Cork
Teacher: Veronica McCourt
Student(s): Diane Corcoran, Erin Anderson, Sarah Leigh Owers

4573

Title: A statistical study of women's knowledge, attitude and practice in relation to menopause and formulating solutions to this societal issue;
Overview: A statistical study into the stigma around menopause. We looked into solutions to this societal problem. We aim to raise awareness on this topical issue.
School: Coláiste Choilm
County: Cork
Teacher: Karina Lyne
Student(s): Genevieve O'Sullivan, Éabha Barry, Aisling Kelleher

4574

Title: Co- Educational versus Single sex schools; Where do Irish girls perform better?
Overview: Our project is all about determining if the stigma around Co-Ed and single-sex schools is justified.
School: Castlecomer Community School
County: Kilkenny
Teacher: Fiona Morrissey
Student(s): Shona Ruane, Grace Buggy

4575

Title: Puff Nation
Overview: Our project is to see usage of e-cigarettes among our peer group and has the uptake of e-cigerattes been influenced by the product and marketing
School: Eureka Secondary School
County: Meath
Teacher: Chloe Sheridan
Student(s): Muireann Monaghan, Sophie Rogan, Dayna McGoohan

4576

Title: Vaping Unveiled – Harmless or Habit-Forming?
Overview: We plan to investigate if vaping is creating smoking habits among adolescents and if they're aware of the possible resulting health damage and substance addiction.
School: F.C.J. Secondary School
County: Wexford
Teacher: Michael Ruane
Student(s): Leanne Mahon, Aimee Farrell

4577

Title: Siri, Are you listening?
Overview: Does your phone know you better than you do? In this project, we want to shed light on how much data is stored on your
School: Scoil Pól
County: Limerick
Teacher: Aisling O'Connor
Student(s): Stella Hehir, Emma Hanley, Sophie Collins

4578

Title: Does the average age of a group of students affect how likely they are to be influenced by the imposed pressure of the participating group.
Overview: We want to examine the potential progression or regression of influence on the group of female students from junior cycle to senior cycle.
School: Loreto Secondary School
County: Dublin
Teacher: Chloe White
Student(s): Ruth Cooper, Sarah Barlow

4579

Title: Surveillance: A mixed method behavioural analysis of the Irish public perception on modern day surveillance.
Overview: Data will be collected from people living in Ireland on surveillance used for law enforcement and personal use. We aim to determine if different factors perception
School: St Aloysius College
County: Cork
Teacher: Ryan Gallagher
Student(s): Eva Fitzpatrick, Lucy Nolan, Sarah Lochaden

4580

Title: An investigation into the practicality of proliferating blood transfusions and to discern why there has been a decline of donations in Ireland over recent years
Overview: To investigate why

people are hesitant to donate blood and how our attitudes towards donating blood may change after discovering what blood type we are.

School: Maynooth Post Primary School

County: Kildare

Teacher: Catherine Roche

Student(s): Anna O'Flaherty, Niamh Barry

4581

Title: Learning and the impact it has on healthy eating habits.

Overview: This project will determine the impact of studying home economics at second level education on students' lifelong eating and nutritional choices.

School: Jesus & Mary Secondary School

County: Galway

Teacher: Kenneth Kennedy

Student(s): Eimear McDonagh, Tallula Mcmanus

4582

Title: TikTok and Attention Span - An Investigation into the effect of TikTok usage on teenagers' attention span.

Overview: Investigating whether there is a relationship between time spent on Tik Tok and ability to recall information from a short and long video.

School: Terenure College

County: Dublin

Teacher: Conall Boomer

Student(s): Brendan Barry, Ben Carroll

4583

Title: DRS - Drive to Recycle

Overview: Will engaging DRS deliver pole position in Ireland's drive to recycle?

School: Coláiste Iognáid S.J.

County: Galway

Teacher: Daniela Donghi

Student(s): Riain Kennedy, Reuben Florisson, Andrew Gordon

4585

Title: "Science Of Anger" A study of spectator reaction to referee decision making in juvenile GAA

Overview: Our project is to make people aware of the abuse referees get when refing juvenile matches.

School: St. Anne's Secondary School

County: Tipperary

Teacher: Sarah Ryan

Student(s): Maeve O' Callaghan, Millie Kelly

4586

Title: Decline of Video Games

Overview: We wish to investigate what causes the decline of modern video games

School: Rosses Community School

County: Donegal

Teacher: Kevin Boyle

Student(s): Seosamh Mac Aoidh, Michael Mc Carry, Zach Macadangdang

4587

Title: An bhfuil tionchar meáin shoisialta ar chorpíomha dearfach?

Overview: Tá muid ag iarraidh fáil amach an bhfuil tionchar ag meáin shoisialta ar chorp íomha daoine óga idir na aoisanna 13, 15 agus 17

School: Pobalscoil Ghaoth Dobhair

County: Donegal

Teacher: Catriona Melly

Student(s): Kathleen Ní Shearraig, Emma Nestor, Shauna Mc Fadden

4588

Title: Irish Teenagers Attitudes towards Neutrality

Overview: A statistical investigation towards Irish teenagers' views towards neutrality. Has the recent war in Ukraine challenged Irish youth attitudes to neutrality?

School: Seamount College

County: Galway

Teacher: Fiona Ryan

Student(s): Kate Fawle, Aisling Quinn, Ava O'Donovan

4589

Title: An é an dianghlásáil nó/ agus na méan shoisialta is cúis le líon ard na gcásanna imní atá feicéalach l measc mic léinn sa lá atá ann inniu

Overview: Tá muid ag deanamh imscrúdú ar an tionchar atá ag dianghlásadh agus na meansosialta ar an fadhb seo l measc daltaí

School: Pobalscoil Ghaoth Dobhair

County: Donegal

Teacher: Siobhan Uí Shearraig

Student(s): Nadia Nic Aoidh, Sórcha Ní Lorcáin, Roise Ní Ghallchóir

4590

Title: Periods with no plastic! An investigation into why there is a reluctance amongst females to use more sustainable period products such as period pants.

Overview: In our project we want to find out why females aged 12 - 40 might be reluctant to use period pants and other sustainable period

School: Coláiste Dún an Rí

County: Cavan

Teacher: Lorraine Hickey

Student(s): Meghan Hurt, Alana McElroy, Anna Chushak

4591

Title: To investigate if secondary school students consume more snacks when presented with larger portion sizes?

Overview: We propose to design an experiment that will investigate the impact of portion sizes and how they influence teenage consumption of snacks today.

School: Coláiste Choilm

County: Cork

Teacher: Karina Lyne

Student(s): Ellie McAuliffe, Jane larkin, Eavan Nolan

4592

Title: Comparing the fundamental movement skill proficiency of first year males from urban and rural backgrounds.

Overview: An investigation into the Fundamental Movement Skill proficiency of 12-14 year old adolescent males from rural and urban backgrounds.

School: Coláiste an Spioraid Naoimh

County: Cork

Teacher: Brian Donovan

Student(s): Jack Brady, Daniel Castles, Donal Bird

4593

Title: You know what gets on my nerves?... Multiple Sclerosis. An Investigation into viral marketing and what form of media is received most effectively by young people.

Overview: Our project aims to find out what way of delivering secondary school students information is the most effective

School: Castleisland Community College

County: Kerry

Teacher: Donncha Hickie

Student(s): Bella Harmon, Amy McCarthy, Emma O'Donoghue

4594

Title: Do School Days have a Detrimental Effect on Student's Fatigue levels?

Overview: Our project investigates the difference a school day has on students' tiredness levels and to figure out if students physical performance differences throughout the day.

School: Kinsale Community School

County: Cork

Teacher: Aishling Kelleher

Student(s): Caoimhe Horgan,

Emily Murphy, Ailbhe O Mahony

4595

Title: Is working during the school term having a positive or negative impact on a teenagers life?

Overview: To investigate whether or not working during the academic term is having a positive or negative effect on a teenagers life.

School: Meán Scoil an Chlochair

County: Westmeath

Teacher: Aisling Raymond

Student(s): Aoife Keegan, Kate Mohan

4596

Title: Organ donation, breaking the boundaries

Overview: We wish to find out why ethnic minority groups are reluctant to get involved with organ donation and transplants. Furthermore our end goal is how we can educate communities

School: St Joseph's Secondary School

County: Westmeath

Teacher: Darragh Glynn

Student(s): Ayulley Amentorge, Lauren Roca

4597

Title: What is the best method to memorise a sequence?

Overview: We are investigating what is the best method to memorise a sequence. We will be testing out paper, screens and audio.

School: Loreto College

County: Dublin

Teacher: Seamus Hayes

Student(s): Éabha Keeling, Áine Burke

4598

Title: A statistical analysis into age and gender of drownings in Ireland and to raise awareness around water safety.

Overview: We are going to research the age and gender of drownings in bodies of water in Ireland and aim to raise awareness around water safety

School: Coláiste Cholmille

County: Donegal

Teacher: Fenton McHugh

Student(s): Mícheál Keown, Patrick Reynolds

4599

Title: Pride in the Parish - Is it time for a new system of local government?

Overview: Parish structure is in decline as both RC parishes and GAA teams merge. Could parishes be re-invigorated as the base unit

for local government?
School: Millstreet Community School
County: Cork
Teacher: Shane Guerin
Student(s): Steven Lyons, Cian McCaul, Kieran Duggan

SENIOR GROUP

4600

Title: The effect of PCOS on adolescents and the lack of education surrounding the topic
Overview: The analysis of hormone disorders and the knowledge our peers have about them
School: St. Brogan's College, Bandon
County: Cork
Teacher: Carmel McSweeney
Student(s): Keeva Hayes, Aisling O' Donovan

4601

Title: Engaging the monster within : Unlocking the psychology of the origin of phobias in primary and post-primary students.
Overview: This project will attempt to find out the origin of peoples phobias and if both genetic and environmental factors can contribute to developing a phobia.
School: Rockford Manor Secondary School
County: Dublin
Teacher: Kelly Ryan

Student(s): Manna Mathew, Sharal D'costa

4602

Title: Are there longer term effects of an individual's preparedness for their first period and the menstrual education they receive?
Overview: We intend to investigate a range of research questions related to menstrual education, preparedness for an individual's first period and their longer term effects.

School: Sandymount Park Educate Together Secondary School
County: Dublin
Teacher: Conor Maxwell
Student(s): Méabh Lunn, Ava Gill

4603

Title: To investigate the effect temperature has on concentration and memory levels
Overview: We observed students were having difficulties concentrating during colder months due to classrooms being ventilated during Covid, with energy costs skyrocketing we wanted to experiment.
School: Tullamore College
County: Offaly
Teacher: Elaine Howlin
Student(s): Eimear Evans, Molly Doyle, Emma Dunne

4604

Title: Sex Bias in the Diagnosis of Chronic Illnesses.
Overview: Our project aims to raise awareness about the sex bias in the diagnosis of chronic illnesses, through real people's first-hand accounts of their experiences.
School: Sacred Heart School
County: Mayo
Teacher: Yvonne Ruane
Student(s): Meadhbh Harrison, Lily Golden, Ellie Gilbert

4605

Title: Angel Shot
Overview: Our project's goal is to raise awareness about sexual assault and to develop an app to help prevent sexual assault/help assist victims cope with trauma.
School: Colaiste Mhuire,
County: Westmeath
Teacher: Eva Acton
Student(s): Andrew Brady, Malachy Hunt, Liam McCann

4606

Title: Assessing the Impact of Second-Level Education on key Aspects of Adolescents Life and Development
Overview: Our project aims to assess the social, mental and physical effects of secondary school on different groups of students
School: The Abbey School

County: Tipperary
Teacher: Niamh McCarthy
Student(s): Shane O'Connor, Liam Carew

4607

Title: Maths Anxiety In Students
Overview: This project is the study of math anxiety in students in our locality but it can be applied to almost all students.
School: Castlerea Community School
County: Roscommon
Teacher: Yvonne Hanbury
Student(s): Daniel Henriques Rodrigues, Kylian Crossan



STEM

INSPIRATIONS

FROM THE BT YOUNG SCIENTIST & TECHNOLOGY EXHIBITION



PODCAST SERIES FROM THE
 BT YOUNG SCIENTIST &
 TECHNOLOGY EXHIBITION

WWW.BTYOUNGSCIENTIST.COM/STEM-INSPIRATIONS-PODCASTS

ON STAGE



SECRETS OF SUPERHERO SCIENCE

In the **Secrets of Superhero Science**, you'll explore the science behind the superpowers of iconic superheroes. You'll learn about the amazing engineering and science behind building an Iron Man suit, the real-life scientists trying to make artificial spider silk, and technologies that could allow you to become invisible.

More importantly, you'll discover how these technologies could be used to fight diseases, to combat climate change, and to create new and more sustainable sources of energy. And you'll learn how we might manage superpowers in the future, and how we can develop these technologies in a safe way.

Are you ready to unlock the **Secrets of Superhero Science**?

Dr. Barry Fitzgerald (The Superhero Scientist) is fascinated by science and superheroes. He is a physicist by training, the author of a number of popular science books, an energetic science communicator, podcaster, and a YouTuber with his channel "The Superhero Scientist". Barry has seen the 2012 film *The Avengers* more than 80 times and his superpower will remain a closely guarded secret.





SMASH YOUR GOALS SECRETS TO SUCCESS

Discover how science can improve your performance on and off the pitch, with physicist, professional footballer and TV presenter, Mark Langtry, aka The Science Guy. Uncover the secret science to your success, hearing from Ireland's top athletes and performance psychologists, to help you fulfil your potential, achieve your dreams and smash your goals!!!

FREESTYLE PHYSICS

Headspins, Backflips, Dance-offs; The laws of Physics like you've never seen them before! Join physicist and TV presenter Mark Langtry, aka 'The Science Guy', and his hip hop crew as they fuse science and dance together in this jaw-dropping display of physics in action, all to the funky tunes from DJ Emc².

Instagram: Mark_theScienceGuy

TikTok: Mark the Science Guy

Twitter: @MarkLangtry

Facebook: Mark the Science Guy





SUSTAINABLE OUTER SPACE 3D

There are currently more than 1,800 individual spacecraft which are orbiting our planet today and new, private companies are launching more and more of these craft to provide us with access to space.

Satellites have become essential to our everyday lives; we need them for a range of services - from banking to GPS navigation and from data transfer to internet and mobile phones. It is because satellites can look back at our planet that they provide us with valuable information on our weather and essential data so that we can monitor global issues such as climate change.

So, why does space sustainability matter? If outer space is not safe, secure, and peaceful, the ability to use it could be denied to every citizen of planet Earth. Our activities in space have created a field of debris and rubbish in space that threaten our access to space. This debris can stay in orbit for decades, even centuries. Astronauts on board the International Space Station must watch out for debris that could damage and potentially cripple the spacecraft. Space Weather can damage electrical components both in space and on the ground, disrupting our communications and navigation systems.

This highly visual presentation will explore sustainability in space topics and how humanity is beginning to address this problem in order for us to continue our open exploration and access to space for generations to come.

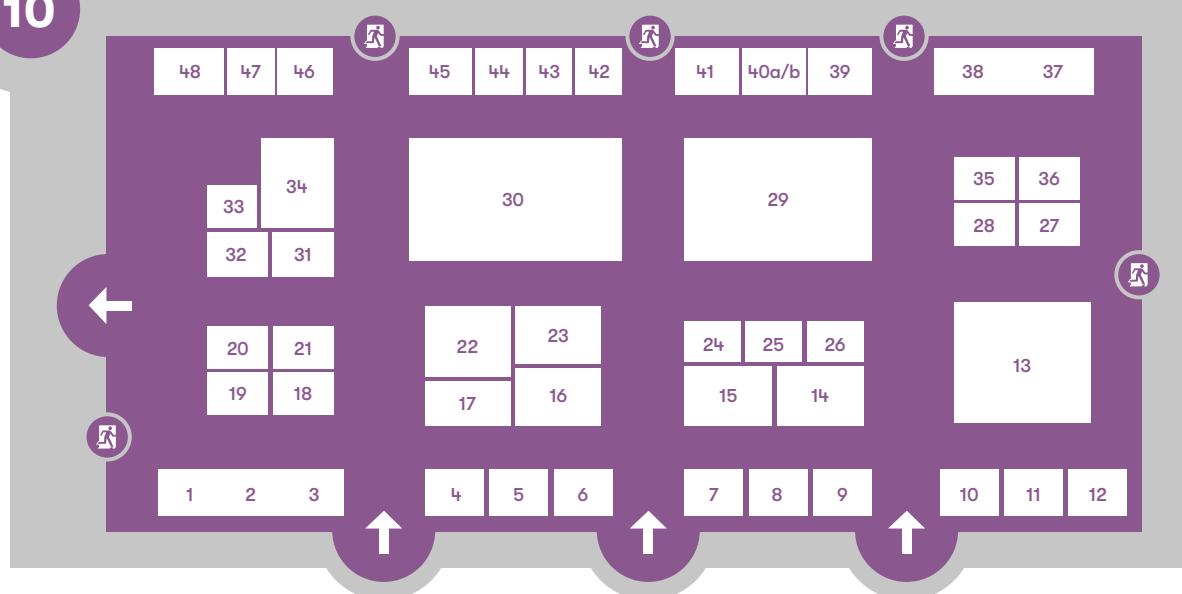
STRONG WOMEN SCIENCE FROM CIRCUS 250

A helter skelter performance from Strong Women in Science from Circus250 is dedicated to bringing circus to new audiences in unusual places. They make circus an accessible art form, for everyone. Even in these challenging times, they work with you to bring invention and joy. They bring circus together with science, as we believe when science meets circus, anything's possible.



EXHIBIT HALLS

10



Hall 1

ABP Food Group	14	Junior Achievement Ireland	42
Alexion	31	Lighthouse Learning LTD (Studyclix.ie)	36
Analog Devices	30	The Marie Keating Foundation	44
BFireSafeatSchool programme	48	Maynooth University	27
BT	13	Meta	23
Central Statistics Office	17	Met Éireann	18
CISCO	26	National Parks & Wildlife Service	6
CONCOS	35	Orthodontic Society of Ireland	10
Cook Medical	22	Road Safety Authority	See main map - 07
Cumann na bhFiann	33	RTÉ Raidió Teilifís Éireann	29
Department of Agriculture, Food and the Marine	20	Science Foundation Ireland	25
Department of Education	15	Self Help Africa	39
Dublin City University	28	Sightsavers Ireland	45
Dublin Zoo	21	Teagasc - Agriculture and Food Development Authority	19
Eli Lilly Kinsale Ltd.	24	The Heritage Council	5
Engineers Ireland	9	University of Galway	46
European Commission Representation in Ireland	34	University of Limerick	41
An Fóram Uisce - the Water Forum	8	VEI Global	12
Geological Survey Ireland	1, 2, 3	Young Scientist & Technology Kenya & Jordan Young Scientist & Technology	40a/b
Global Action Plan	47		
Henkel Ireland Operations and Research Ltd	4		
H&MV Engineering	43		
Horizon Therapeutics	16		
Institute of Physics	11		
Intellectual Property Office of Ireland	7		
Irish Aid at the Department of Foreign Affairs	37, 38		
Irish Science Teachers' Association	32		

Hall 2

112 ECAS
Irish Coast Guard
Environmental Protection Agency (EPA)
An Garda Síochána



ABP Food Group

ABP is one of Europe's leading privately owned agribusiness companies. It is the largest beef processor in the UK and Ireland. The company also operates substantial renewable (Olleco), pet food (C&D) and protein divisions. ABP employs over 12,000 people and has 47 manufacturing plants in the Ireland, UK, Denmark, Poland, Austria, Holland, France and Spain.

www.abpfoodgroup.com



Alexion

Alexion, AstraZeneca Rare Disease, is the group within AstraZeneca focused on rare diseases, created following the 2021 acquisition of Alexion Pharmaceuticals, Inc. As a leader in rare diseases for 30 years, Alexion is focused on serving patients and families affected by rare diseases and devastating conditions through the discovery, development and commercialisation of life-changing medicines.

Alexion focuses its research efforts on novel molecules and targets in the complement cascade and its development efforts on haematology, nephrology, neurology, metabolic disorders, cardiology and ophthalmology. Headquartered in Boston, Massachusetts, Alexion has offices around the globe and serves patients in more than 50 countries. Alexion Ireland has over 850 employees with over 650 based in the College Park Site in Blanchardstown, Dublin 15 and over 200 employees in the Athlone site in Monksland, Co. Roscommon. Alexion College Park is home to Bulk Drug Substance Biologics Manufacturing, Commercial and Clinical Secondary Packaging, Alexion's QC Centre of Excellence, along with Global Functions (Finance, IT, HR, Supply Chain, Regulatory Affairs and External CMO Management). Alexion Athlone is responsible for Aseptic Drug Product Biologics Manufacturing, Commercial Drug Substance Biologics Purification and Clinical Drug Substance Biologics Manufacturing.

www.alexion.com



Analog Devices

Analog Devices, Inc. is a global semiconductor leader that bridges the physical and digital worlds to enable breakthroughs at the Intelligent Edge. ADI combines analog, digital, and software technologies into solutions that help drive advancements in digitized factories, mobility, and digital healthcare, combat climate change, and reliably connect humans and the world. With reported revenues of more than \$12 billion in FY22 and more than 24,000 people globally working alongside 125,000 global customers, ADI ensures today's innovators stay Ahead of What's Possible.

www.analog.com



BFireSafe@School programme

BFireSafe@School programme is an Erasmus+ funded project that developed a new harmonised fire safety education programme for post primary schools all over Europe. Leitrim Fire service led a project consortium of 9 project partners from 7 EU countries (Ireland, Belgium, Denmark, Finland, Germany, Lithuania and Spain). This new teacher led resource has been developed to place student wellbeing and personal safety at the centre of learning. The resource aims to ensure students aged 12 -18 learn the knowledge, skills and attitude necessary to keep themselves and others safe from fire.

The project was a collaboration between teachers, fire service personnel, an educational consultant, an ICT company specialising in online learning and

leading fire safety organisations worldwide. The new fire safety education programme (consisting of 10 modules) has been translated into 10 European languages. It can easily be integrated into existing subjects on the school curriculum. A new Learning Management System was developed to manage all the content. A Teachers Handbook with additional resources and tips for use in class and online is available to download.

Several innovative digital outputs were also developed such as an Augmented Reality App called FireSmart AR (available to download online), a Virtual Reality app called 'Fire in the Home', a gaming app called Rescue Heroes (available online) and a school evacuation video.

Over 900 teachers in post primary schools all over Europe have been trained to deliver the programme. The programme is now being rolled out in schools across the EU. The programme is free, easy to use and requires no previous knowledge.

Recently the BFireSafe@School programme won the European Community Fire Safety Education award and the award for Best International Practice.

For further details check out our project website – www.bfiresafeatschool.eu.

You can also follow the programme on Facebook, Twitter, Instagram, LinkedIn and YouTube.

www.bfiresafeatschool.eu



BT

BT Group plc is a British multinational telecommunications holding company headquartered in London, England. It has operations in around 180 countries and is the largest provider of fixed-line, broadband and mobile services in the UK, and also provides subscription television and IT services.

www.bt.com

www.btireland.com



Central Statistics Office

The Central Statistics Office is delighted to sponsor an award that will encourage young people to use open data. Exploring the potential value of growing access to open data is one of the challenges of our information society. This award is for the most innovative use, or potential use, of CSO data. The application of open data may be varied: Statistical analyses, statistical processes or statistical outputs, be they scientific or mathematical, a piece of research, a visualisation or a data map, the development of a device, a software application or the use of CSO data in any other innovative way.

Whatever way students use our data, the CSO is excited to see your open data projects.

www.cso.ie



CISCO

Cisco was founded in 1984, by two Stanford University computer scientists who had the desire to connect across campus, rumour has it that the reason was to let each other know if their cat had been fed! "Cisco" was derived from the city name San Francisco, the logo is intended to depict the two towers of the Golden Gate Bridge.

Cisco connects you to the internet and the world, delivering the content and experiences of the internet on any device.

Cisco's annual revenue for 2022 was over \$51.5 billion. 90% of Cisco's bookings are generated through the Cisco Partner Ecosystem and we have 62,000 global partners.

We are a global company with over 70,000 employees in 380 offices in 165 locations across the globe, creating many opportunities around the world. In Ireland, Cisco has a sales office in Dublin along with Webex development in Galway. Cisco ranked first for Ireland's Best Workplaces in 2021 and 2022!

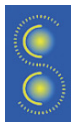
We help deliver training to more than 1 million students in 170 countries; building IT and career skills through our Cisco Networking Academy program



and Cisco Certifications. Over 190 apprentices have graduated from the Cisco apprenticeship scheme, there are currently 96 active apprentices and a retention rate of 86%.

Cisco is a member of Connecting Women in Technology, CWIT is a network of Irish-based technology companies.

www.cisco.co.uk



CONCOS

Coláistí Gaeilge

www.colaistigaeilge.ie



Cook Medical

Since 1963, Cook Medical has worked closely with physicians to develop technologies that eliminate the need for open surgery. Today we invent, manufacture and deliver a unique portfolio of medical devices to the healthcare systems of the world. Serving patients is a privilege, and we demand the highest standards of quality, ethics and service. We have remained family owned so that we have the freedom to focus on what we care about: patients, our employees and our communities. Find out more at cookmedical.eu, and for the latest news, follow us on Twitter, Facebook and LinkedIn.

www.cookmedical.eu



Cumann na bhFiann

Cumann na bhFiann is the largest nationwide Irish language youth service. Weekly/fortnightly Irish language youth clubs as well as regional and national events through Irish are its main focus. These services give young people the opportunity to use and improve their spoken Irish outside of the school environment on a social level. Cumann na bhFiann provides opportunities for young people to meet and make friends throughout the country through the medium of Irish.

Is é Cumann na bhFiann an tseirbhís óige Ghaeilge is mó sa tír. Eagraítear Óg-Chlubanna Gaeilge seachtainiúla, chomh maith le himeachtaí réigiúnacha agus náisiúnta trí mheán na Gaeilge. Tugann seo deis do dhaoine óga a gcuid Gaeilge labhartha a úsáid agus a fheabhsú lasmuigh de thimpeallacht na scoile ag leibhéal sóisialta. Is é an toradh ar seo ná go mbíonn cairde nua le Gaeilge sa cheantar agus ar fud na tíre ag na daoine óga.

www.cnb.ie/



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

Dept of Agriculture, Food and the Marine

The mission of the Department of Agriculture, Food and the Marine is to serve the government and people of Ireland by leading, developing and regulating the agri-food sector, protecting public health and optimising social, economic and environmental benefits. The work of the Department's Laboratories Service is a key component of the organisation with regard to the provision of scientific advice, ensuring the safety of Irish food and safeguarding public, animal and plant health.

Science plays a vital role in underpinning policy making within DAFM and we are delighted to sponsor an award to encourage and recognise the contribution of young scientists.

www.gov.ie/en/organisation/department-of-agriculture-food-and-the-marine



An Roinn Oideachais
Department of Education

Dept of Education

Government Department and sponsor of BTYSTE. Exhibition space will demonstrate the work of the Department in education and the innovative programmes in place in schools to support STEM.

www.gov.ie/en/organisation/department-of-education/



Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

Dublin City University

DCU Faculty of Science and Health and Faculty of Engineering and Computing

Are you curious about the world around you, and the forces that shape and change it? Are you fascinated by discoveries that expand our understanding of existence? Are you passionate about helping people, and improving the health of individuals and communities? Today's engineers and scientists play an increasingly vital role in the future of our country and the world. We focus on preparing students to pursue careers in the STEM (science, technology, engineering and maths), ICT (information communication and technology) and health sectors and, in doing so, aim to deliver real transformation in society and the broader national and global economy. Known for our cutting-edge teaching facilities, and for the excellence of our innovation and research, we promise our students an education that provides the skills and knowledge for a successful and rewarding career that makes a real difference.

www.dcu.ie

D U B L I N



Dublin Zoo

Dublin Zoo, home to over 400 animals, is an environment where education and conservation combine for an exciting and unforgettable visitor experience. Dublin Zoo's state-of-the-art Discovery and Learning Centre 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 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 W21 for lots of fun and learning including animal artefacts, 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



112 ECAS

The Emergency Call Answering Service, answers all emergency calls and text messages made in Ireland and connects the caller to the required emergency service. It is a vital operator service provided to the public on behalf of the state. Authorised Undertakings forward all emergency calls and texts to the Emergency Call Answering Service and these are routed and answered by call handling agents located in one of our centres. The call handling agents onward connect received calls, where appropriate, to the required emergency service.

www.bfireland.com



Eli Lilly Kinsale Ltd.

Lilly was founded in 1876 by Colonel Eli Lilly, a man committed to creating high-quality medicines that met real needs in an era of unreliable elixirs peddled by questionable characters.

More than 140 years later, we remain committed to his vision through every aspect of our business and the people we serve starting with those who take our medicines, and extending to health care professionals, employees and the communities in which we live.

Lilly has been operating in Ireland since 1978 and today the company employs almost 2,000 people, with an additional 500 outsourced and contract staff involved in the provision of day-to-day support services for the company's operations here.

Lilly's first investment in Ireland began in 1978, with the purchase of a farm in the West Cork countryside, near Kinsale. Today, that site has grown to a vast high-technology manufacturing campus that employs over 900 people and uses complex chemical synthesis and biotechnology manufacturing processes to make active ingredients for Lilly medicines.

Established in 2010, our Global Business Solutions (GBS) centre in Little Island, Cork city has evolved from shared service provider to global business partner across many of Lilly's key business units.

Through the centralisation, standardisation and optimisation of complex processes, GBS Cork provides innovative solutions that add value in a number of diverse areas including finance, supply chain, HR data management, customer support, clinical trial capabilities and more. Currently it employs over 800 employees across 38 nationalities, speaking 35 languages.

Lilly was named the Cork Chamber of Commerce "Cork Company of the Year" in May 2021, with a winning joint submission by Kinsale manufacturing and the Cork Global Business Solutions centre.

The accolade was awarded to Lilly based on a combined 50 years of investment, innovation and positive impact within the Cork region.

www.lilly.ie



Engineers Ireland

Engineers are people who design, create, explore and innovate, working to solve some of the world's greatest challenges. Engineers Ireland is a community of creative professionals who deliver solutions for society. We are the progressive and trusted voice of the engineering profession here in Ireland and represent 25,000 members from every discipline of engineering. We support our members' career progression at all stages, from students to senior engineers and CEOs. We have an extensive network of dedicated Regional branches, Engineering divisions and Societies both in Ireland and overseas.

Engineers Ireland ensures that the competence and ethical standards of our profession are world class. We set the standards of engineering education here in Ireland and provide continuing professional development.

Engineers Ireland inspires and encourages future generations of engineers from an early age through our exciting STEPS programme which is funded by Science Foundation Ireland, Dept of Education and Skills and industry sponsors Arup, ESB, Intel and TII. In particular we would like to see more young women become engineers.



Environmental Protection Agency (EPA)

The Environmental Protection Agency (EPA) is responsible for protecting and improving the environment as a valuable asset for the people of Ireland.

We are committed to protecting people and the environment from the harmful effects of radiation and pollution.

We also play key roles in environmental regulation, provision of knowledge and advocacy for the environment.

www.epa.ie



European Commission Representation in Ireland

European Union

Visit the EU at the BT Young Scientist & Technology Exhibition!

This year we have teamed up with Dr How's Science Wows who will bring you to the science world with exciting hands-on and real science experiments. No to miss out.

What do you know about Europe? Join us for a chat with European Parliament and Commission staff in Ireland.

Find out what the EU has to offer for students from easy travel and Erasmus exchanges to studying and working in another country. Learn how a Parliament for 445 million people works and who your local MEPs are.

Free resources about the European Union will be available for all visitors. Information Officers will answer any queries you may have about the EU.

Contact us: The European Commission Representation in Ireland

Tel: + 353 (0)1 6341 111 Website: www.eurireland.ie

Facebook: @EUIreland Twitter: @eurireland #EUIrl

Instagram: @euireland

Contact us: The European Parliament Liaison Office in Ireland Tel: +353 (0)1 605 7900 Website Europarl.ie

Facebook: @EPinIreland Twitter: @EPinIreland

Instagram: @ep_ireland

Join the pan-European community together.eu



An Fóram Uisce - the Water Forum

The Water Forum is the national statutory body representative of stakeholders with an interest in the quality of Ireland's waters. It consists of 26 members including representatives from a wide range of organisations with direct connections to issues relating to water quality and also public water consumers.

In accordance with the Water Services Act 2017, the Forum has advisory roles in relation to the Minister for Housing, Local Government and Heritage, Irish Water, the Commission for Regulation of Utilities and the Water Policy Advisory Committee.

The Forum provides an opportunity for stakeholders to debate and analyse issues and to inform policy regarding water management, rural water policy, issues of concern to customers of Irish Water, the implementation of the Water Framework Directive and the River Basin Management Plan for Ireland.

www.thewaterforum.ie



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 standalone 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 Crimeall programme and at major public exhibitions such as The Young Scientist Exhibition, The National Ploughing Championships, The Tullamore Show and a variety of car and motorcycle shows.



Geological Survey Ireland

Founded in 1845, Geological Survey Ireland is Ireland's public Earth science knowledge centre and is a division of the Department of the Environment, Climate and Communications.

We are committed to providing free, open and accurate data and maps on Ireland's subsurface to landowners, the public, industry, and all other stakeholders, within Ireland and internationally.

In addition, we act as a project partner in interpreting data and developing models and viewers to allow people to understand underground.

We deal with a diverse array of topics including bedrock, groundwater, seabed mapping, natural disasters, and public health risks.

Geological Survey Ireland also provides a Duty Geologist service to the public to address geological queries and concerns, please email duty.geologist@gsi.ie

www.gsi.ie



Global Action Plan

Global Action Plan is an environmental behaviour change organisation.

We equip individuals and communities with knowledge and skills to develop solutions to the environmental and climate crises.

We deliver programmes for community groups, schools and businesses, in areas ranging from environmental education and climate action, to global citizenship, the Sustainable Development Goals and community transformation.

We believe that all of us can make a difference, through the choices we make - that is why we focus on assisting people, helping them discover their power to effect change, and enabling them to develop tangible actions that lead to lasting attitudinal development.

Our programmes are evidence-based and designed to help people overcome barriers to change. We provide targeted support to communities, schools and businesses, to encourage smart and effective citizen solutions to the climate and biodiversity crises.

www.globalactionplan.ie



Henkel Ireland Operations and Research Ltd

Henkel employs approximately 860 employees in the UK & Ireland across six sites, which include manufacturing, R&D and office facilities.

With a presence in Dublin since 1966, Henkel Ireland is responsible for the full product innovation and supply pipeline - from concept and technology development, through product development and scaleup to manufacture and distribution of adhesives and sealants globally.

Henkel's brands and technologies are used in many different applications and industries. Henkel is the name behind many well-known brands such as Loctite, Pritt, Sellotape, UniBond, Schwarzkopf, LIVE, got2be, Bloo, Colour Catcher, Dylon Dyes and Jeyes.

www.henkel.co.uk/



H&MV Engineering

H&MV Engineering is a High Voltage Electrical Contracting Company that specialises in the design and build of substations up to 400 kV. We are a market leading, trusted partner for Mission Critical Data Centres, Renewable Developers, Transmission and Distribution Utilities globally.

Our ingenuity is developed and strengthened by 3 decades of experience delivering EPC projects across the world. We have active sites and offices

across the EMEA region, where our local expert staff provide engineering solutions to our clients.

H&MV Engineering are a certified Carbon Neutral Organisation, committed to being environmentally responsible with a driving ambition to continually foster sustainable initiatives.

www.hmvengineering.com/ireland



Horizon Therapeutics

Horizon is a global biotechnology company focused on the discovery, development and commercialization of medicines that address critical needs for people impacted by rare, autoimmune and severe inflammatory diseases. Our pipeline is purposeful: We apply scientific expertise and courage to bring clinically meaningful therapies to patients. We believe science and compassion must work together to transform lives. For more information on how we go to incredible lengths to impact lives, visit www.horizontherapeutics.com and follow us on Twitter, LinkedIn, Instagram and Facebook.

www.horizontherapeutics.com

IOP Institute of Physics

Institute of Physics

The Institute of Physics (IOP) is the professional body and learned society for physics in the UK and Ireland, with an active role in promoting co-operation in physics around the world. We strive to make physics accessible to people from all backgrounds.

The IOP aims to:

- Break down barriers to inclusion for those currently under-represented in physics
- Bring physicists in the UK, Ireland and around the world together to share knowledge and support each other
- Help turn scientific discoveries into real world applications.
- Make sure physicists have a voice in the big debates of our age, about education, science, innovation, and wider policy.
- Help physicists share their wonder and excitement with the next generation of potential physicists, from all walks of life.

Currently the IOP is running the Limit Less campaign to increase the amount of young people from underrepresented groups studying physics post-16. Through Limit Less, our members and staff are engaging families and schools, to build a better understanding of opportunities in the world of physics in order for them to celebrate and support their young people's drive to change the world.

www.iop.org



Oifig Maoine
Intleachtúla na hÉireann
Intellectual Property
Office of Ireland

Intellectual Property Office of Ireland

The Intellectual Property Office of Ireland is a statutory body under the Department of Enterprise, Trade and Employment. We are responsible for the administration and protection of Intellectual Property (IP) rights in Ireland.

IP refers to creations of the mind, such as inventions (patents); literary and artistic works (copyright); new product designs (industrial designs) and brand names, symbols or logos (trade marks). You can file for a trade mark, design or patent and pay many of your IP fees on our website 24 hours a day.

If you want to find out more about IP check out our website www.ipoi.gov.ie or contact one of our experienced staff in our dedicated information centre who will be happy to assist with your queries over the phone (056 77 2011), via email (ipinfo@ipoi.gov.ie) or in person in our Office in Kilkenny City.

Make sure to drop by to ask about our exciting new IP in Education project - our team will come to your school and teach you all about IP and how it fits into your everyday life in a really interactive and fun way. We can even give you some guidance on how to protect your IP for events like the BTYSE.

For updates on what's new in IP and to keep up to date on the latest news from the Office follow us on social media (@ipoireland or Intellectual Property Office of Ireland) on Facebook, Twitter, LinkedIn or Instagram!

www.ipoi.gov.ie



Rialtas na hÉireann
Government of Ireland

Irish Aid at the Department of Foreign Affairs

Irish Aid is Ireland's official overseas development assistance programme, managed by the Department of Foreign Affairs. It aims to reduce global poverty, hunger and humanitarian need.

Ireland is committed to the delivery of the Sustainable Development Goals (SDGs), for peace and prosperity for people and the planet. We work through partners in more than 130 countries.

www.irishaid.ie/



Irish Coast Guard

The Irish Coast Guard provides a nationwide maritime emergency organisation as well as a variety of services to shipping and other government agencies.



Irish Science Teachers' Association

The Irish Science Teachers' Association is the professional association for science teachers in Ireland. It was founded in 1961 and has a membership in excess of 1200 members. The ISTA is a member of the International Council of Associations for Science Education (ICASE) and is represented on the executive of this organisation. The ISTA functions as a body dedicated to the professional development of its members and the advancement of science teaching.

www.ista.ie



Member of
JA Worldwide

Junior Achievement Ireland

Junior Achievement Ireland (JAI) is a member of one of the world's largest educational non-profits, helping prepare young people for their futures by delivering hands-on, experiential learning in entrepreneurship, employability, financial literacy and the value of STEM.

Reaching more than 12 million young people each year, Junior Achievement (JA) is one of few organisations with the scale, experience, and passion to build a brighter future for the next generation.

JAI was established in Ireland in 1996 and since then has built up a strong demand from schools throughout the country and created successful partnerships with 150 leading organisations.

JAI inspires and motivates young people to succeed in the changing world of work by equipping them with the skills, knowledge and confidence they need. We work directly with young people, schools and the business community to help build a successful and sustainable future for all young people and society at large.

We utilise the experience of those already in the workforce to help young people of all ages to fully understand the important role that education will play in shaping their futures. JA business volunteers – who act as role models from the working world – are recruited, trained, vetted, equipped and supported to deliver hands-on learning experiences in primary and second level schools. Through our entrepreneurship, employability, financial literacy and STEM programmes we aim to encourage young people to stay in school and help them realise their potential in order to empower a generation to learn, to work and to live.

www.jai.ie



Lighthouse Learning LTD (Studyclix.ie)

Lighthouse Learning Limited (T/A Studyclix.ie) Unit 6 Strand Campus, Strandhill Co. Sligo. F91A Y99

studyclix.ie



The 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 are 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 2017 to date over 486 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.



Maynooth University

Maynooth University is an internationally recognised institution located 25 kilometres outside of Dublin, Ireland, and is the nation's fastest growing university. One of four constituent universities of the National University of Ireland, Maynooth University in 2022 ranked #1 in Ireland in the latest Times Higher Education (THE) Best Young University Rankings.

On 16 June 2022, Maynooth University celebrated its 25th birthday, having been formally established as an autonomous university in 1997. Yet, it traces its origins to the foundation of the Royal College of St. Patrick in 1795, drawing inspiration from a heritage that includes over 200 years of education and scholarship.

Today, Maynooth University is a place of lively contrasts—a modern institution, dynamic, rapidly growing, research-led and engaged, yet grounded in historic academic strengths and scholarly traditions. With over 15,000 students from more than 100 countries, Maynooth offers a range of programmes at undergraduate, Master's and PhD level in the humanities, science and engineering, and social sciences, including business, law, and education. The University also offers a range of international programmes and partnerships.

Maynooth's unique collegial culture fosters an interdisciplinary approach to research, which its worldclass academics bring to bear in tackling some of the most fundamental challenges facing society today. The University's research institutes and centres consolidate and deliver this impact as vibrant communities of learning, discovery and creation. Research at Maynooth also is very much central to its teaching, and the University prides itself on placing equal value on its research and teaching missions.

Maynooth University is recognised among the top 600 universities in the world and in the top 250 European universities.

www.maynoothuniversity.ie



Meta

Giving people the power to build community and bring the world closer together. Our products empower more than 3 billion people around the world to share ideas and offer support. The metaverse is the next evolution in social connection and the successor to the mobile internet and we are building the future of connection in the metaverse.

www.meta.com



Met Éireann

Met Éireann, Ireland's National Meteorological Service, is a line division of the Department of Housing, Local Government and Heritage and is the leading provider of weather information and related services in the State. Its mission is to monitor, analyse and predict Ireland's weather and climate and to provide a range of high quality meteorological and related information to the public and to specific customers in, for example, the aviation and agricultural sectors. As a scientific and technical organisation, it strives to utilise the latest technological and scientific advances in order to improve the efficiency, effectiveness and accuracy of its forecasts.

www.met.ie



An tSeirbhís Páirceanna Náisiúnta
agus Fiadhúlra
National Parks and Wildlife Service

National Parks & Wildlife Service

The National Parks and Wildlife Service is part of the Department of Housing, Local Government and Heritage, and has responsibility for the protection and conservation of Ireland's natural heritage and biodiversity at national government level. Our stand will have exhibits, information leaflets and posters available to all in attendance. It also gives the public a chance to meet our staff to discuss activities available within the NPWS.

Education & Visitor Centres

The NPWS Education & Visitor Centres around the country offer various activities and learning opportunities for teachers and students alike. Our Education Officers have designed school programmes aimed at promoting awareness of, knowledge and an appreciation of our biodiversity.

National Biodiversity Action Plan

Consultation on Ireland's next National Biodiversity Action Plan has been ongoing in 2022. The next NBAP will set out a vision for an Ireland in 2050 in which biodiversity is valued, conserved, restored, and sustainably used maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people in society.

Further information on all of the above is available on www.npws.ie



Orthodontic
Society of Ireland

Orthodontic Society of Ireland

The Orthodontic Society of Ireland (OSI) is the professional body representing Specialist Orthodontists in Ireland, promoting best practice in Orthodontics through education & research.

www.orthodontist.ie



Road Safety Authority

The role of the Road Safety Authority (RSA)...

Mission:

Our mission is to make Irish roads safer for everyone. That means working in every way possible to save lives and prevent injuries by helping to reduce the number and severity of collisions on Irish roads.

We are recognised as the leading voice for road safety in Ireland and as a leading voice internationally.

This recognition is built upon a strong record of driving positive change in the attitudes and behaviours of all road users, while effectively collaborating with many stakeholders, such as An Garda Síochána and the Health and Safety Authority, to save lives.

What we do:

Our mission of making Irish roads safer for everyone involves delivering some key functions:

- Road safety promotion, education and awareness

- Road safety and collision research
- Primary responsibility as the lead agency for the governance and implementation of the government's Road Safety Strategy
- Driver testing and driver licensing
- Governance and supervision of the National Car Testing Service and Commercial Vehicle Roadworthiness Testing
- Enforcement of a range of road haulage industry and driver regulations
- Regulation of the driving instruction industry
- Development and monitoring of vehicle standards
- Advising the Department of Transport and the Minister for Transport on all aspects of road safety public policy.

www.rsa.ie



RTÉ | Raidió Teilifís Éireann

RTÉ is back live from BTYST 2023 12-14th January. RTÉ 2FM and RTÉ Raidió na Gaeltachta will be broadcasting live from our radio studio with some special guests popping in to say hello too.

Following his sold-out show, we are very excited for RTÉ 2FM Rising artist Sello's live performance on the main stage, during the opening ceremony.

Fancy trying your hand at presenting the weather? We have lights, cameras, autocue and blue screen ready for you to give it a try in our RTÉ Weather studio. The RTÉ Weather presenters will be on hand to give you a few tips too.

Visit the RTÉ Studio in the Exhibition Hall and keep up-to-date with RTÉ at BTYST on Twitter, Facebook and Instagram.

www.rte.ie



Science Foundation Ireland

Science Foundation Ireland (SFI) is the national foundation for investment in scientific and engineering research. SFI funds research in the areas of science, technology, engineering, and mathematics (STEM) which promotes and assists the development and competitiveness of industry, enterprise and employment in Ireland. SFI offers a range of funding schemes which support scientists and engineers to deliver both research excellence and economic and societal impact.

This year's stand explores Creating our Future, a Government of Ireland initiative which sought to understand what challenges and opportunities the people of Ireland experience in their lives. It created a conversation on how research can play a role in addressing challenges and seizing opportunities.

Over 18,000 submissions were received, analysed and synthesised into 16 thematic areas. The response demonstrated that the people of Ireland want their voice to be heard and that they have confidence in the promise and potential of research to transform lives and create sustainable societies. A database of all of the submission has been created and is available at www.creatingourfuture.ie. It contains the voice of the public. It is their ideas for what should be investigated to address the challenges we face and the opportunities we should seize. The ideas have been made public so that they may spark a research or project question.

www.sfi.ie



Self Help
Africa

Self Help Africa

Self Help Africa is an Irish-based international development organisation that is working through agriculture to alleviate poverty in 17 of the world's poorest countries.

The organisation applies agriculture and climate science in its responses to the challenges of supporting resource poor communities grow food and earn an income from small farms.

Self Help Africa has been working for more than 40 years to eradicate hunger and extreme poverty in Africa. In 2022 its programmes will support close to six million people.



Science has a key role to play in addressing the challenges of rural poverty in sub-Saharan Africa. By providing smallholder farmers with access to better quality seed, to new crop varieties, and by promoting and introducing new farming methods, Self Help Africa supports communities to adapt to and mitigate the effects that changing climate and extreme weather is having on people who rely on the land to support themselves and their households.

For 20 years, Self Help Africa's Global Citizenship Education (Development Education) team has been attending the BT Young Scientist and Technology Exhibition, where it promotes its work to students and teachers, and also promotes the 'Science for Development Award,' an Irish Aid sponsored competition that encourages and assists student entrants to devise projects for BTYTE that might address some of the challenges that affect poor communities in Africa.

Winning student projects at BTYTE receive a travel bursary, sponsored by Irish Aid, that enables the project winners and their teacher to travel on an annual Self Help Africa school's study visit to Africa, where they can learn more about their project from people they meet.

Self Help Africa's Global Citizenship Education team also provide workshops in Irish secondary schools that assist students and teachers to address global development challenges.

www.selfhelpafrica.org



Sightsavers Ireland

Founded in 2003, Sightsavers Ireland envisions a world where no one is blind from avoidable causes and where people with disabilities participate equally in society. Sightsavers Ireland works with Sightsavers globally, through an affiliate agreement, to eliminate avoidable blindness and promote the rights of people with disabilities in 30 countries focussing on Africa and Asia. We seek to contribute to the Sightsavers global mission through the provision of steady and dependable funding from the Irish market, securing and managing funding from the Irish government, and engaging and influencing the Irish public and policy/decision makers on matters relating to eye health and social inclusion in low and middle-income countries.

www.sightsavers.ie



Teagasc - 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 in Ireland.

We invite you to find out more about the research we do and the education courses we offer at BTYTE 2023.

The Teagasc special award at BTYTE 2023 is presented to the project that best demonstrates a thorough understanding of the science of agricultural or food production, or the use of science to improve technologies available to agricultural or food production.

www.teagasc.ie



The Heritage Council

Established under The Heritage Act 1995, the Heritage Council is a public body whose mission is to develop a wide understanding of the vital contribution that our heritage makes to our social, environmental & economic well-being. Our heritage is what we have inherited from the past, to value and enjoy in the present, and to preserve and pass on to future generations. The Heritage Council is based in the former Bishop's Palace, Kilkenny.

www.heritagecouncil.ie



OLLSCOIL NA
GAILLIMHE
UNIVERSITY
OF GALWAY

Coláiste na hEolaíochta
& na hInnealtóireachta
College of Science
& Engineering

University of Galway

University of Galway's College of Science and Engineering offers a range of research-led programmes at Undergraduate, Postgraduate and Post-Doctoral levels.

Scientific training and research contributes significantly to knowledge generation, technology development and translation, and to our economic and societal development. Our faculty includes internationally recognised innovators contributing to the advancement of engineering and computing knowledge and the creation of everyday products used by millions of people throughout the world.

www.universityofgalway.ie/science-engineering/



UNIVERSITY OF
LIMERICK
OLLSCOIL LUIMNIGH

Science and
Engineering

University of Limerick

UL's (www.ul.ie) stand provides you the opportunity to experience interactive activities in Biology, Chemistry, Physics, Mathematics, Engineering, Electronics, Equine Science, Architecture, Design, Computer Science, Gaming and much more. The Faculty of Science and Engineering (www.ul.ie/scieng) offers teaching and research programmes in a wide range of industry relevant scientific and engineering disciplines. All UG programmes include periods of co-operative, industrial or teaching experiences. Its world-leading research translates into practice and the academic programmes offer unique & sustainable careers. If you are interested in studying artificial intelligence, the pursuit of renewable energy technologies or the development of innovative company solutions find out more about the opportunities available at our stand.

www.ul.ie/scieng



VEI Global

VEI Global is a market leader in providing innovative technology services and support solutions. We excel in delivering multi-site IT deployment projects across all sectors around the globe. Our focus is on providing the best support service capabilities, all requests are managed 24/7. We can handle any ICT challenges and are experts in networks, logistics, infrastructure and service delivery.

VEI Global specialise in the delivery of IT and Telecoms solutions including; WiFi, LAN/WAN/SD WAN, IPT, Contact Centre, UC&C, Circuit Connectivity. Our clients include some of the largest Global Service Providers and Systems Integrators. We have completed Digital Transformation and Network upgrade Projects for some of the most recognised brands in the world.

www.vei.global/



JORDAN YOUNG SCIENTIST
علماء الغد



YOUNG SCIENTISTS
KENYA

Young Scientist & Technology Kenya & Jordan Young Scientist & Technology

Recognising the important contribution that the Young Scientist initiative has made to economic and social development in Ireland since its foundation, it is fitting that this experience can similarly inform and contribute to the evolution of emerging economies in the Global South. National Young Scientist programmes, based on the original Irish model, established Kenya and Jordan are exhibiting at BTYTE2023. Winners from Young Scientist & Technology Kenya 2020 & 2021 and well as the first ever winners of Jordan Young Scientist & Technology will be exhibiting at the exhibition. Please call down to say hello and learn more about their amazing in country programmes.



DRIVEN BY I



1965

John Monahan



1966

Máire Caitríona Ní
Dhomhnaill / Mary Finn



1967

Walter Hayes R.I.P.



1968

George Andrew
Reynolds



1969

Luke Drury



1970

Maria Edgeworth



1977

Micheal Og O'Briain



1978

Donald P McDonnell



1979

Jervis Good



1980

Karen Ruddock



1981

Catherine Conlon



1982

Martynn Sheehan



1989

Grace O'Connor,
Sinead Finn



1990

Anna Minchin-Dalton



1991

Barry O'Doherty,
Daniel Dundas



1992

Elizabeth Dowling,
Jean Byrne R.I.P.



1993

Donal Keane,
Rodger Toner



1994

Jane Feehan



2001

Shane Browne,
Peter Taylor,
Michael O'Toole



2002

David Michael
O'Doherty



2003

Adnan Osmani



2004

Ronan Larkin



2005

Patrick Collison



2006

Aisling Judge



2013

Emer Hickey,
Sophie Healy-Thow,
Ciara Judge



2014

Paul Clarke



2015

Ian O'Sullivan,
Eimear Murphy



2016

Diana Bura,
Maria Louise Fufezan



2017

Shane Curran



2018

Simon Meehan

INNOVATION



1971

Peter Short



1972

Seán Mac Fheorais



1973

Tadgh Begley



1974

Richard Elliott



1975

Noel Boyle



1976

Mary Kelly-Quinn



1983

William Murphy,
Gareth Clarke,
Turan Mirza



1984

Eoin Walsh



1985

Ronan McNulty



1986

Breda Maguire,
Niamh Mulvaney



1987

Emma Donnellan,
Henry Byrne



1988

Siobhan Lanigan
O'Keeffe



1995

Brian Fitzpatrick,
Shane Markey



1996

Elsie O'Sullivan,
Rowena Mooney,
Patricia Lyle



1997

Ciara McGoldrick,
Emma McQuillan,
Fiona Fraser



1998

Raphael Hurley



1999

Sarah Flannery



2000

Thomas Gernon



2007

Abdusalam
Abubakar



2008

Emer Jones



2009

Liam McCarthy,
John D. O'Callaghan



2010

Richard O'Shea



2011

Alexander Amini



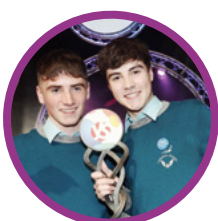
2012

Mark Kelly,
Eric Doyle



2019

Adam Kelly



2020

Alan O'Sullivan,
Cormac Harris



2021

Greg Tarr



2022

Aditya Kumar,
Aditya Joshi



2023

Winner announced
Friday 13th January



THE PRIMARY SCIENCE FAIR



The Primary Science Fair has been an exciting part of the BT Young Scientist & Technology Exhibition for over 15 years and allows those students in primary school with an interest in science and technology to be an integral part of one of the world's leading and longest-running school science exhibitions.

Rules

This is not a competition, all schools will receive participation certs to distribute to their students and will also receive a plaque to say that they have been part of The Primary Science Fair at the BT Young Scientist and Technology Exhibition 2023. Max number of pupils is 30 per project and where possible should be made up of a full class group. For smaller schools multi grade classes can put a project forward and they should be a combination of 3rd to 6th class only. We may accept more than one project per school dependent on availability of spaces. All ideas will go through a quick screening process which will be undertaken by judges from the BT Young Scientist & Technology Exhibition as we may receive more applications than we can accept.

For more information, visit our website

<https://btyoungscientist.com/the-primary-science-fair-at-btyste>



LIVING THINGS



MATERIALS



ENVIRONMENTAL AWARENESS
AND CARE



ENERGY AND FORCES

THURSDAY 12TH OF JANUARY

"The Mini Boat Race" What materials make the Ultimate Boat?

Scoil Naomh Bríd Ballyconnell, Cavan

Do video games have an effect on concentration and academic performance?

Ballyhass NS, Cork

Decreasing our Carbon Footprint as a School Community

Barryroe NS, Cork

How do Planes actually fly?

Cullen NS, Cork

Trains, tracks, and tunnels: Full STEAM Ahead!!

Goggins Hill NS, Cork

Powering into the Future

Kill o The Grange National School, Dublin

Does screen time affect levels of concentration?

Scoil Choilm CNS, Dublin

Is Scoil San Treasa a green school?

Scoil San Treasa, Dublin

Is Scoil San Treasa a self-sufficient?

Scoil San Treasa, Dublin

Awesome Aerodynamics!

St. John the Apostle Knocknacarra N.S., Galway

Do you see what Eye see?

Moyderwell Mercy Primary School, Kerry

Are breakfast cereals really that healthy for us?

SN Colmcill Naofa, Kildare

How WE as children can make positive changes for the better of our Environment

S N Moin Ruadh, Kilkenny

Magic of the Microbit

Scoil Phroinsiais Naofa Clara, Offaly

How does our body work? Investigating our digestive system, blood, ears and more...

St Colman's N.S. Ballindaggin, Wexford

FRIDAY 13TH OF JANUARY

Was it something I read?

Boherbue NS, Cork

Taste/Blas

Gaelscoil Dr. Uí Shúilleabháin, Cork

Solar Energy in Our Community

Scoil Naomh Fionan, Cork

What we put into our water has consequences

Timoleague NS, Cork

Why is Ireland Green?

Our Lady Immaculate SNS, Dublin

Reduce, Reuse, Restyle!

St. Kilian's SNS, Dublin

Is It Possible To Improve Our Short Term Memories?

St. Vincent de Paul Girls' School, Dublin

Is Biodegradable the answer to our problems

Scoil Mhuire, Leitrim

Is it possible to prevent apples from going brown when they're cut?

Knockrooskey NS, Mayo

What makes the perfect sliotar

St. Michaels NS, Meath

Are pets good for your health and well-being?

Scoil Mhuire gan Smál, Tipperary

Save our Trees

St Declan's NS, Waterford

Investigating the effect homework has on children and parents mood.

Bunscoil Loreto, Wexford

Can listening to music aid our concentration in school?

Bunscoil Loreto, Wexford

Does meditation and mindfulness affect our concentration?

Bunscoil Loreto, Wexford

Do video games really rot your brains?

Bunscoil Loreto Gorey, Wexford

Why does friction matter?

St Saviour's NS, Wicklow



BT YS BUSINESS BOOTCAMP

Programme for students

A number of the exhibiting intermediate and senior students from the 2023 BT Young Scientist & Technology Exhibition will be invited to take part in a BT Young Scientist Business Bootcamp in February/March next year where they will experience the world of technology commercialisation and entrepreneurship.



(Above) Taha Fareed Farooqi (age 15), Hannah Walsh (age 17), Sophie Creedon (16), Harry O'Connor (age 16) and Claudine Mulihano (age 17) were named as the overall "Best Group" for the work on their project "Ahead of the Curve". (Right) Isabelle Linehan (age 17) was presented with the title overall "Best Individual".

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 is expected to be held at UCD, subject to Covid-19 guidelines.

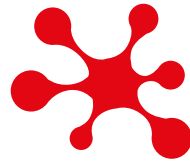


BT YS Bootcamp 2022 highlights

<https://www.youtube.com/embed/JzRKGLoo7dE>



in association
with UCD Innovate



THE BT YOUNG SCIENTIST
BUSINESS BOOTCAMP

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.

The Bootcamp experience has been life changing. I feel it has really opened up doors for me in regards to career options, developing my project and communicating better with people. I have met and heard from some amazing and inspiring people and I feel I have become more creative and innovative in the way I think.



Events schedule

Thursday 12th January



BT ARENA

CONCERT HALL

CLYDE ROOM FOYER

09:00	Smash your Goals		
09:45	Strong Women Science		
10:00		Sustainable Outer Space 3D	Global Goal Games
10:15			
10:30	The SuperHero Scientist		
10:45			
11:00		Sustainable Outer Space 3D	Global Goal Games
11:15	Freestyle Physics		
11:30			
11:45			
12:00	The SuperHero Scientist		Global Goal Games
12:15		Sustainable Outer Space 3D	
12:30			
12:45	Smash your Goals		
13:00			
13:15		Sustainable Outer Space 3D	
13:30	The SuperHero Scientist		
13:45			
14:00			Global Goal Games
14:15	Freestyle Physics		
14:30		Sustainable Outer Space 3D	
14:45			
15:00	Strong Women Science		Global Goal Games
15:15			
15:30			
15:45			
16:00			Global Goal Games
16:15			
16:30			

Events schedule

Friday 13th January



BT ARENA

CONCERT HALL

CLYDE ROOM FOYER

09:00	Smash your Goals		
09:45	Strong Women Science		
10:00		Sustainable Outer Space 3D	Global Goal Games
10:15			
10:30	The SuperHero Scientist		
10:45			
11:00		Sustainable Outer Space 3D	Global Goal Games
11:15	Freestyle Physics		
11:30			
11:45			
12:00	The SuperHero Scientist		Global Goal Games
12:15		Sustainable Outer Space 3D	
12:30			
12:45	Smash your Goals		
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14:00			Global Goal Games
14:15	Freestyle Physics		
14:30		Sustainable Outer Space 3D	
14:45			
15:00	Strong Women Science		Global Goal Games
15:15			
15:30			
15:45			
16:00			Global Goal Games
16:15			
16:30			

Events schedule

Saturday 14th January



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16:30	Strong Women Science		

INTERNATIONAL YOUNG SCIENTIST PROGRAMMES

BY DR. VINCENT O'NEILL, FORMER IRISH AMBASSADOR TO KENYA AND TO JORDAN

Recognising the important contribution that the Young Scientist initiative has made to economic and social development in Ireland since its foundation, it is fitting that this experience can similarly inform and contribute to the evolution of emerging economies in the Global South. National Young Scientist programmes, based on the original Irish model, have been established in Tanzania, Kenya, Jordan and the United Arab Emirates over the past decade. These developments have benefitted from the engagement of the Department of Foreign Affairs and the support of the Irish Aid programme for developing countries.

Following on from the development of Young Scientists Tanzania established in 2011, the Young Scientist and Technology Kenya (YSK) initiative was launched by Dr Tony Scott and the Tanzanian Cabinet Secretary for Education, in 2018.

The President of the Republic of Kenya is chief patron of the Kenyan Young Scientist and Technology programme which is supported by a large number of government, non-governmental and business institutions in the country. In November 2022 the 5th National Exhibition was held in Nairobi attracting projects from schools in 47 districts across the country. The programme is now the paramount National Science and Technology competition for second level students in Kenya.

Following the opening of a new Embassy of Ireland in Amman, Jordan in 2019, organizations involved in the promotion of STEM in secondary schools in

Jordan expressed their interest in establishing a programme, similar to the BTYSTE. An Embassy hosted visit for representatives of this group to BTYSTE2020 was facilitated. Following their return to Jordan, an interim Steering Committee was established with the objective of establishing of a national Jordan Young Scientist and Technology initiative (JoYS).

Despite Covid related delays, JoYS was formally registered, an interim Board was established, and relationships developed with key institutions engaged in promoting STEM across the kingdom. Important partnerships were formalised with the Crown Prince Foundation and the Queen Rania Foundation's in 2022. A pilot national JoYS initiative was launched in June 2022 by Dr Tony Scott and the Jordanian Minister for Cultural Affairs. Plans are underway for a full national exhibition to be held in 2023.

It is indeed good news that there is a growing international dimension to the BTYSTE. It is excellent that that lessons learnt from its implementation in Ireland over the past 59 years can inform the planning of national YS programmes in other countries so that they have the potential to yield similar benefits to those we have experienced in Ireland. It is very welcome also that the winners of these international competitions are invited to exhibit their projects at the RDS each year. This is one, among several, efforts to deepen the linkages between the BTYSTE and the growing number of international partner programmes.





BT's origins date back to the very first communications company, the Electric Telegraph company, founded in 1846. Today BT is one of the world's leading providers of managed telecommunications, security and network and IT infrastructure services to customers across 180 countries.

BT's purpose is as simple as it is ambitious: we connect for good. There are no limits to what people can do when they connect. We are proud to organise the BT Young Scientist & Technology Exhibition (BTYSTE) because we are passionate about increasing youth engagement in science and technology. We want to provide students with a platform to showcase innovative ideas nationally and internationally so that all participants can tackle the biggest challenges and "connect for good".

BT in Ireland

We employ over 650 people in the Republic of Ireland where we partner with organisations that use our portfolio of end-to-end technology solutions.

Our job is to help companies to solve and manage their complex communication needs using our global network. 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 much more.

We also serve major public sector organisations, operating the 999/112 emergency call answering service on behalf of the Irish state.

Sustainability in BT

BT's "connect for good" purpose helps make the world a better place. We're committed to respecting and supporting the human rights and freedoms of all those touched by our business – our colleagues, customers, supply chain workers and wider communities.

We are a leader on climate and sustainability action. Our ambition is to adopt a sector-leading approach to climate action, with a target to become a net zero

target for operational emissions by end of March 2031 and end to end emissions by end of March 2041.

Just like our global colleagues, our Irish employees support numerous good causes and we work hard to make a positive impact on society through volunteering, fundraising and financial contributions. Each year, BT employees are allocated three days volunteering leave, some of which will be used to organise BTYSTE.

In 2021, BT was awarded the Business Working Responsibly Mark® for the second time, the official standard of excellence for sustainability and corporate social responsibility. We were one of the inaugural Irish signatories of the Low Carbon Pledge® and, in 2021, the first signatory in Ireland of a new Inclusive Workplace Pledge®.

We have been recognised as one of Ireland's healthiest places to work for five consecutive years. A Healthy Place to Work® is one where people understand the purpose of their work and how it aligns with the organisation; are part of a learning environment where they are able to adapt and grow; have connections with others and the organisation that allow them to be at their best; and where people have the energy to sustainably deliver on their and the organisation's objectives.

Northern Ireland

BT is one of the largest private sector employers in Northern Ireland. 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.

Find out more at:

btireland.com and btyoungscientist.com