



# St. Michael's Church of Ireland National School C072

**S.T.E.M**  
**Section.1. – Science**  
**2016 /2017**

STRAND	EXPERIMENT	CLASS
Living Things	Myself – Fingerprints & Dominant Eye	3 <sup>rd</sup> & 4 <sup>th</sup> Class
	Growing Beans	3 <sup>rd</sup> & 4 <sup>th</sup> Class
Energy & Forces	Build A Volcano	6 <sup>th</sup> Class Boys
	Dancing Raisins	5 <sup>th</sup> Class Boys
	Making Circuits	Senior Room
Materials	Growing Crystals	5 <sup>th</sup> & 6 <sup>th</sup> Class
	Bounciest Balls	2 <sup>nd</sup> & 3 <sup>rd</sup> Class
Environmental Awareness & Care	Spring	Junior Room
	Our Class Goldfish	3 <sup>rd</sup> & 4 <sup>th</sup> Class
	Make A Bird Feeder	2 <sup>nd</sup> Class
	Anti-Litter Campaign	6 <sup>th</sup> Class Girls
Visit	Blackrock Castle – Mysteries of Mars Tour	3 <sup>rd</sup> & 4 <sup>th</sup> Class
Event	Space Week : 03 – 09 October	School
Event	Science Week : 13 -20 November	School
Show & Tell	Showcase with Junior Room	5 <sup>th</sup> & 6 <sup>th</sup> Class Boys

# Living Things Myself

## Fingerprint & Dominant Eye Experiment



The Senior Room (3<sup>rd</sup> & 4<sup>th</sup> Class) learnt all about Fingerprints & Dominant Eye.

- \* First we took a fingerprint of our thumb and tried to draw it.
- \* We looked at our thumbprint with a magnifying glass and identified splits, loops, ridges and cusps on the print.
- \* We compared our fingerprints with our friends and saw how each person's fingerprint in the class is different.
- \* We discussed how fingerprints could be useful in everyday life.


We then conducted the dominant eye experiment by holding our hands in a triangle and focussing on an object and then closing one eye at a time. The eye where you could still see the whole object in the triangle is the dominant eye.

<b>Myself</b>	Name	Connor
	Class	3rd


  

FINGERPRINTS	
My Fingerprint - Printed	My Fingerprint - Drawn
 <p>Labels: Split, Ridge, Loop</p>	


Compare your fingerprint to your partner's fingerprint by identifying the following features of each fingerprint.




Cusps





Ridges



Loops



Splits

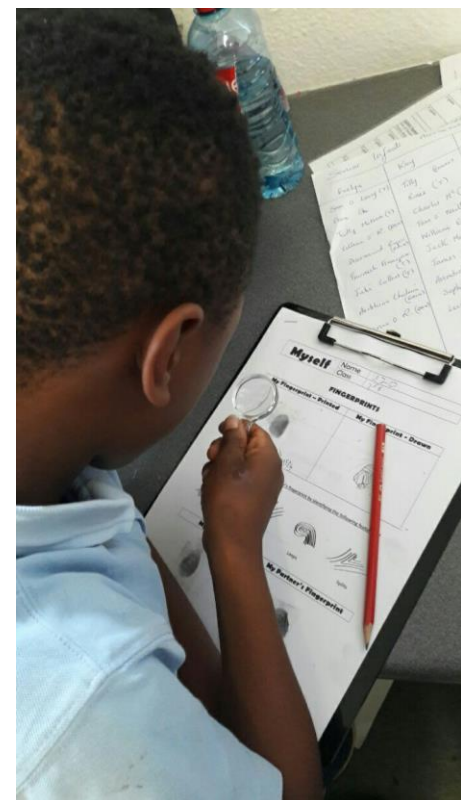
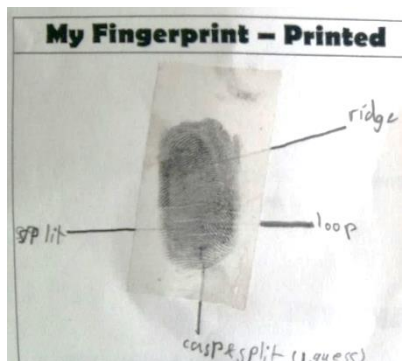
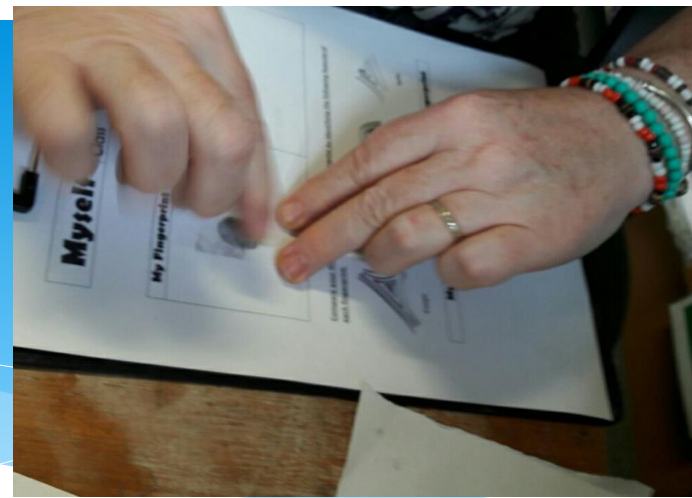
My Fingerprint	My Partner's Fingerprint
	 <p>Liam</p>

Answer the following questions:-

- Do the lines on the fingerprint every cross each other? No They don't
- Is your fingerprint the same as your partner's fingerprint? They are never the same
- Think of three uses of being able to identify a person's fingerprint  
Find a friend, dna scanner, Photo copy

**DOMINANT EYE**

- What object did you focus on in this experiment? My dominant eye
- Which eye is your dominant eye? My left eye
- Did you find this experiment hard or easy?...explain. it was hard because it looked like it was both of my eyes





Seedling

Parts of

Roots

Stem

Leaves

Seed

Hull

Cotyledon

Hilum

Radicle

Hypocotyl

Epicotyl

Plumule

Cotyledon

Hilum

Radicle

Hypocotyl

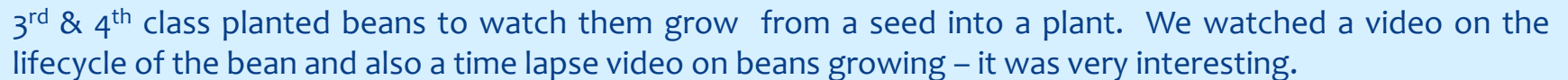
Epicotyl

Plumule

Parts of the Bean Plant

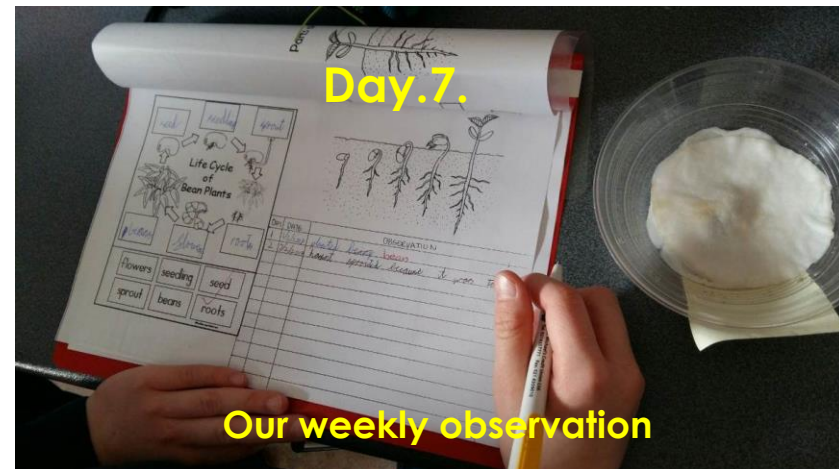
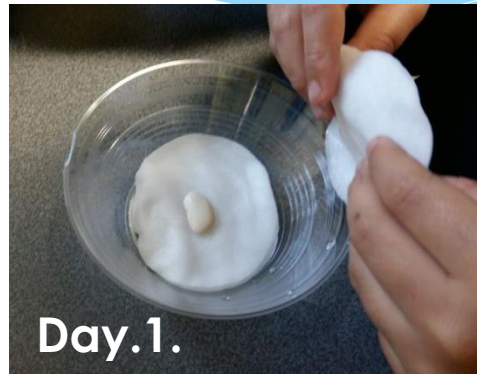
When leave

1. 2. 3.



We completed some worksheets all about beans and then planted our own bean to watch it grow and develop . We then noted down our observations every few days so that we could see the progress of the bean.

We then took them home and planted it in our gardens.



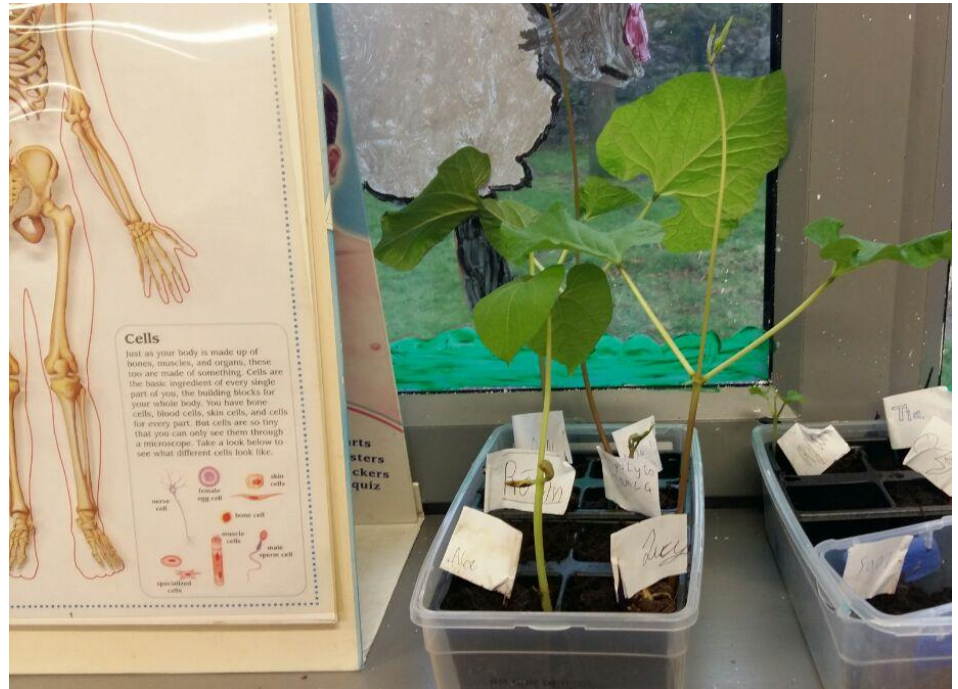




Day.18. Suan's bean is the first to show!

Day.10. and our beans have sprouted and we planted them in soil.

Day.25. Some of our beans are ready to go home to be planted and hopefully there will be loads of beans for dinner!

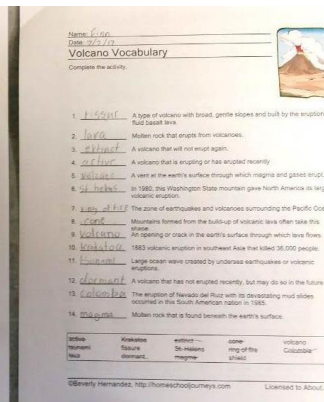
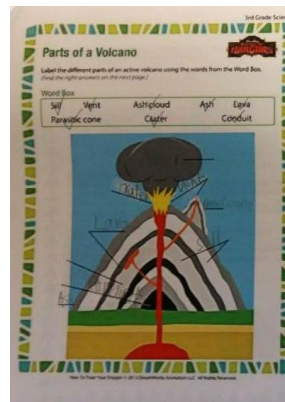
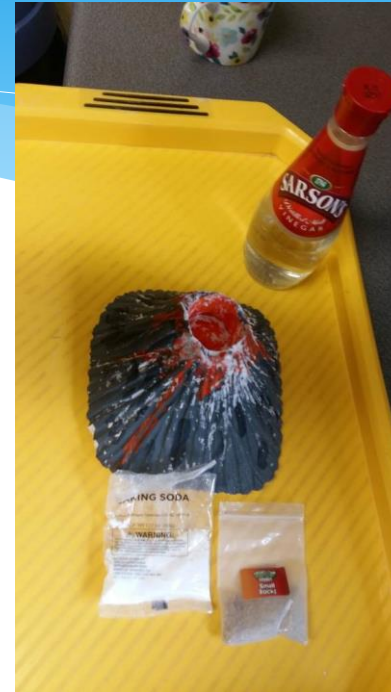




# Show and Tell Experiments

The 6<sup>th</sup> Class boys conducted the volcano experiment with the Junior Room. The 6<sup>th</sup> class also completed worksheets on volcanoes

# Energy & Forces Build A Volcano





## Show and Tell Experiments

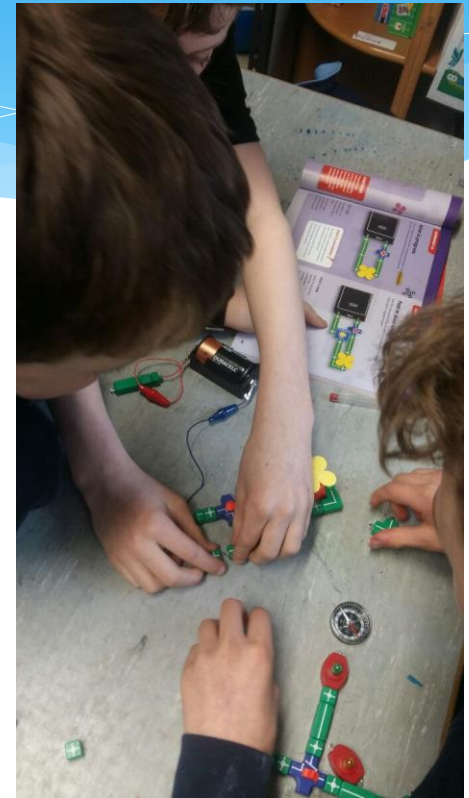
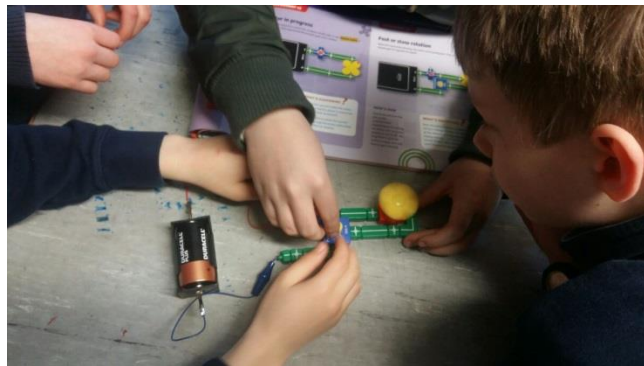
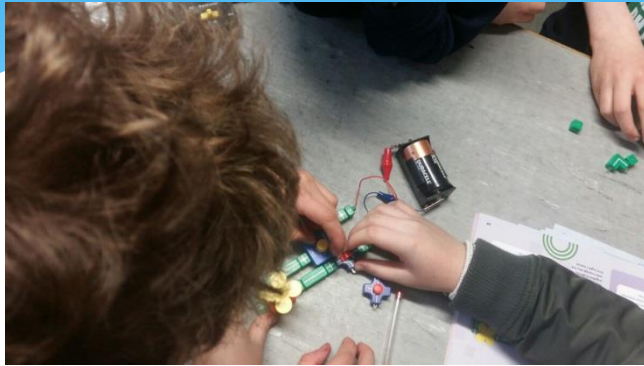
The 6<sup>th</sup> Class boys conducted the dancing raisins experiment with the Junior Room. They explained to the juniors why each water reacts differently on the raisins. The juniors had a great time enjoying the raisins as an 'after experiment snack'!

## Energy & Forces Dancing Raisins



Each class worked with our Electricity Master Lab and built different types of circuits incorporating transformers, coils, relays. We experimented with electric currents and forces using metal shavings, speakers and lights.

# Energy & Forces Making a Circuit

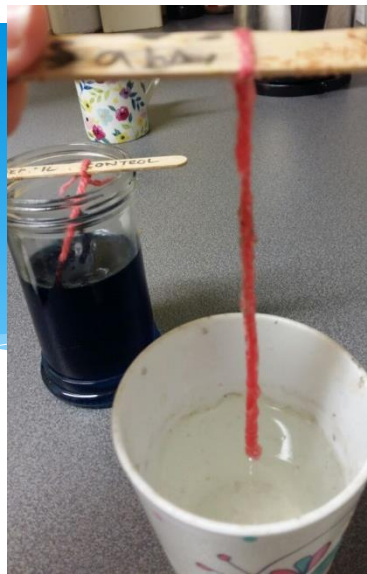




The Senior Room (4<sup>th</sup>, 5<sup>th</sup> & 6<sup>th</sup> Class) conducted the experiment – Growing Crystals. The group prepared the experiment and observed it over a period of 21 days.

The experiment was not successful and the crystals did not grow as intended. The group concluded that the reason it was a failed experiment could have been:-

- \* The solution was not strong enough.
- \* The kitchen area where the experiments were kept in a dark cupboard may have been too warm and or/too moist (steam from the kettle and washing up)
- \* We should have used string instead of wool



# Materials

## Growing Crystals

<b>Growing Crystals</b>	Name	Beni
	Class	6 <sup>th</sup> class

Fill in the missing words:-

~~solids~~ ~~salt~~ ~~carbon~~ ~~shapes~~ ~~diamond~~ ~~seven~~ ~~dissolves~~ ~~ices~~ ~~cores~~ ~~pattern~~

Most Caves are made up of a lot of crystals. Sometimes you can't see them because they are so small but they come in all shapes and sizes.

You have to look most crystals under a microscope. We use crystals in our food. We put sugar in our tea and sprinkle salt on our food.

Large crystals grow in solids. The most beautiful crystal is a diamond. Over millions of years, carbon is pressed to make them.

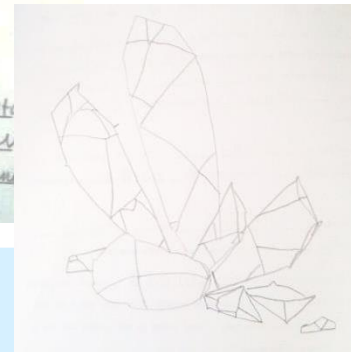
Crystals have a regular pattern. There are seven main types of crystals. Crystals of the same substance are always the same shape.

To make a good crystal you will need a concentrated solution. To make a concentrated solution, you need to keep adding the substance to the water until it no longer dissolves. Sometimes putting a small crystal in the solution acts like a seed to help grow the crystal.

Answer the following questions:- (Research on the internet)

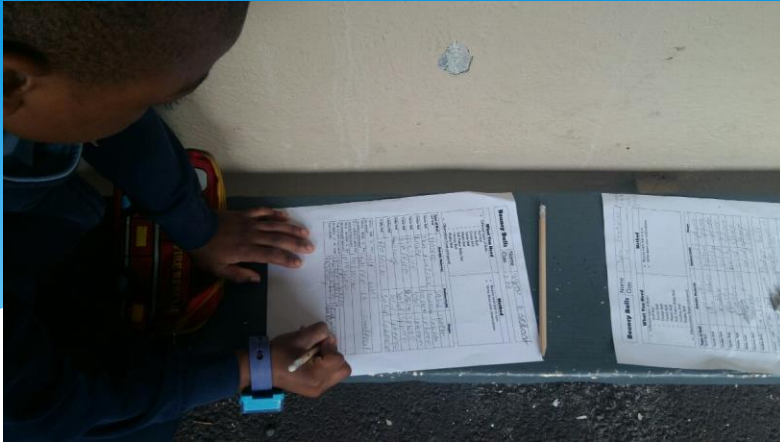
How would you describe a crystal?

A piece of a homogeneous solid substance having a natural geometrically regular form with symmetrically arranged planes



All the containers including the control was a sludgy mess with some presenting with mould.

# Materials Bounciest Ball



Bouncy Balls		Name	Class
		John Pretorius	2nd

What You Need	Method
<ul style="list-style-type: none"> <li>Different types of Balls:-               <ul style="list-style-type: none"> <li>Golf Ball</li> <li>Soccer Ball</li> <li>Dodge Ball</li> <li>Tennis Ball</li> <li>Plastic Ball</li> <li>Soft Fabric Baby Ball</li> <li>Hockey Ball</li> <li>Rugby Ball</li> </ul> </li> <li>Observation Sheet and pencil</li> </ul>	<ul style="list-style-type: none"> <li>Bounce each ball in turn</li> <li>Write down your observations</li> </ul>

Type of Ball	Outside Material	Hollow/Solid	Shape
Golf Ball	plastic	solid	sphere
Soccer Ball	thin fabric	hollow	sphere
Dodge Ball	rubber	hollow	sphere
Tennis Ball	plastic	solid	sphere
Plastic Ball	plastic	solid	sphere
Baby Ball	thin plastic	hollow	sphere
Hockey Ball	concrete	solid	sphere
Rugby Ball	fabric	solid	oval

Which ball is the bounciest? Dodge ball

Which shape is the bounciest? AND why? It is sphere because it is more symmetrical

Is a hollow or solid ball bouncier? AND why?

What material is the bounciest ball made of? plastic

Rate the balls from most bounciest (1) to least bounciest (8)

1	golf ball	5	
2	tennis ball	6	
3	plastic ball	7	
4	Dodge ball	8	

2<sup>nd</sup> & 3<sup>rd</sup> Class had great fun with the bounciest ball experiment where they compared different types of materials balls are made up of to see which was the bounciest.



# Environmental Awareness and Care Spring



1<sup>st</sup> and 2<sup>nd</sup> Class from the Junior Room have been learning all about spring.

We planted some new plants in the school garden in January and watched them grow. We carefully watered and weeded them and in the spring we had some lovely flowers. We also did some Spring related exercises in our workbooks and teacher gave us some crosswords and word searches to do.





Planting and propagating vegetable and herb seeds for our vegetable garden that we are going to plant.





1<sup>st</sup> and 2<sup>nd</sup> Class from the Junior Room and 3<sup>rd</sup> class from the Senior Room had an interesting morning with 'Naturally Wild'.

We learnt all about different bugs and trees and how we should look after nature as nature looks after us!

We then had fun exploring the playground and enjoying the sunshine.



 **Sunshine** 





# Environmental Awareness and Care Goldfish

The Senior Room have two special pets that they look after – Sandy and Maple. Sandy & Maple came to live in the classroom in September 2016 and are two healthy and happy goldfish.

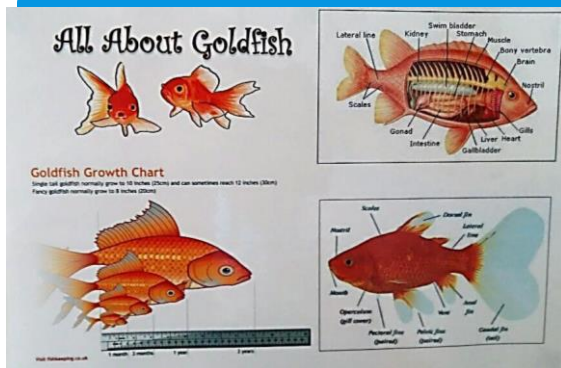
There is a feeding roster for the goldfish and each student takes a turn to make sure that the fish are fed each morning.

A tank cleaning schedule gives each student a chance to ensure that their living environment is clean. Each day a student takes out a jug of water and replaces it with a clean jug of water to ensure that the goldfish have clean, oxygenated water each day.

The tank is cleaned either once every 4 weeks.







**Sandy & Maple**  
One Pinch of Fish Food

Feeding Schedule		Feeding Schedule	
Week	Day Feeder	Week	Day Feeder
27 Feb - 03 Mar	Mon Uzo	20 - 24 Mar	Mon Okwu
	Tue Jared		Tue Freya
	Wed Liam G		Wed Lena
	Thur Harry		Thur Alisha
	Fri Reisin		Fri Rebekah
06 - 10 Mar	Mon Susan	27 - 31 Mar	Mon Finn
	Tue Conor		Tue Beni
	Wed Alarik		Wed Uche
	Thur Liam ON		Thur Jared
	Fri Tia		Fri Liam G
13 - 17 Mar	Mon Ryan	03 - 07 Apr	Mon Harry
	Tue Alec		Tue Reisin
	Wed Sam		Wed Conor
	Thur Daragh		Thur Uzo

**Cleaning Schedule**

Month	Week	Team
Jan	1	Uzo, Jared
	2	Liam G, Harry
	3	Susan, Reisin
	4	Conor, Lucy
Feb	1	Liam ON, Alec
	2	Freya, Okwu
	3	Daragh, Felix
	4	Sam, Nikki
Mar	1	Lena
	2	Alisha
	3	Rebekah
	4	Uche

**Cleaning Schedule**

Month	Week	Team
Apr	1	Finn, Beni
	2	Uzo, Jared
	3	Liam G, Harry
	4	Susan, Reisin
May	1	Conor, Lucy
	2	Liam ON, Alec
	3	Ryan, Tia
	4	Freya, Okwu
Jun	1	Sam, Nikki
	2	Lena, Alisha
	3	Rebekah, Uche
	4	Beni, Finn

**Cleaning Duties**  
Each day take on jug of water out and replace it with a clean jug of water

**Tank Cleaners (Once A Month)**  
6<sup>th</sup> Class - Alisha, Lena, Rebekah, Uche, Beni, Finn



Following the  
cleaning and  
feeding  
schedule.



The Junior Room  
made friends for  
Sandy and Maple in  
their art class.



# Environmental Awareness and Care

## Bird Feeder

### Show and Tell Experiments

The 5<sup>th</sup> Class boys made bird feeders with 1<sup>st</sup> & 2<sup>nd</sup> Class. They prepared all the materials and then facilitated the session.

- \* Peat pots threaded with a string and stopper
- \* Peanut Butter
- \* Bird seed
- \* Plastic gloves
- \* Spoons
- \* Bags to take their creations home



Felix from 5<sup>th</sup> Class explaining the process to 1<sup>st</sup> & 2<sup>nd</sup> on how to make the bird feeders and leading a class discussion on why it is good to put out bird feeders in the winter.





Putting on the  
peanut butter  
was messy and fun!



Once we put the peanut butter on we dipped  
them into the birdseed.

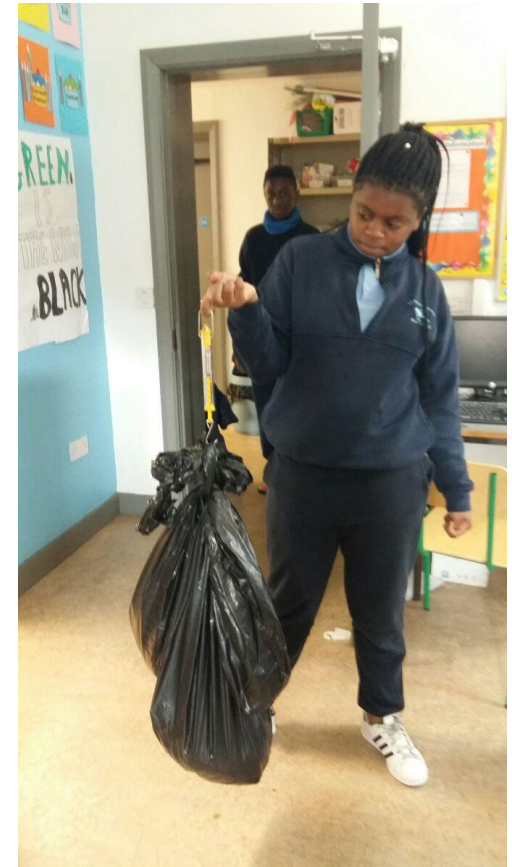


# Environmental Awareness and Care Litter & The Environment

The 6<sup>th</sup> Class girls conducted a **behavioural trial** as part of the START Competition 2017. They tackled 'litter' as their subject



Please see their PowerPoint presentation and survey results they submitted for the competition under the 'Technology' section of this presentation and results of their survey under the 'Maths' section.





# Outing

## Blackrock Castle Observatory Mars Workshop

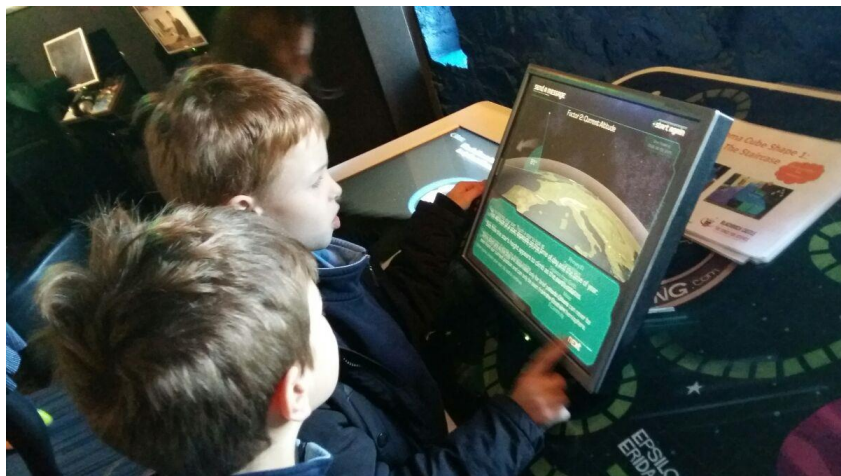
3<sup>rd</sup> & 4<sup>th</sup> went on a trip to the Blackrock Castle where we spent the morning doing various S.T.E.M. activities as part of the 'Mars Mysteries' workshop. We explored the night sky in the 'Star Dome' and saved the Earth from Meteors in the Mission Control room and then did various activities in the workshop including:-

- \* Creating and measuring craters
- \* The surface of Mars
- \* The Mars Rover

We explored Mars through Google Earth and infra-red satellite images. Lots of fun learning!







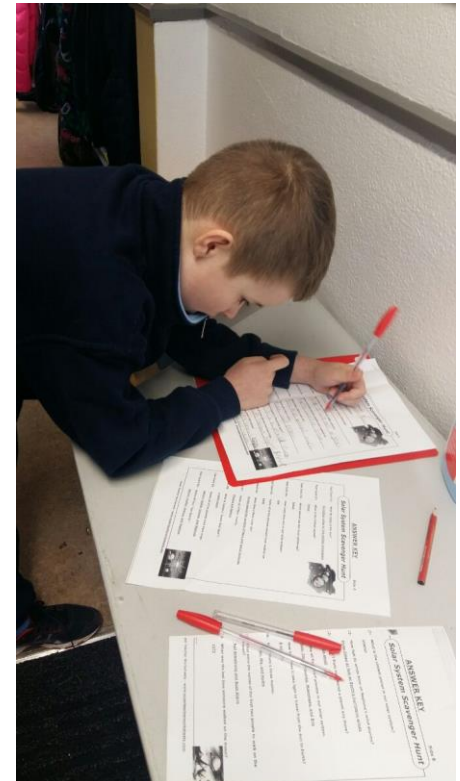
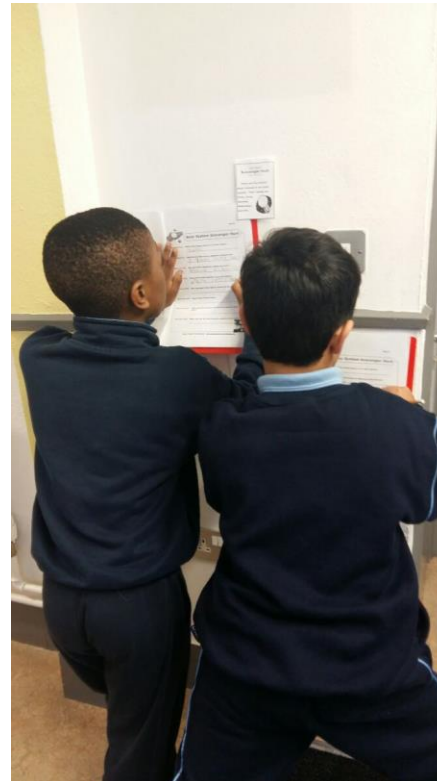


# 03 – 09 October 2016 Space Week

## Designing our Solar System



## Solar System Scavenger Hunt



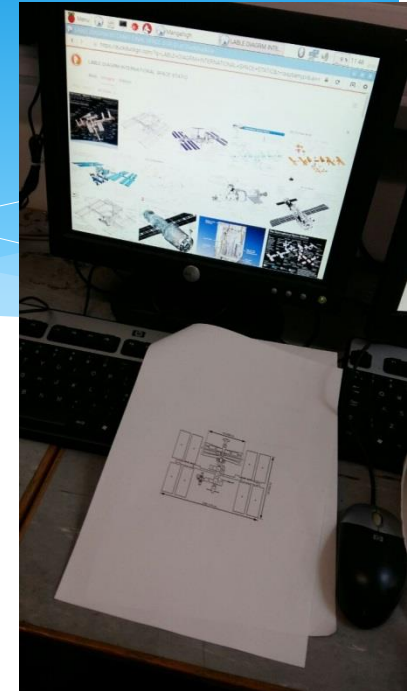
## Space Themed Short Stories



Learning about our Sun



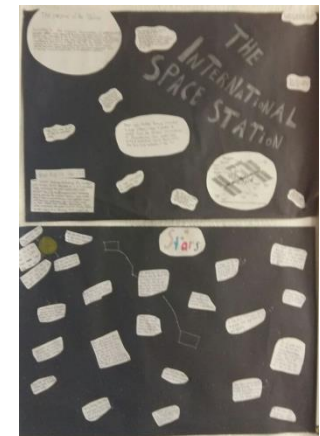
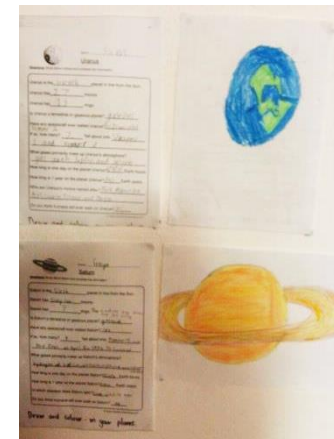
It's all in the research!



Exploring the I.S.S.



Some of  
our  
projects



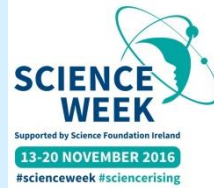


# 13 – 20 November 2016

## Science Week

During Science Week, we did various activities around the school:

- \* 5<sup>th</sup> & 6<sup>th</sup> Class Boys presented their Showcase with the Junior Room (See Step.5. – Show & Tell)
- \* We conducted (or started) various experiments such as:-
- \* Fingerprints, Dominant Eye and Blindspot (3<sup>rd</sup> Class)
- \* Growing Crystals (4<sup>th</sup>, 5<sup>th</sup> & 6<sup>th</sup> Class)
- \* Make A Bird Feeder (5<sup>th</sup>, 1<sup>st</sup> & 2<sup>nd</sup> Class)
- \* Make A Volcano (6<sup>th</sup> & Junior Room)
- \* Dancing Raisings (6<sup>th</sup> & Junior Room)
- \* Building Robots (Engineering)
- \* Bounciest Balls (2<sup>nd</sup> Class)
- \* We pretended to be geologists & archaeologists and mined 'fools gold', skeletons & geodes



All these experiments are in our presentation!

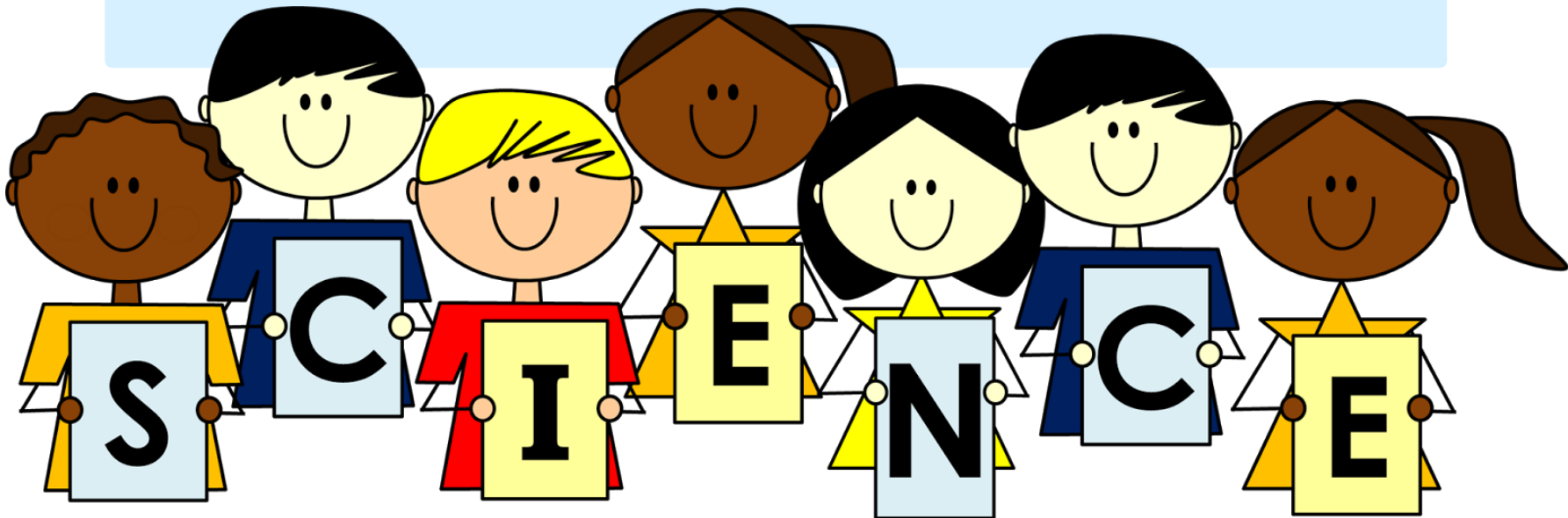
We also decided to start showing more awareness of our immediate environment and started an Anti-Litter Campaign in the school yard (6<sup>th</sup> Class)



# Science Week Junior Room Showcase

During Science Week, the 5<sup>th</sup> & 6<sup>th</sup> Class boys presented a showcase to the Junior Room and did various experiments with them.

Please see Step.5. – Show & Tell for more details







# St. Michael's Church of Ireland National School C072

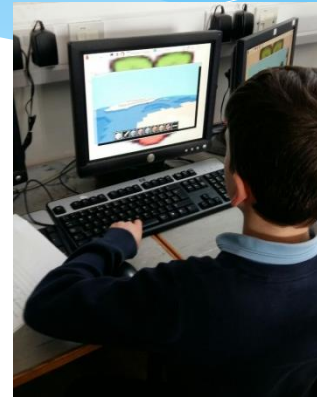
**S.T.E.M**  
**Section.2. – Technology**  
**2016 /2017**

ACTIVITY	CLASS
Minecraft	Senior Room
Blog & Social Media	Senior Room
Manga High	Senior Room
Storybird	Senior Room
Scratch	Junior & Senior Room
Graphs	6 <sup>th</sup> Class Girls
Investigating the Raspberry Pi	Senior Room
Using the Office Equipment	Junior Room

St Michael's uses IT extensively during the day. Pupils all have access to a computer and we have 15 desktop sets, 5 laptops and 2 tablets to a class. (23 pupils in the senior room and 33 in the junior room). A number of programmes are used to enhance learning and practice skills. We have shown a variety of programmes in this presentation but have not shown the new projects we are starting including [kidsblog.com](http://kidsblog.com) and [flipsnack](http://flipsnack.com). The junior room also have educational games software which enhances skills practice

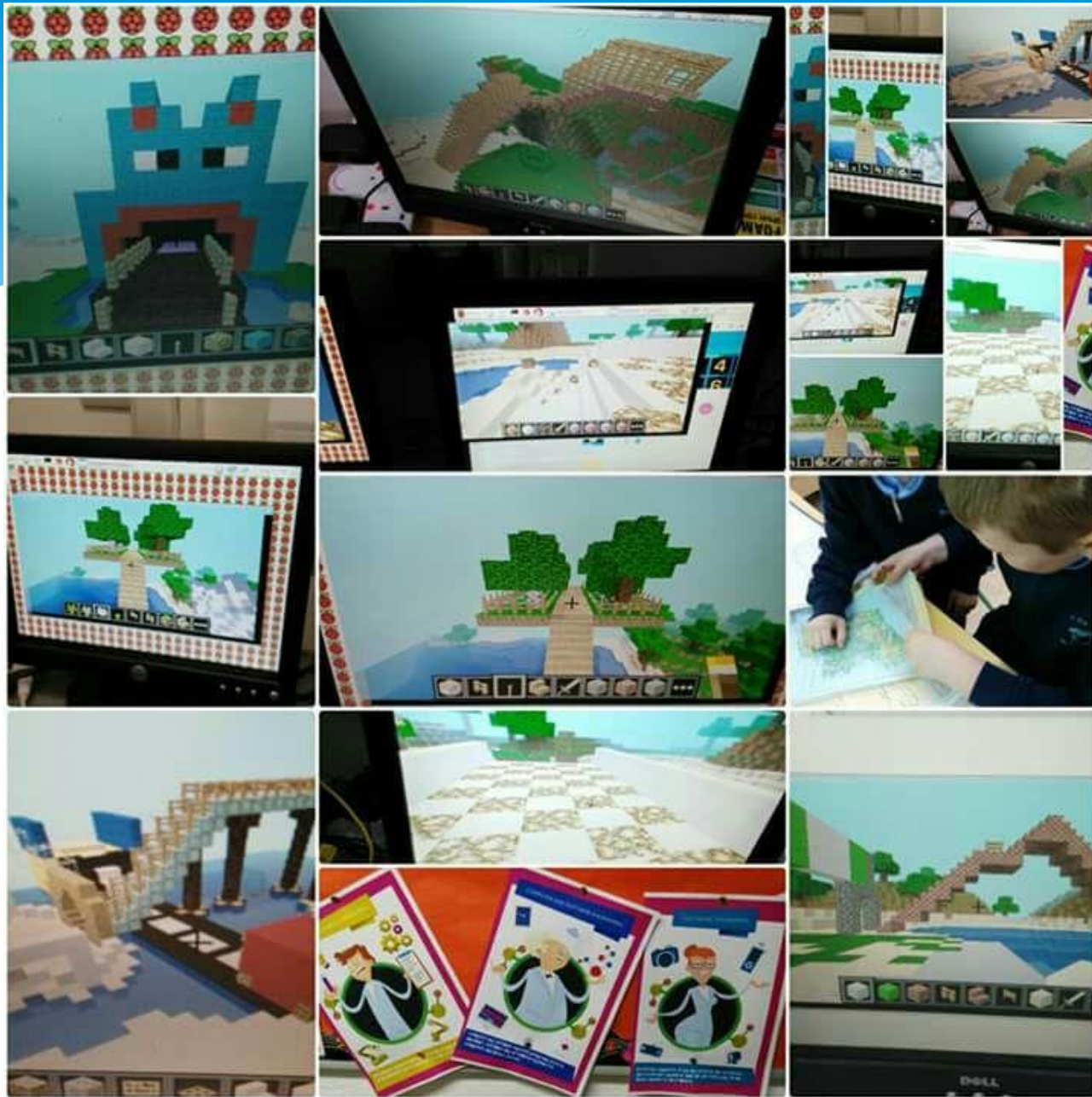


# Bridge Building Minecraft Bridge Building Competition



The Senior Room was challenged to design a bridge on Minecraft. The winning engineer must have a bridge that:-

1. Stable
2. Can bear weight
3. Thoughtful design
4. Aesthetically pleasing.



The winner of the competition did a fantastic job designing a bridge with character, strength and design.





# St. Michael's Church of Ireland

National School

Scoil Naomh Micheal

HOME About Us Parents Information Gallery School Blog Our Projects

## Our School Tour to U.C.C.

March 24, 2017 | Tia Kelly (4th Class)



Today the senior room went to an art workshop at the Glucksman Gallery in UCC. There was alot for us to see and do. In the art gallery there was a HUGE painting made entirely out of NUTELLA! Then we went into this huge transport lift to the art room where there were...

[Read More](#)

## Elf @ Ashton

March 20, 2017 | Harry O'Donoghue (3rd Class)



We went to Ashton on the 18th January to see Elf. We didn't have a bus so we had a brisk walk all that way to Ashton. It was worth it though! The Ashton students put on a really big show. Some old St.Micheal's students were in the play like Alden, Scott and Abi. We had...

[Read More](#)

## Space Week

March 15, 2017 | Liam Gardland (3rd Class)









For space week 4th class, myself and a friend...

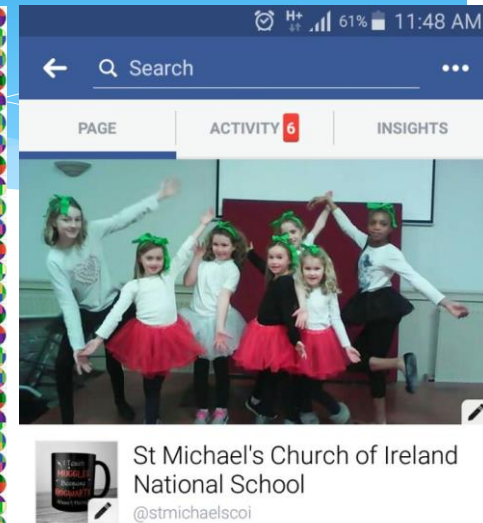
Our blog is all about our life at St. Michael's with news and interesting stories written by the pupils and staff.

Senior Room (10)  
Junior Room (1)  
School (0)

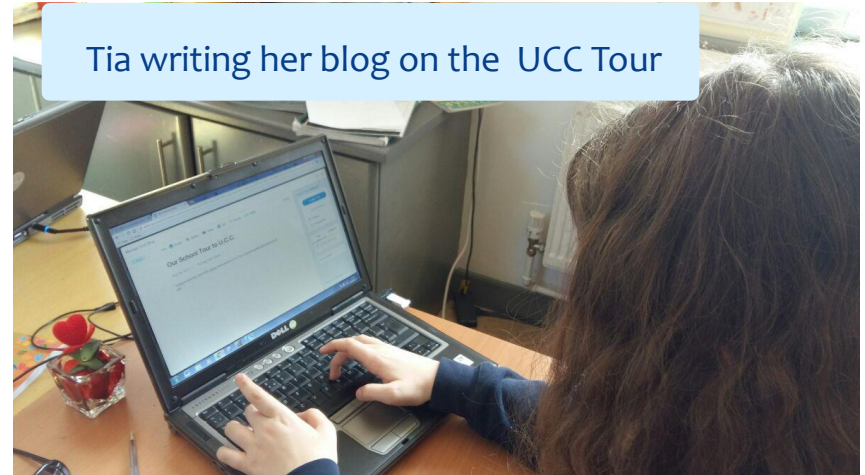
## Recent Posts

-  Our School Tour to U.C.C.  
March 24, 2017
-  Elf @ Ashton  
March 20, 2017
-  Space Week  
March 15, 2017
-  Book Review - Miss Peregrine's Home for Peculiar Children  
March 8, 2017
-  World Book Day - 2nd March 2017  
March 3, 2017
-  St. Michael's Church and Schoolhouse  
February 16, 2017
-  How Beans Grow  
February 14, 2017
-  Book Review - Tell Me No Lies

# Blog - Website Social Media – Facebook

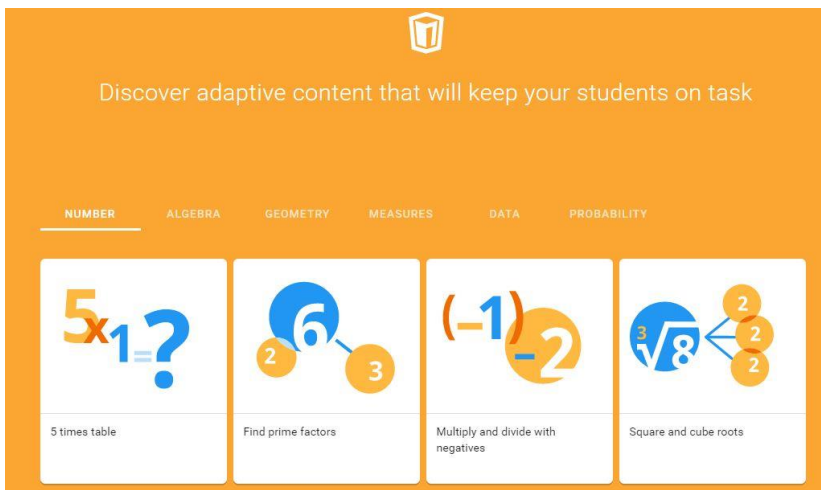
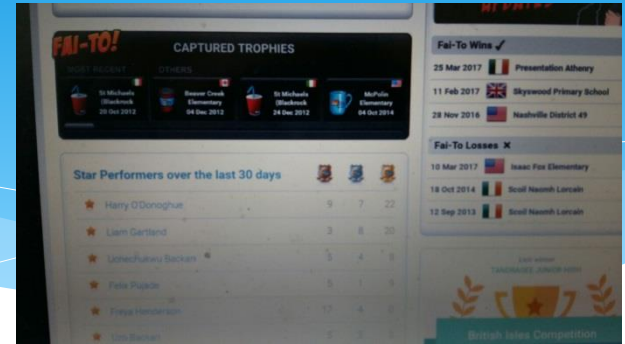


Tia writing her blog on the UCC Tour



The pupils write a monthly blog on our school website and compiles collages with photogrid for our school facebook page.

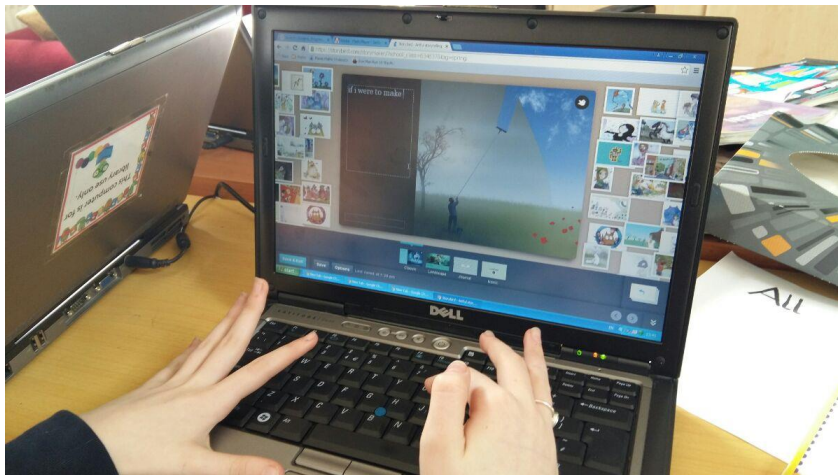
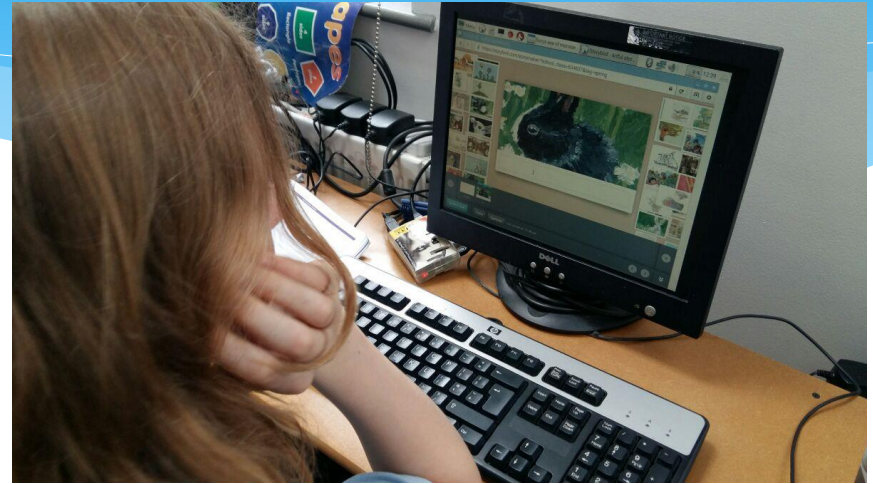
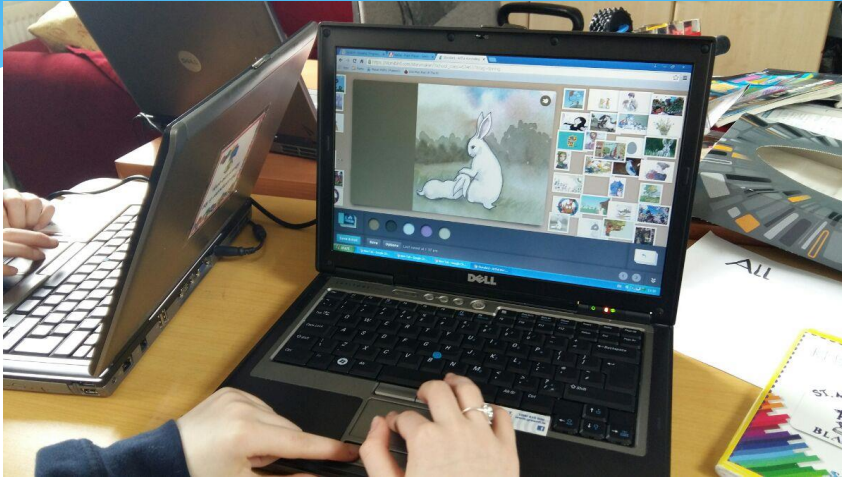
# Manga High

[illegible]



The Senior Room use [www.storybird.com](http://www.storybird.com) to practice their creative writing. Each pupil has their own profile and can use the pictures and templates to make their own storybooks.

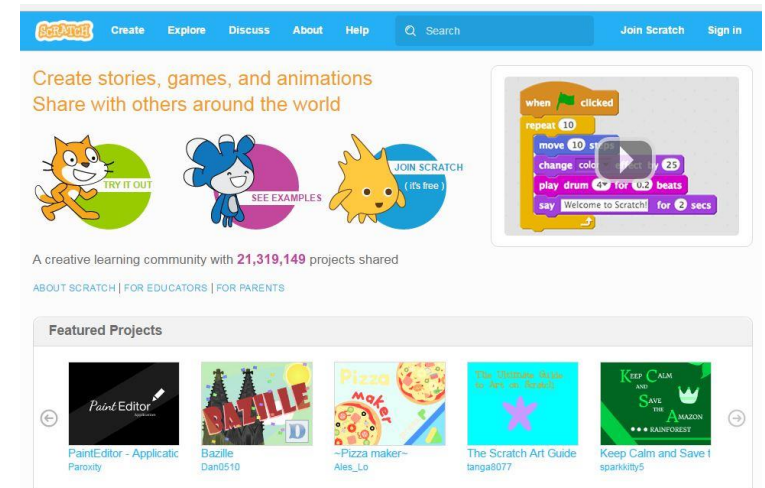
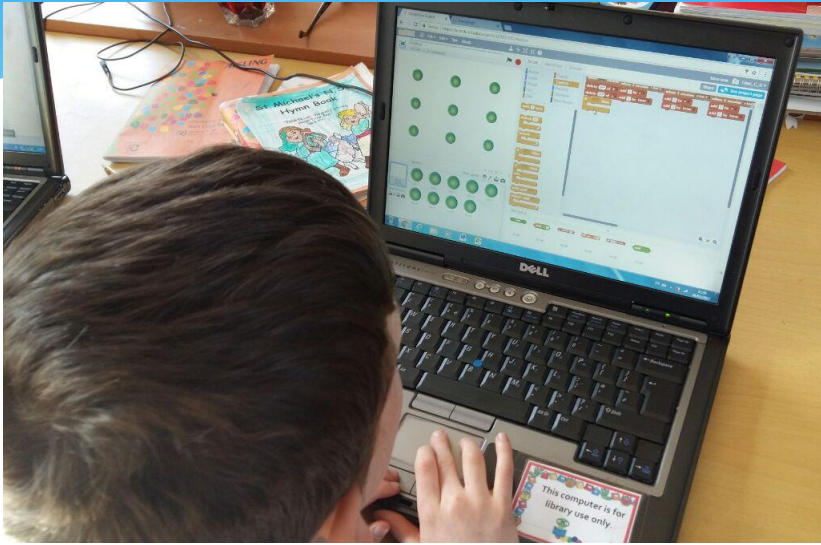
# Storybird





Scratch teaches children how to code and make short animated films and sketches. All pupils in the senior room have their own Scratch accounts. Not only does it test their maths skills but also logic and creativity.

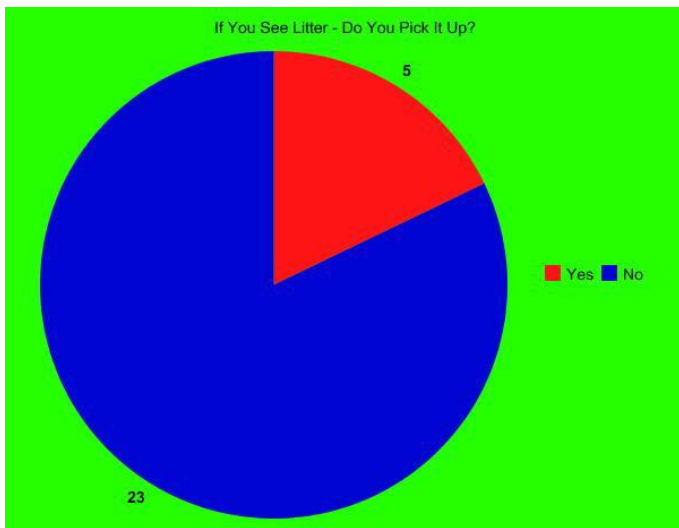
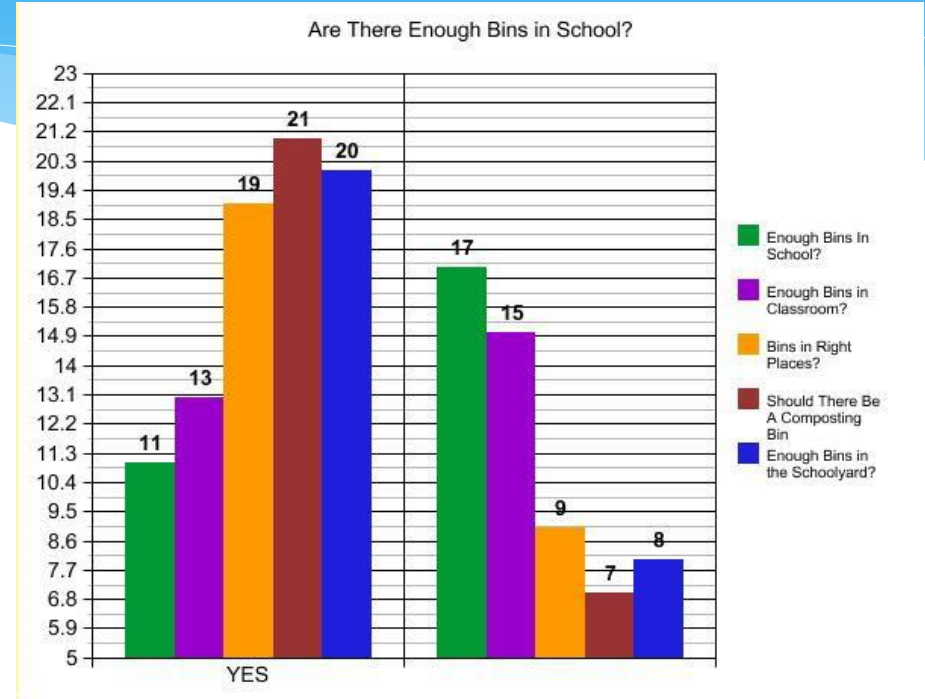
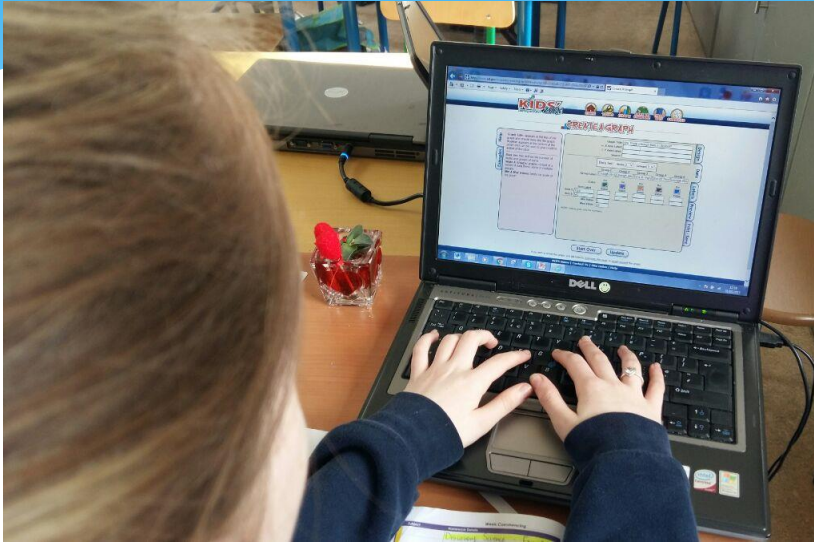
# Scratch



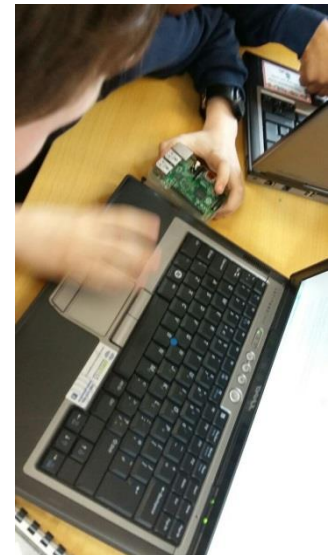
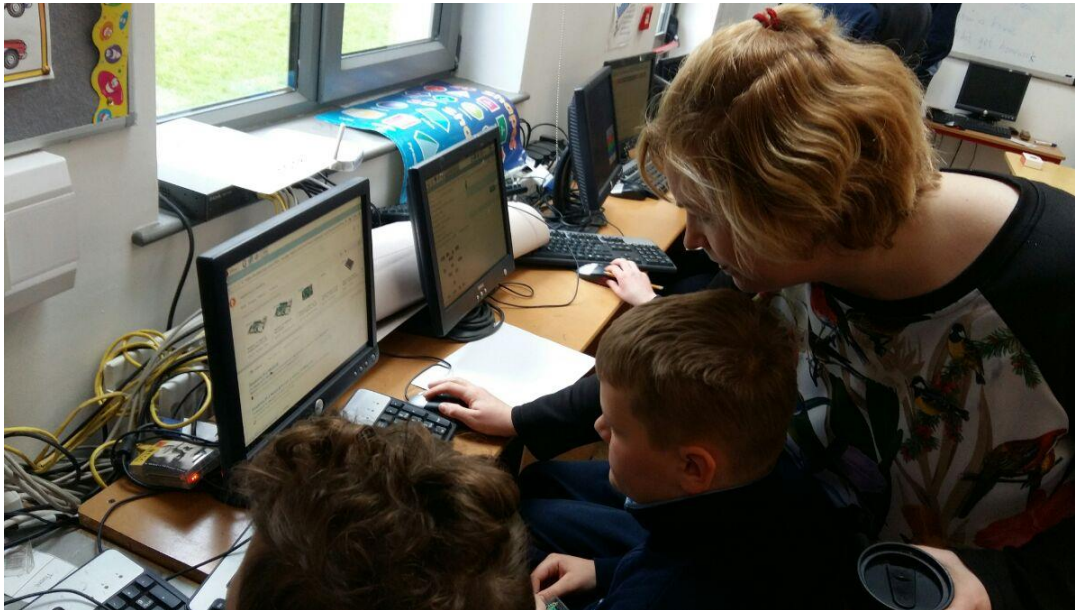
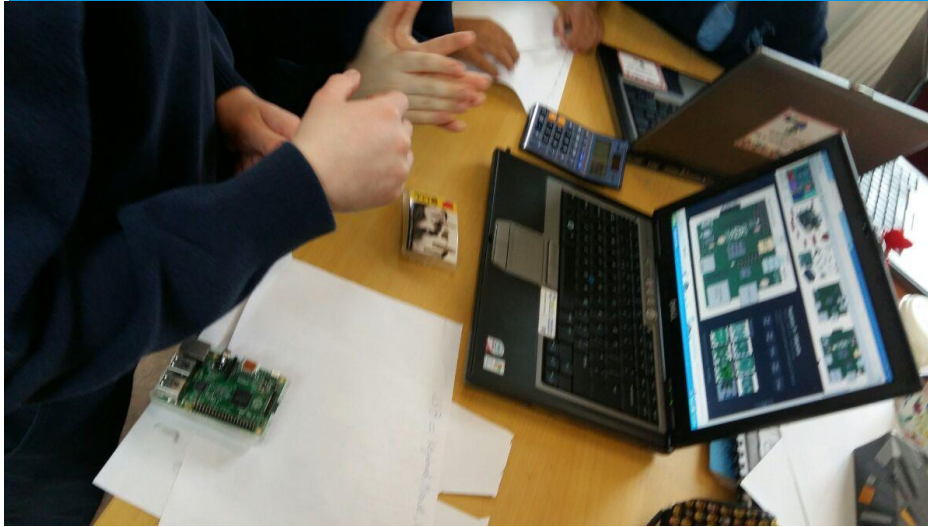


The 6<sup>th</sup> Class Girls took part in the S.T.A.R.T Competition and used Create-A-Graph to make graphs showing their compiled data.

# Graphs



# Investigating how a Raspberry Pi works





# Office Equipment

All pupils have been taught to use the copier and love doing that job for the teachers!





# St. Michael's Church of Ireland National School C072

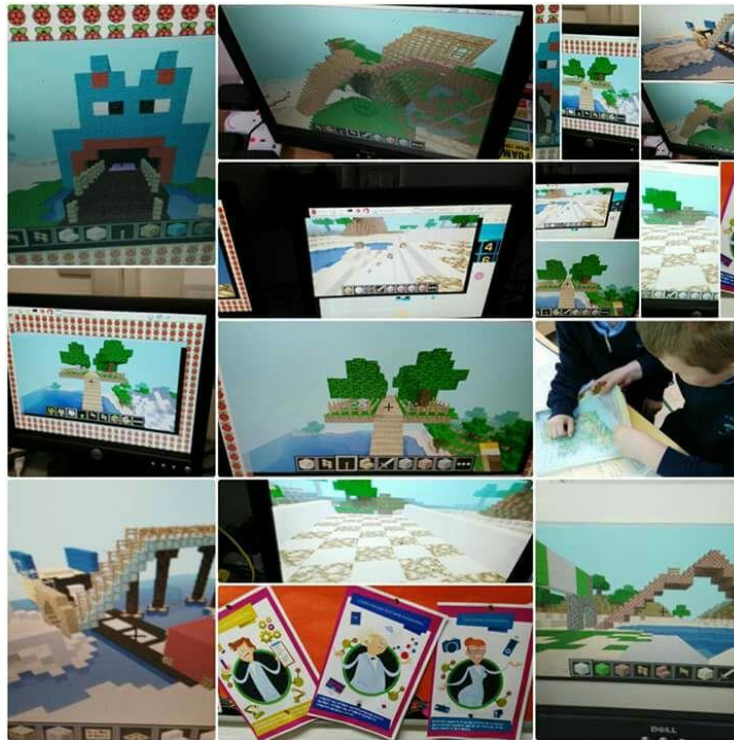
**S.T.E.M**  
**Section.3. – Engineering**  
**2016 /2017**



ACTIVITY	CLASS
Minecraft Bridge Building Competition	Senior Room
Civil Engineering Talk – PM Group	Senior Room
Building Bridges	Senior Room
Launch Challenges	Senior Room
Blackrock Engineering Walk	3 <sup>rd</sup> & 4 <sup>th</sup> Class
Building Robots	3 <sup>rd</sup> & 5 <sup>th</sup> Class
Making Circuits	Senior Room
Investigating the Raspberry PI	Senior Room
Event – Engineering Week : 04 – 10 March	Senior Room

# Bridge Building Minecraft Bridge Building Competition

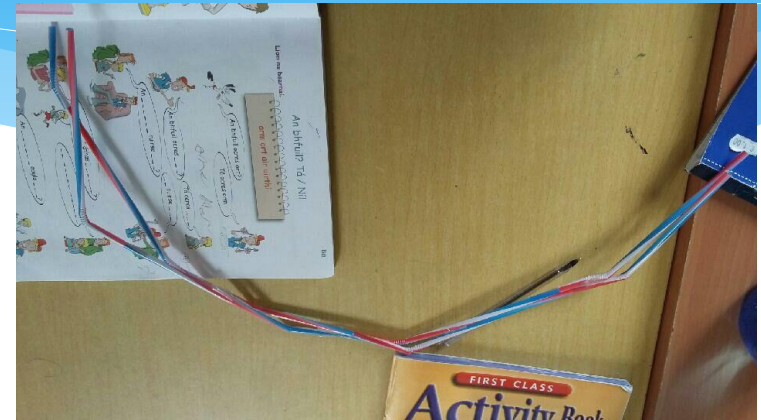
The Senior Room was challenged to design a bridge on Minecraft. The winning engineer must have a bridge that is stable, can bear weight, have a thoughtful design and is aesthetically pleasing.





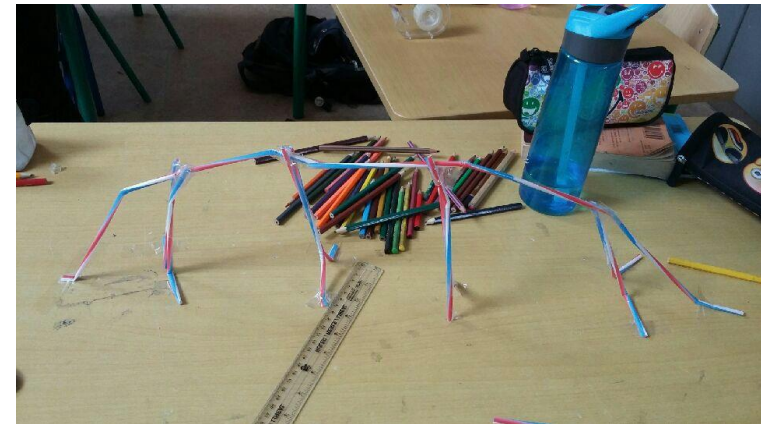
3<sup>rd</sup> & 4<sup>th</sup> class researched all about bridges and we had a guest speaker from Project Management (PM) come and explain what a Civil Engineer is.

# Civil Engineering Bridges



Heike Dornig from PM Group came and talked to our Senior Room about Civil Engineering and building bridges.

After the talk we had a chance to build some of our own bridges!

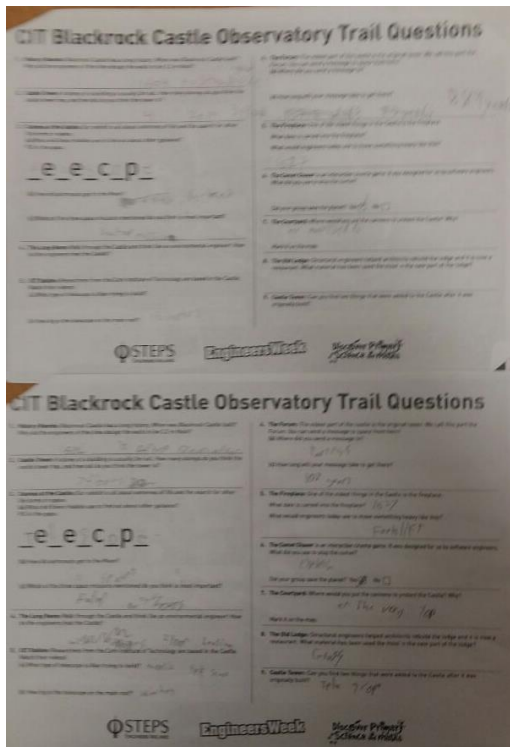
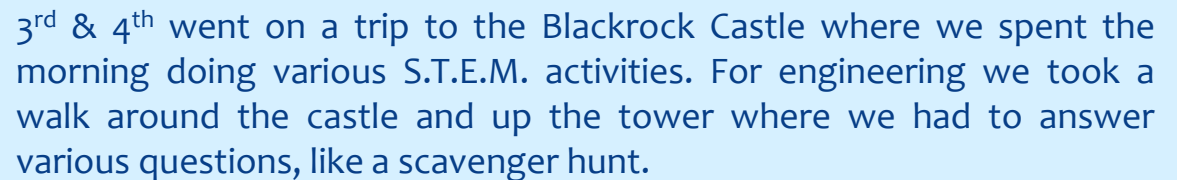


**PM**  
GROUP

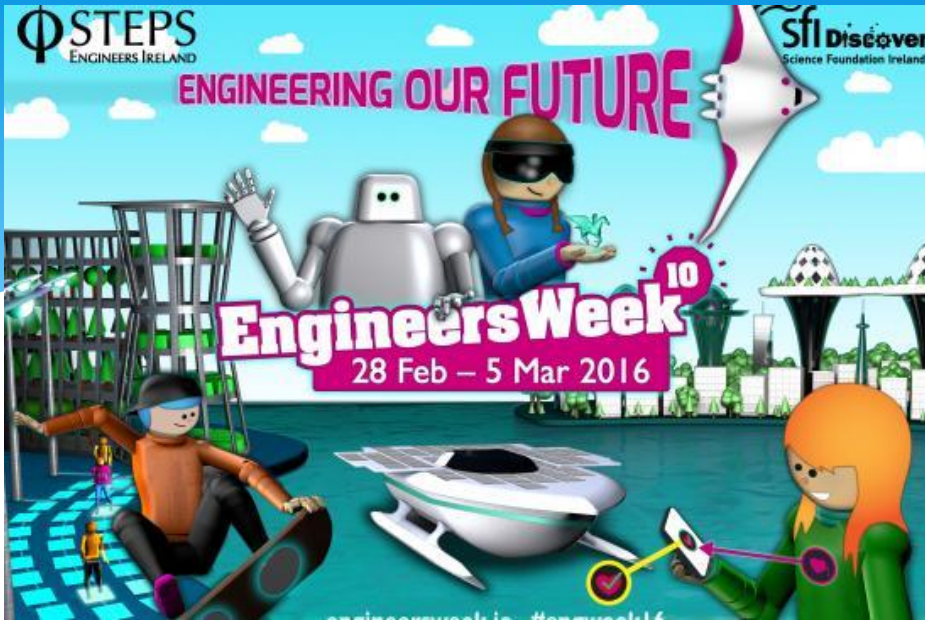
## CIT Blackrock Castle Observatory



**CIT Blackrock Castle Observatory** Castle Road, Blackrock, Cork, Ireland  
Phone: +353 (0) 21 4357 917 E-mail: [info@bco.ie](mailto:info@bco.ie) Web: [www.bco.ie](http://www.bco.ie)



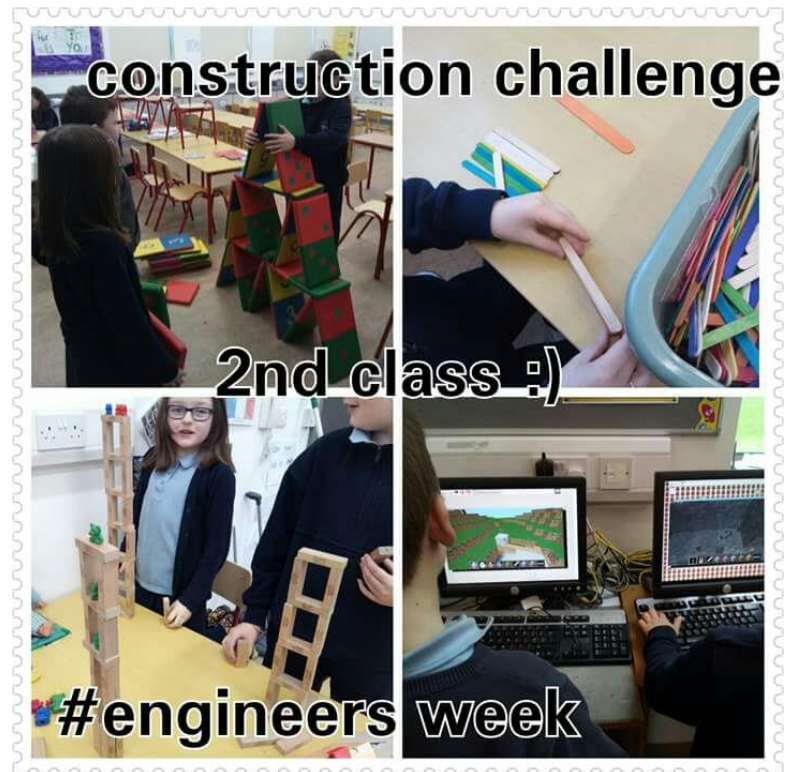




04 – 10 March 2017  
Engineering Week

The Junior and Senior Room did some exciting projects during Engineering Week including:-

- \* Egg Challenge
- \* Building Robots
- \* Making Circuits
- \* Junior Room Engineering Fun!

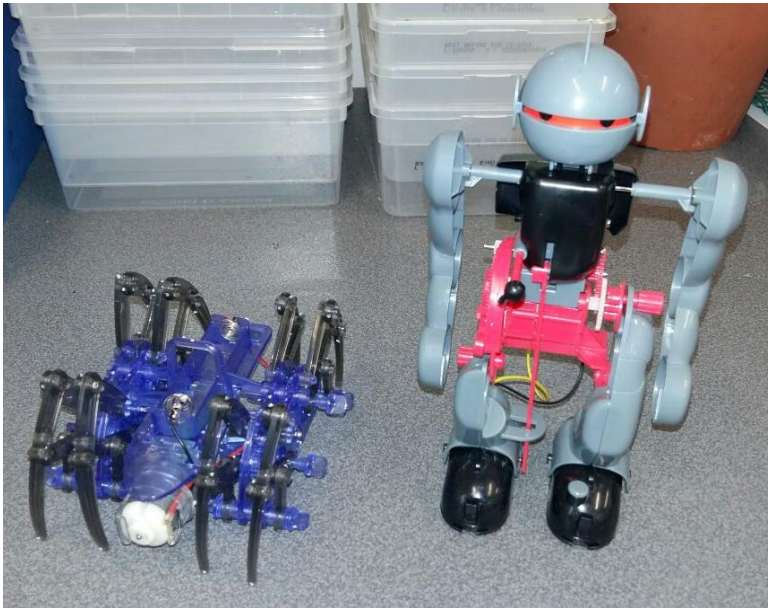


# 04 – 10 March 2017 Engineering Week



The Senior Room spent an exciting day building various robots and competing to see which robot works the best!

## Mechanical Engineering Robot Building





# Engineering Week

The Senior Room had to design and make a 'vehicle' to see who could throw their egg the furthest without it breaking! The winning group threw theirs 6.8m.

# Mechanical Engineering Launch Challenges

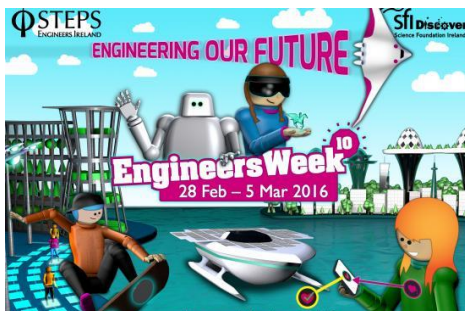
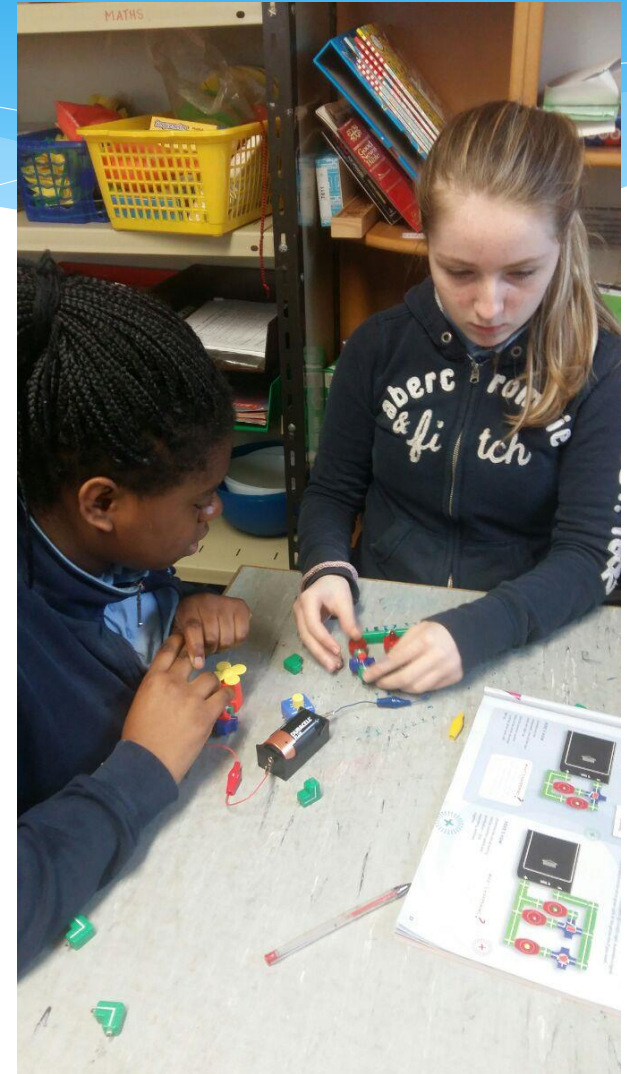
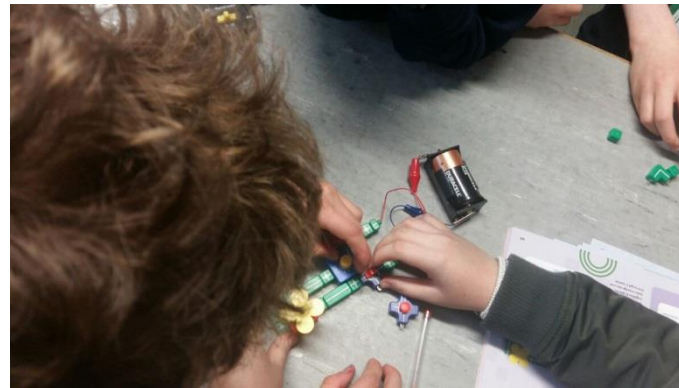
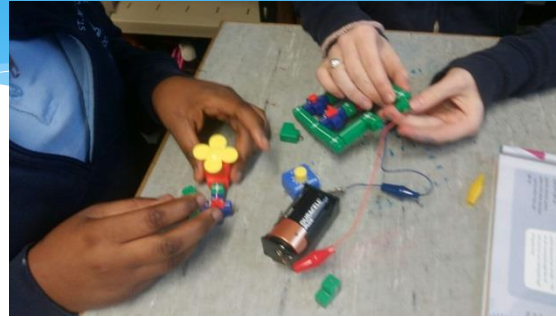
The Senior Room had to make launchers to launch their soldiers over the school roof! Loads of fun!





04 – 10 March 2017  
Engineering Week

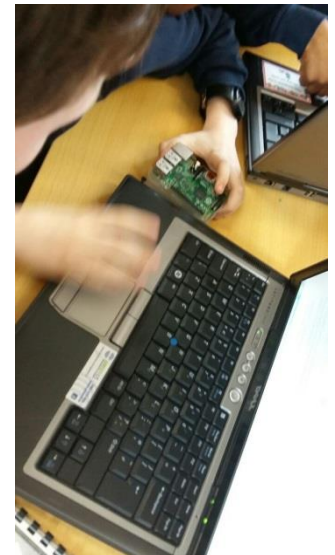
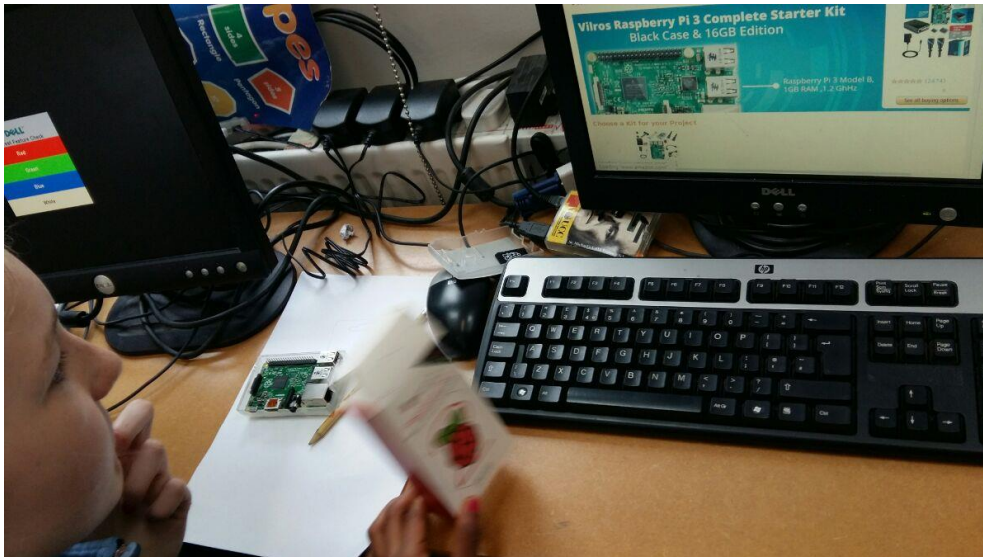
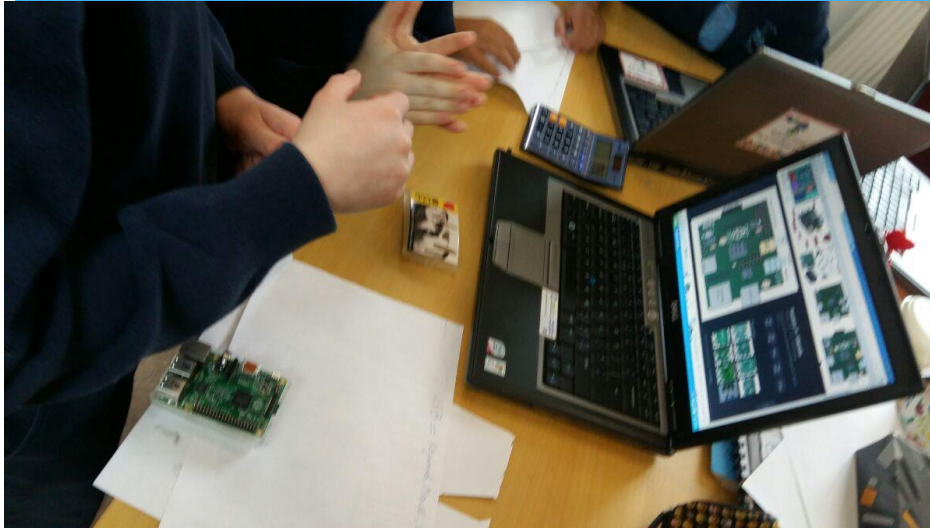
Electrical Engineering  
Building Circuits





04 – 10 March 2017  
Engineering Week

# Electrical Engineering Investigating the Raspberry Pi





# St. Michael's Church of Ireland National School C072

**S.T.E.M**  
**Section.4. – Maths**  
**2016 /2017**



ACTIVITY	CLASS
S.T.A.R.T Competition – Tallying Results & Creating Graphs	6 <sup>th</sup> Class Girls
Manga High	Senior Room
Blackrock Castle – Creating and Measuring Craters	3 <sup>rd</sup> & 4 <sup>th</sup> Class
S.T.E.M Maths – It's Everywhere	School
Nagle Community College – Maths Competition	3 <sup>rd</sup> , 4 <sup>th</sup> & 5 <sup>th</sup> Class
1 <sup>st</sup> Class Maths Trail	1 <sup>st</sup> & 5 <sup>th</sup> Class
Event – Maths Week : 15-23 October	School

# Litter Audit S.T.A.R.T Competition

As part of the START Competition, the 6<sup>th</sup> class girls (Lena, Alisha, Rebekha and Uche) did a survey on how the pupils treat litter and recycling in the school.

They then collated results as follows:-

- \* Counted the number of surveys
- \* Counted and tallied the yes and no answers
- \* Collated the different slogans
- \* Prepared graphs of the results
- \* Prepared a presentation based on the results

School Litter Survey : 2016 / 2017

Class : 6<sup>th</sup> Don't put your name on!!! ☺

Instructions:-

1. Read each question carefully and decide which answer you think suits the question best - Remember that there is no right or wrong answer and this is your opinion!

Tick which answer you think fits best with the question.

	Yes	No
1. Are there enough bins inside the school?	Yes ✓	No
2. Are there enough bins inside the classrooms?	Yes ✓	No
3. Are the bins in the right places in the classrooms?	Yes ✓	No
4. Should there be a bin for recycling in the classroom?	Yes ✓	No
5. Should there be a bin for recycling in the classroom?	Yes ✓	No
6. Should there be a bin where you can put your uneaten fruit & vegetables for composting in the classroom?	Yes ✓	No
7. Are there enough bins in the schoolyard?	Yes ✓	No
8. When you see litter in the schoolyard - do you pick it up?	Yes ✓	No
9. Do you or have you dropped litter in the classroom or schoolyard?	Yes	No ✓

10. If you have answered yes to Question 9., then please tick why you dropped litter (you can tick more than one!)

- You can't be bothered to put it in the bin
- If you can't find a bin you will just drop your rubbish
- You don't mean to, you drop it accidentally
- It's not cool to put rubbish in bins
- You drop empty bottles & wrappers because they are dirty and you don't want to hold it
- You think it's fun
- You don't care
- You like being a rebel

which answer you think fits best with the question.

	Yes	No
10. When drawing on a piece of paper, do you draw or write on both sides?	Yes ✓	No
11. Do you always put your paper into the recycling bin?	Yes	No ✓
12. Do you bring a new bottle of water to school every day?	Yes	No ✓
13. Do you refillable water bottle?	Yes ✓	No
14. Should there be a bin for recycling in the classroom?	Yes ✓	No
15. If you bring a disposable water bottle to school, do you take it home after?	Yes ✓	No

Your Lunch Box!

Open up your lunch box and tell us what is inside it!

	Yes	No
1. Do you have water with your lunch today?	Yes ✓	No
2. Is your water in a reusable or disposable bottle?	Yes ✓	No
3. Do you have a sandwich or wrap or crackers today?	Yes ✓	No
4. Is your sandwich or wrap or crackers in a wrapper?	Yes ✓	No
5. Do you have fruit today?	Yes ✓	No
6. Do you have fresh vegetables today?	Yes ✓	No
7. Do you have a yoghurt or other dairy product today?	Yes ✓	No
8. Do you take your wrappers home?	Yes ✓	No
9. Do you take your fruit peels and apple cores home?	Yes ✓	No

How many wrappers do you have in your lunch box (plastic, paper, foil)? two

Tell us exactly what you have in your lunch box today!

a Fruit and a Grape  
a Sandwich with cheese

Give two suggestions how to stop litter in the school yard?

put in side

Give two suggestions how to stop litter in your classroom?

put them in your lunch box

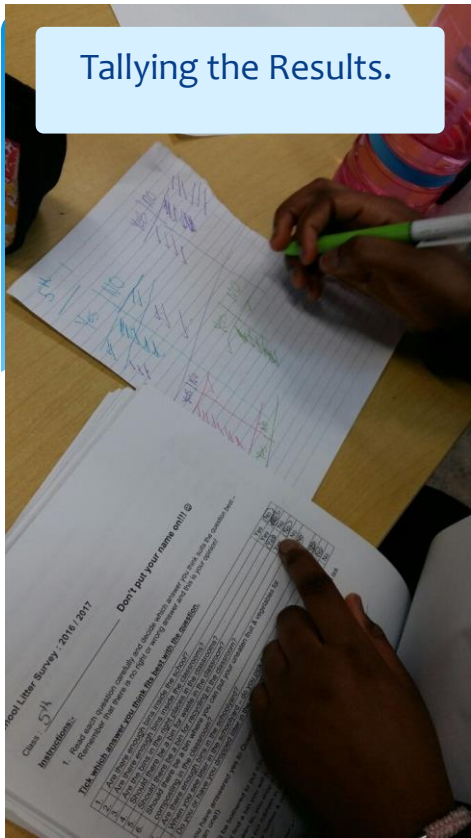
Draw or write slogan for an anti-litter campaign poster

do not litter! ☺

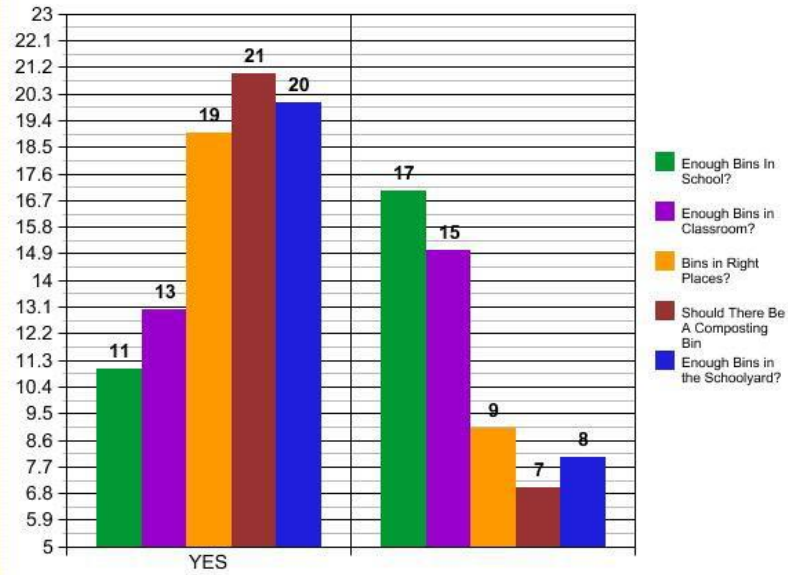




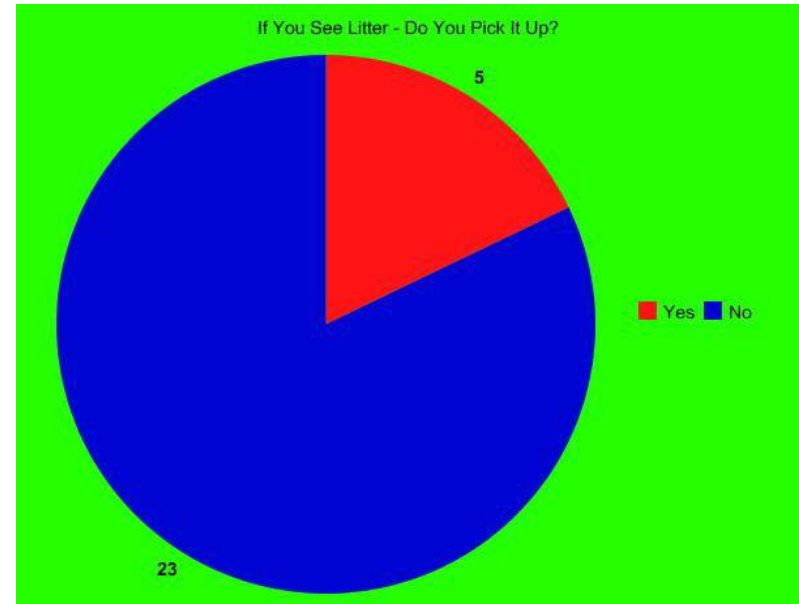

## Tallying the Results.



Are There Enough Bins in School?



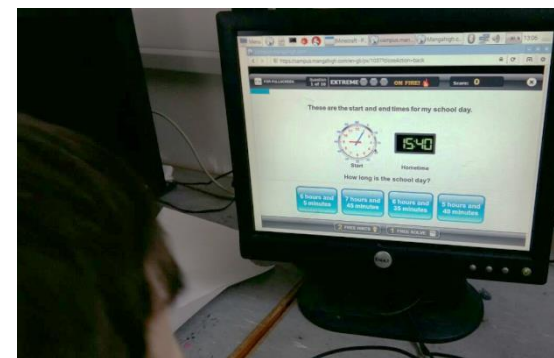
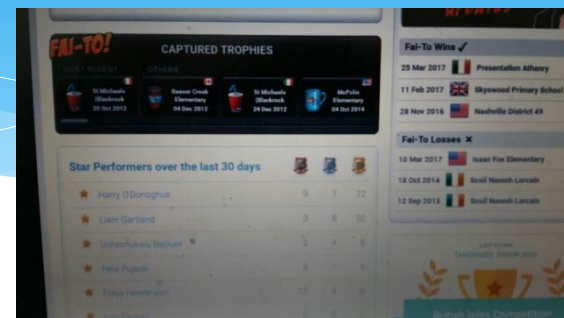
## Using Create-A-Graph



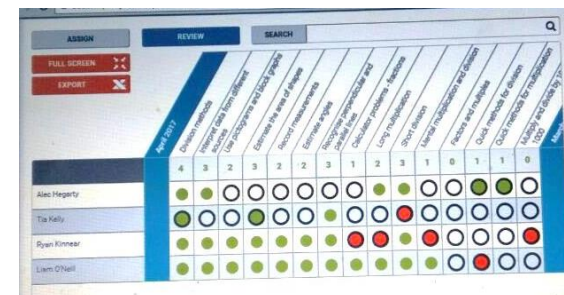
The pupils in the Senior Room work on their maths skills on Manga High. Each pupil has a set of challenges that are set by the teacher on a weekly basis. There is also class challenges and Manga High Achievers of the Month Awards. The pupils also take part Fai To with other schools.

# Educational Games Manga High

Each month we reward our Top Performers on Manga High.



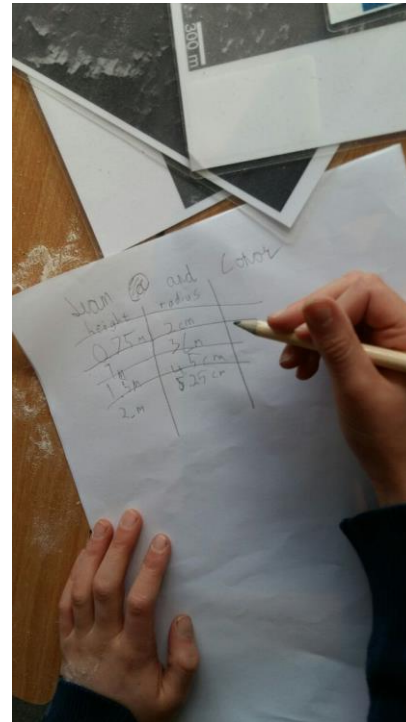
Gold Medal Winner





# Measuring Crater Impacts Blackrock Castle

3<sup>rd</sup> & 4<sup>th</sup> went on a trip to the Blackrock Castle where we spent the morning doing various S.T.E.M. activities. During the Mars Workshop we dropped bearings of various weights into sand and had to measure the craters they made and then discussed how weight, height and speed impacts on the size and depth of the craters. We also had to measure craters on the moon, earth and Mars from satellite photos using a scale and then put them into size order.



It's fun to use Maths in all our projects!

# S.T.E.M Maths It's Everywhere!!



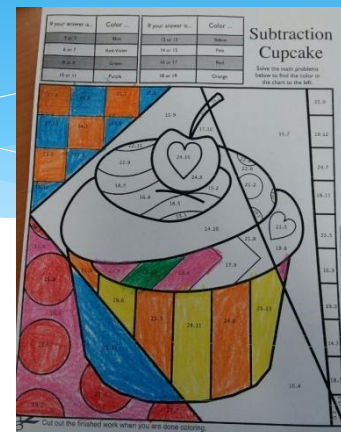
We used graphs to show where all our pupils come from in the world in Geography.



Calculating the amount of food to feed the fish.



Maths in our  
Pop Art!



Maths in the yard



# Nagle Community College 5<sup>th</sup> Class Competition 2016

## Maths Competition



# 1<sup>st</sup> Class Maths Trail

The 5<sup>th</sup> Class boys took the 1<sup>st</sup> Class on a Maths Trail around the school where they did measuring of objects with tape measures, handspans and footsteps. They also identified various shapes around the school and had fun drawing shapes on the playground with chalk.

**1<sup>st</sup> Class - Maths Trail** Name: Ali

Start at the School gate and walk toward the front of the school.

1. Look at the front of the school.  
Where can you see numbers on the outside of the school?

1 2 3 4 5 6 7 8 9 10 20th 4th 29 7/12 5-6  
62 4/12 181 198 20th 17-21

How many windows on the front of the school? 7  
How many doors on the front of the school? 2  
How many steps to the front door? 1  
How many flower pots at the front of the school? 5

2. Now turn around and look at the front gate and fence.  
How many trees in the front garden? 14  
How many gates at the front of the school? 3  
How many bars on the gates? 35

3. Can you find these 2D & 3D shapes on your school? Give 1 example of each.

Triangle 1  
Rectangle 1  
Circle 1

4. Now let's do some measuring.  
How wide is the front door? 105cm  
How high is the wall next to the front door? 170cm  
What is the circumference of the flower pot? 102cm  
How many footsteps long is the flower bed? 18  
How many handspans high is it from the bottom of the front door until the handspans? 11

5. Using the pavement chalk - draw the following shapes.

Square ☒ Circle ☒  
Triangle ☒ Straight Line ☒  
Elliptical sign ☒ Square sign ☒  
Division sign ☒ Equally line ☒

6. Give an example of the following shapes you could find at school.

Sphere 1  
Cube 1  
Cone 1





During Maths Week, we did lots of activities. These are some of our favourites.

Manga High Math's Week Olympiad Winners!



1<sup>st</sup> Class Maths Trail



We did art that was based on maths! Join the dot landmarks & math problem pop art



# 15 – 23 October 2016 Maths Week

Using brochures to learn about budgeting





Learning to sequence using  
hopscotch!

Skipping whilst learning our  
timetables is lots of fun!







# St. Michael's Church of Ireland National School C072

**S.T.E.M**

**Section.5. – Show & Tell**

**2016 /2017**

The 5<sup>th</sup> & 6<sup>th</sup> class boys did a Showcase with the Junior Room. During the day they conducted the following experiments with them.

- \* Volcano Experiment
- \* Dancing Raisings Experiment
- \* Make a Bird Feeder
- \* Robots
- \* Scratch Computer Coding

