DPSM Log 2018-2019

Scoil N. Fiachra Illistrin

2019/DSM/662

Discover Primary Science and Maths

www.primaryscience.ie

Science

Step 1

Junior Infants Planting Cress seeds

Step 1 – Science – Living Things

Planting Cress Seeds in Ms Mc Garveys Junior Infants

Step 1 – Science – Living Things

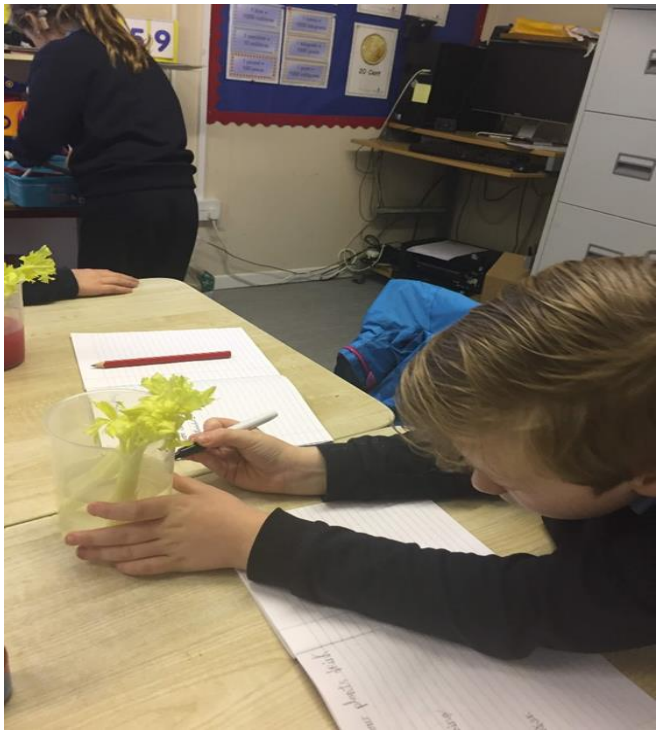
Planting Cress Seeds in Ms Stewarts Junior Infants

Vegetable Garden

Pictured below are children from 1st, 3rd, 4th and 5th planting vegetable seeds. They planted rocket, radishes, peas, spinach and tomatoes. The children can't wait to see them in a few weeks

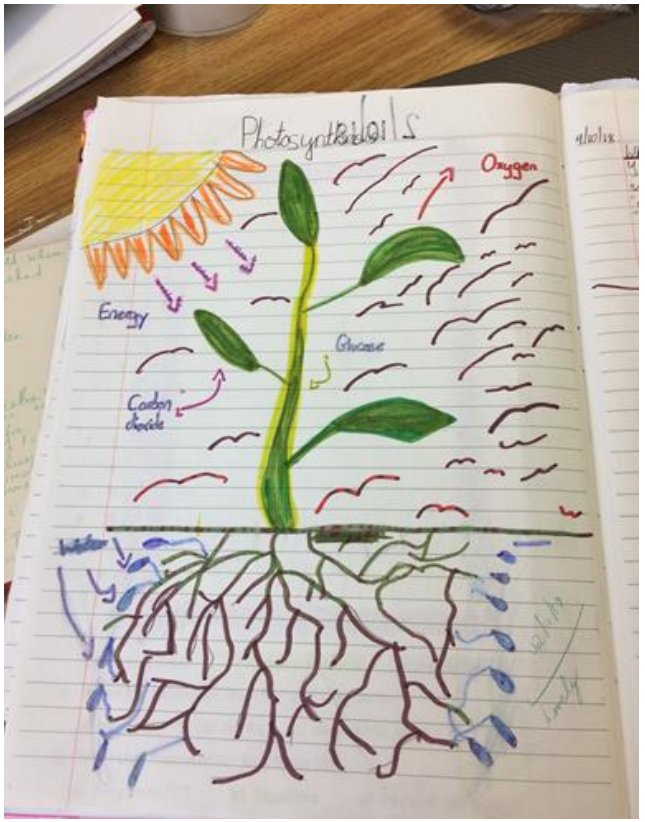
Step 1 – Science – Living Things

Rang 2 – Investigating how Plants Drink



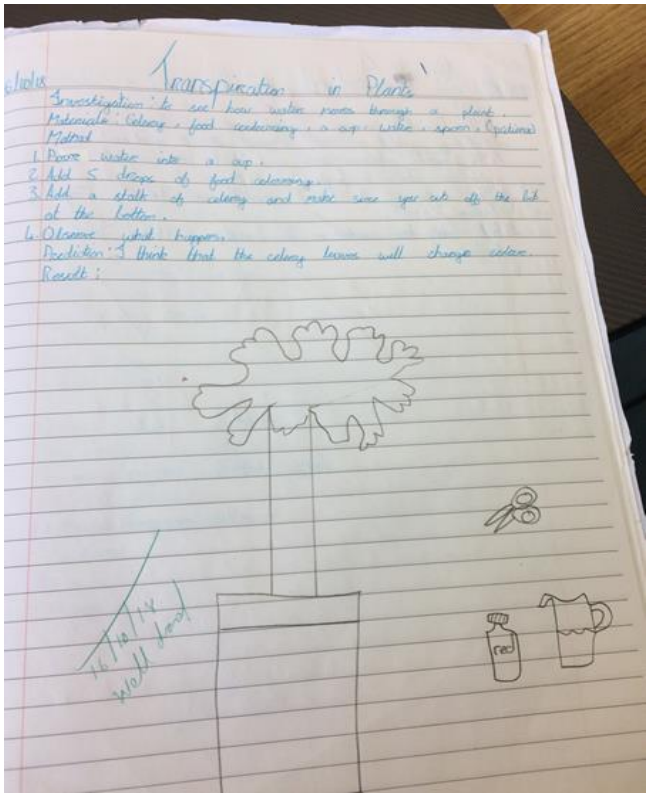
Step 1 – Science – Living Things

Rang 5 : Living Things: Transpiration in Plants



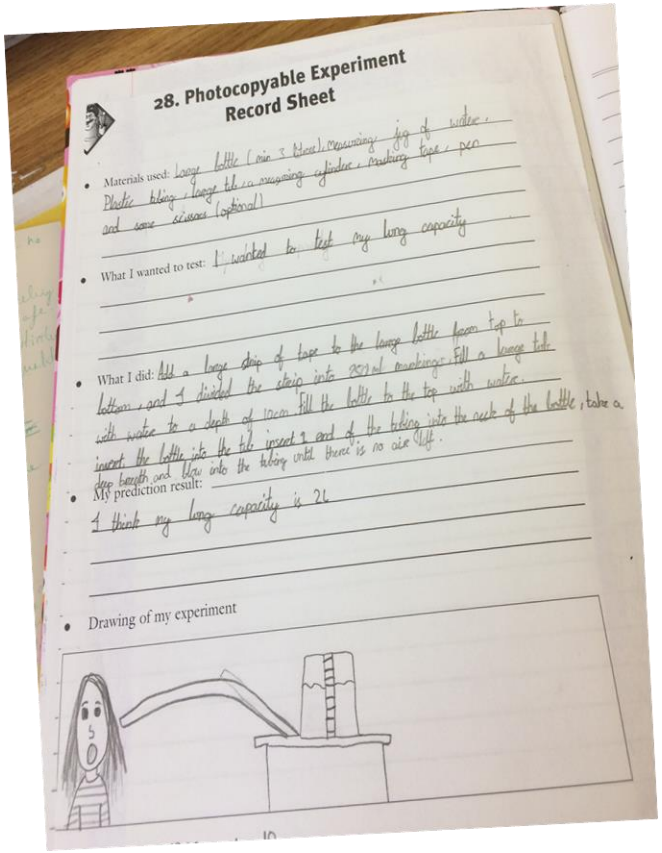
Step 1 – Science – Living Things

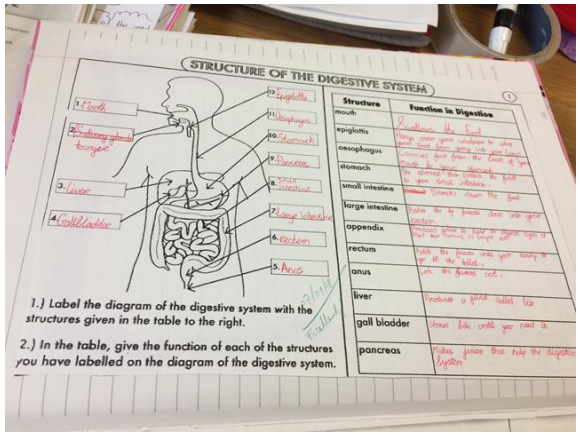
Rang 5 : Living Things: Transpiration in Plants

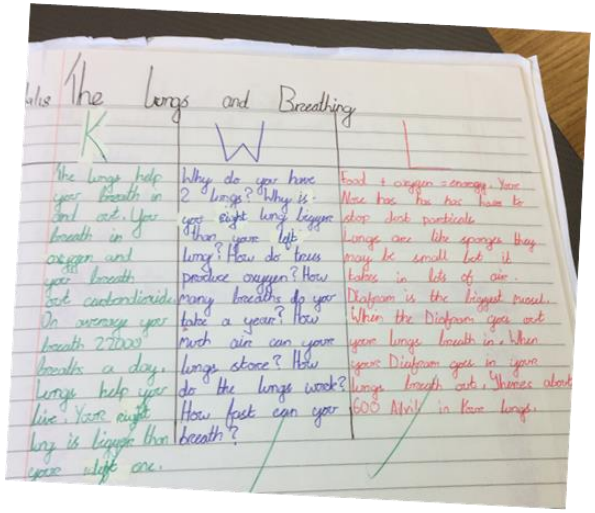


Step 1 – Science – Living Things

Human Life: 5th Class explore Breathing





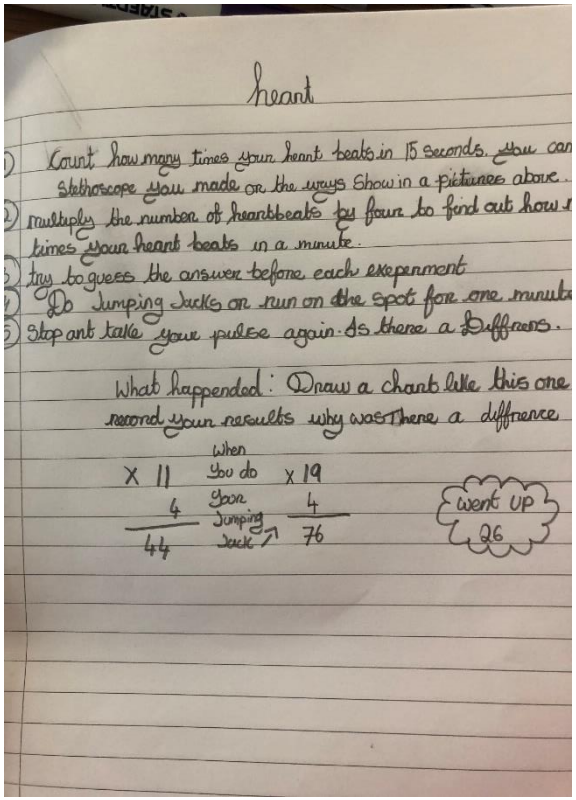


Step 1 – Science – Living Things

6th Class – Exploring Lungs Expanding & Contracting

Step 1 - Science – Living Things

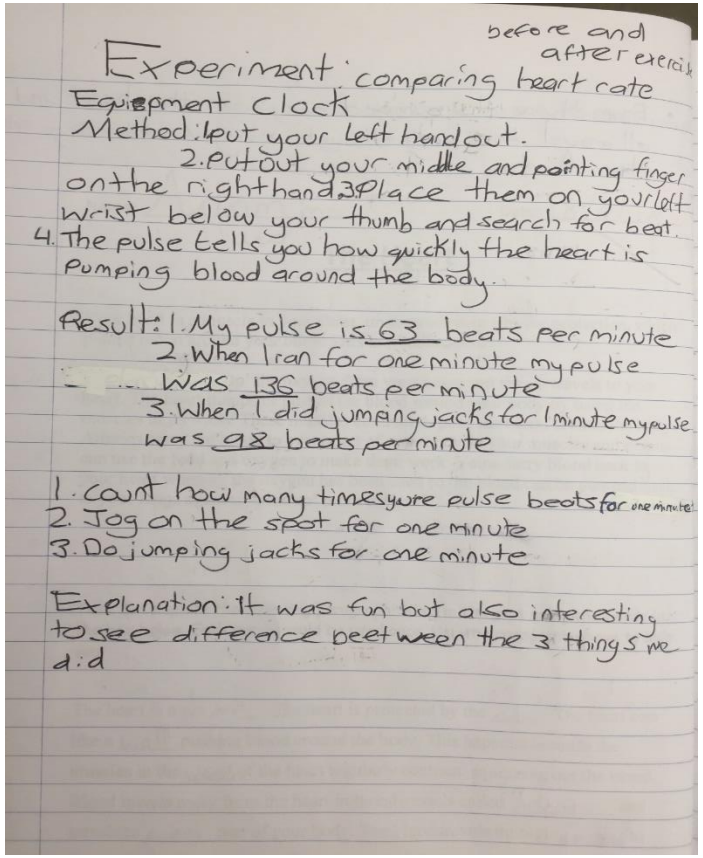
Exercise Your Heart
Rang a 3 investigated heart rate before, during and after Exercise



Maths
Using a stopwatch
Counting Pulse Rate

Step 1 – Science – Living Things

Heart Rate & Reaction Time



before and after exercise

Experiment: comparing heart rate

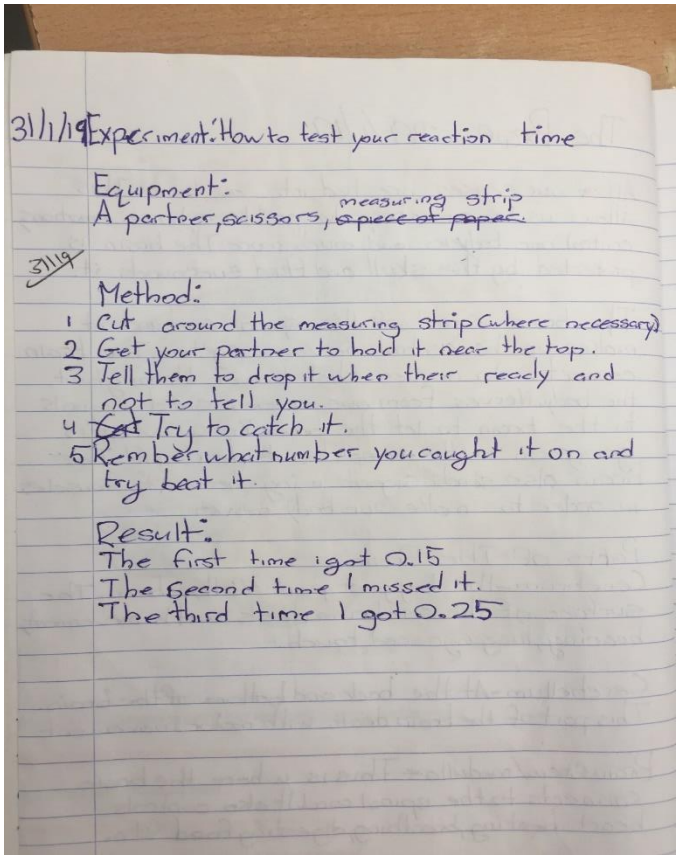
Equipment clock

Method: 1. put your left hand out.
2. Put out your middle and pointing finger on the right hand. 3. Place them on your left wrist below your thumb and search for beat.
4. The pulse tells you how quickly the heart is pumping blood around the body.

Result: 1. My pulse is 63 beats per minute
2. When I ran for one minute my pulse was 136 beats per minute
3. When I did jumping jacks for 1 minute my pulse was 98 beats per minute

1. Count how many times your pulse beats for one minute
2. Jog on the spot for one minute
3. Do jumping jacks for one minute

Explanation: It was fun but also interesting to see difference between the 3 things we did



31/1/19 Experiment: How to test your reaction time

Equipment:
A partner, scissors, measuring strip ~~a piece of paper~~.

31/1/19

Method:
1 Cut around the measuring strip (where necessary)
2 Get your partner to hold it near the top.
3 Tell them to drop it when their ready and not to tell you.
4 ~~Cat~~ Try to catch it.
5 Remember what number you caught it on and try beat it.

Result:
The first time i got 0.15
The second time I missed it.
The third time I got 0.25

Step 1 – Science – Living Things

Rang 6- Exploring Lungs

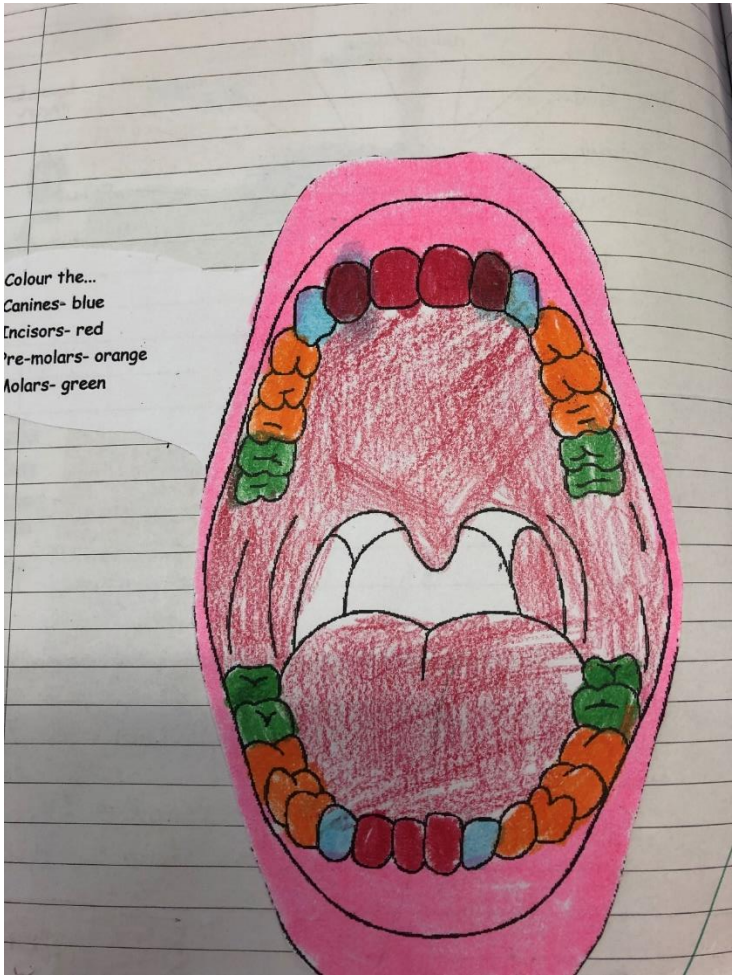
Step 1 – Science – Living Things

Rang 6 – Making a Lung

Step 1 – Science – Living Things

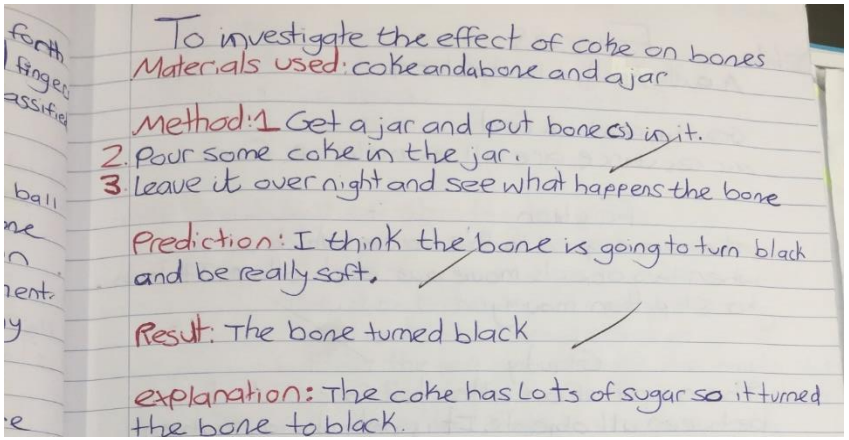
Rang 3 Investigate ‘The Teeth’

Step 1 – Science – Living Things



Rang a 6- Investigating the effects of Coke on Bones

Investigating the effects on coke(right) and water(left) on bones when they have been left in the liquids for 5 days.



Step 1 – Science – Living Things

Rang a 3 visited Inch Island looking for Birds – SFI Discovery Centre

Step 1 – Science – Living Things

Rang a 3 Bird Watching at Inch Wildfowl Reserve – SFI Discovery Centre

Step 1 – Science – Living Things

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

Rang a 3 visited Ballyare Woods SFI Discovery Centre

Step 1 – Science – Living Things

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

Rang a 3 visited Ballyare Woods

Step 1 – Science – Living Things

STEM Log Evidence, Scoil Naomh Fiachra
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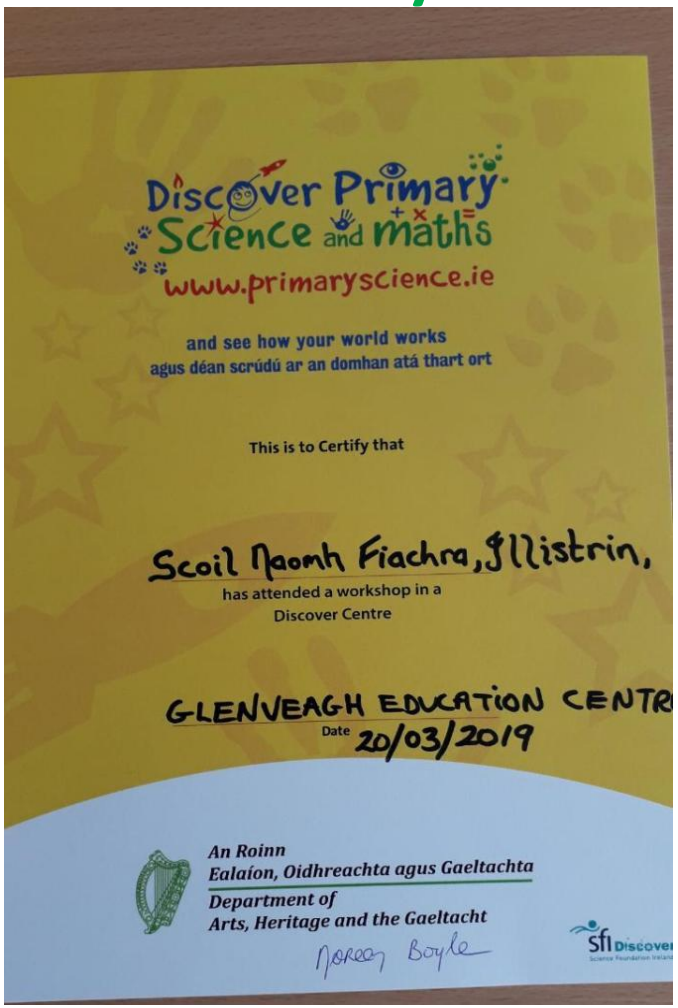
1st & 3rd Glenveagh trip to Glenveagh National Park – SFI Discovery Centre



Materials

Junior Infants - Mixing Materials – Skittles Experiment

Investigating Colours.

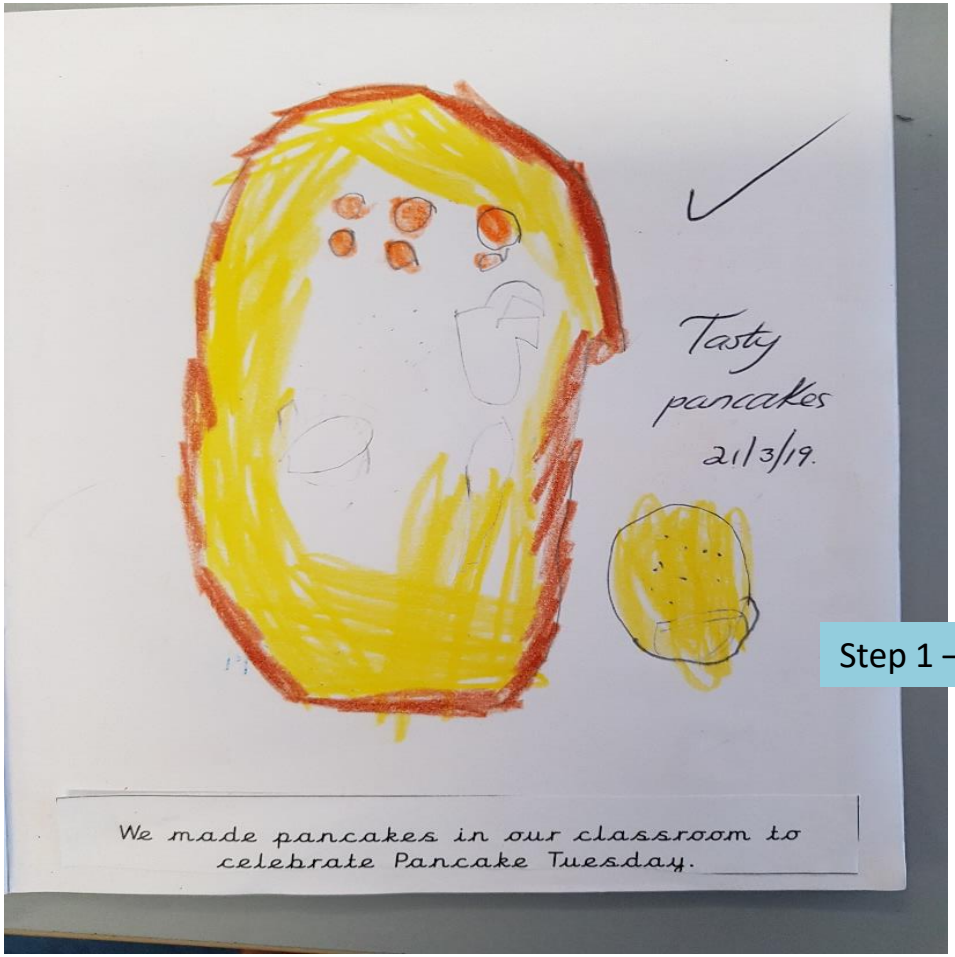
We looked at how all the colours mixed together using skittles and water.?

Step 1 – Science – Materials

Properties and Characteristics of Materials: Dancing Raisins

Step 1 – Science – Materials

Junior Infants - Mixing Materials – Pancakes

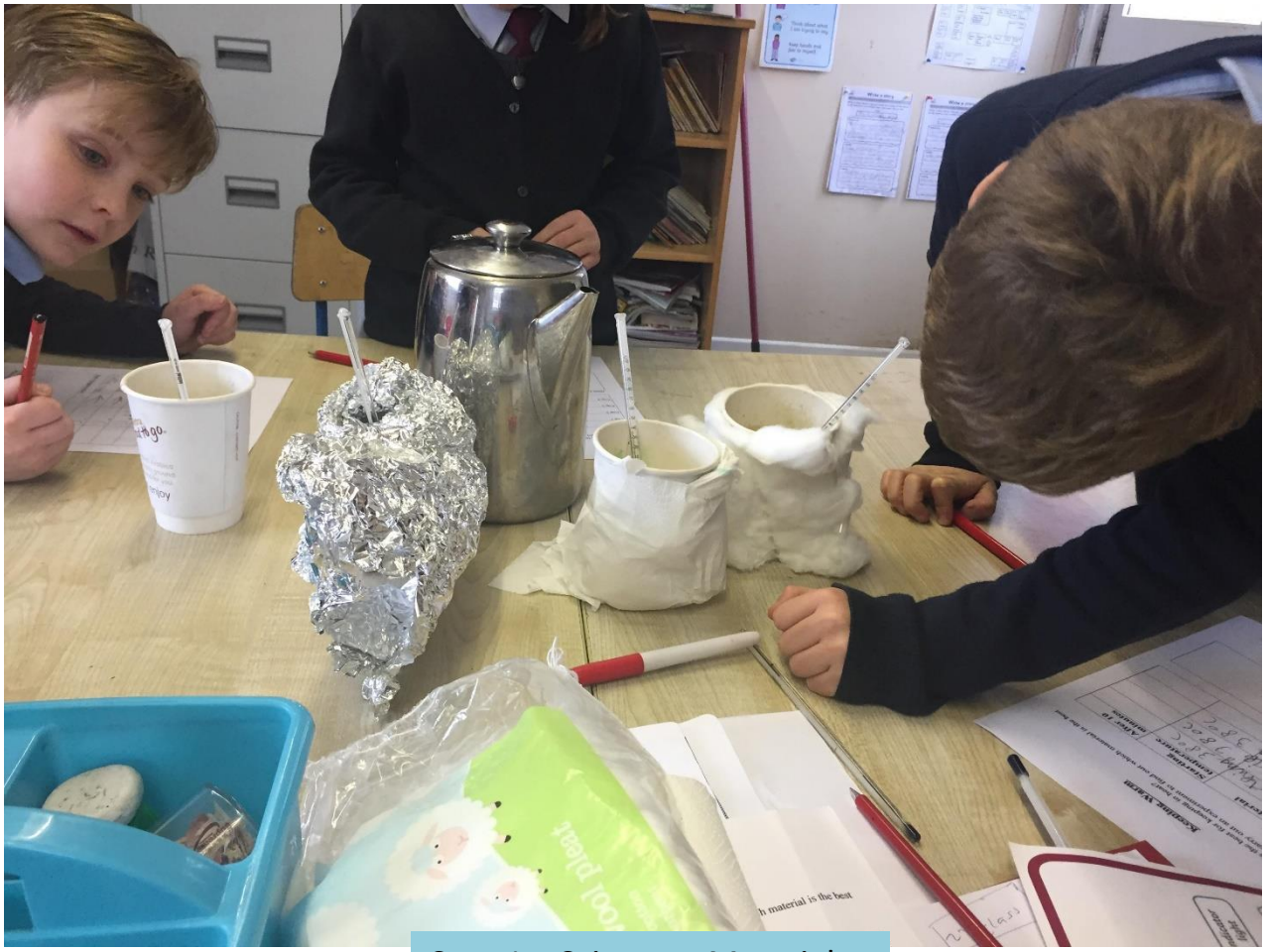


Step 1 – Science – Materials

2nd Class - Magic Milk Experiment

Step 1 – Science – Materials

Rang 2 - Which Material is the Best Insulator



Step 1 – Science – Materials

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Rang 2 Materials and Change
Making Playdough

Step 1 – Science – Materials

Best Materials for Cooking Utensils

- We did a bit of cooking to see which of the these handles on our spoons were best suited for cooking. We put butter on each handle with hot water and tested which handle the butter melted on first. We learned about which materials were the best conductors or insulators.

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

3rd Class – Material changes

- We had some fun in the snow, examining snowballs -at the same time learning about materials changing from solids to liquids to gases.

3rd Class choose a suitable raincoat

3rd Class have been learning all about Materials. We decided to design a suitable raincoat for our Lego men. We had already had gone around our school on a material tour outside. We then invented some crazy items made from unsuitable materials e.g a bed made out of chocolate, a car made out of ice and a bath made from paper.

Rang a 5
Testing if a material is acidic or alkaline

Step 1 – Science – Material

Rang a 5
Testing if a material is acidic or alkaline

Step 1 – Science – Materials

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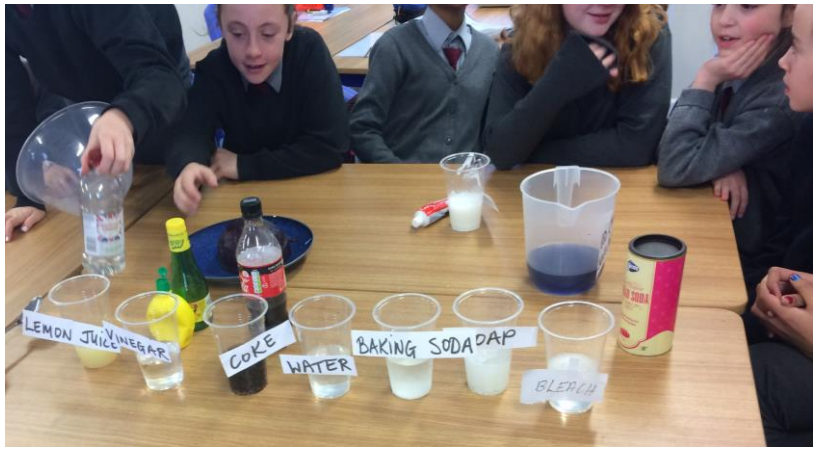
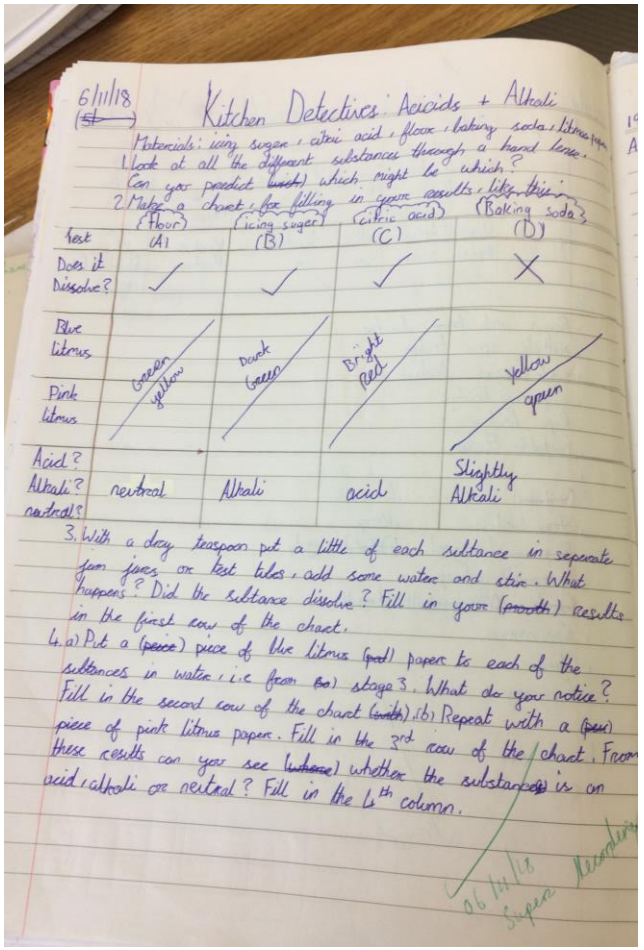
Rang a 5
Testing if a material is acidic or alkaline





6/11/18

Kitchen Detectives: Acicids + Alkali

Materials: icing sugar, citric acid, flour, baking soda, litmus

1. Look at all the different substances through a hand lense. Can you predict which might be which?
2. Make a chart for filling in your results, like this:

Test	(A) Flour	(B) Icing sugar	(C) Citric acid	(D) Baking soda
Does it Dissolve?	✓	✓	✓	X
Blue litmus	Green yellow	Dark Green	Bright Red	Yellow
Pink litmus				Green
Acid? Alkali? neutral?	neutral	Alkali	acid	Slightly Alkali

3. With a dry teaspoon put a little of each substance in separate jam jars or test tubes, add some water and stir. What happens? Did the substance dissolve? Fill in your (~~smooth~~) results in the first row of the chart.
4. a) Put a (~~piece~~) piece of blue litmus (~~pad~~) paper to each of the substances in water, i.e from (~~to~~) stage 3. What do you notice? Fill in the second row of the chart (~~with~~). (b) Repeat with a (~~new~~) piece of pink litmus paper. Fill in the 3rd row of the chart. From these results can you see (~~whether~~) whether the substances is an acid, alkali or neutral? Fill in the 4th column.

06/11/18 Super Recording

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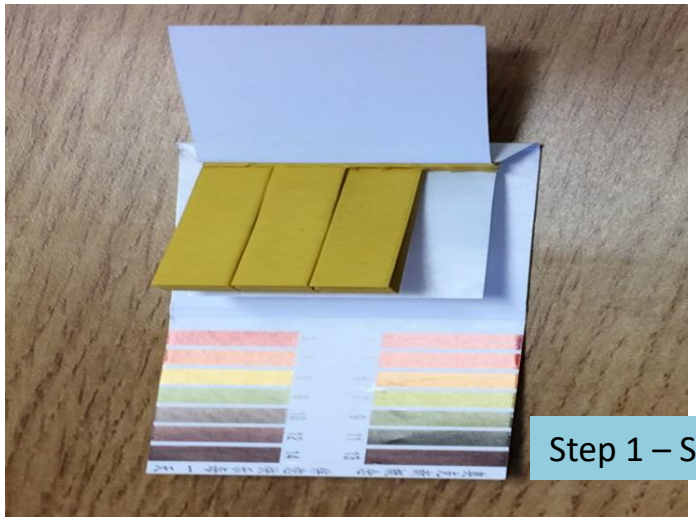
Step 1 – Science – Materials

Rang a 5
Testing if a material is acidic or alkaline

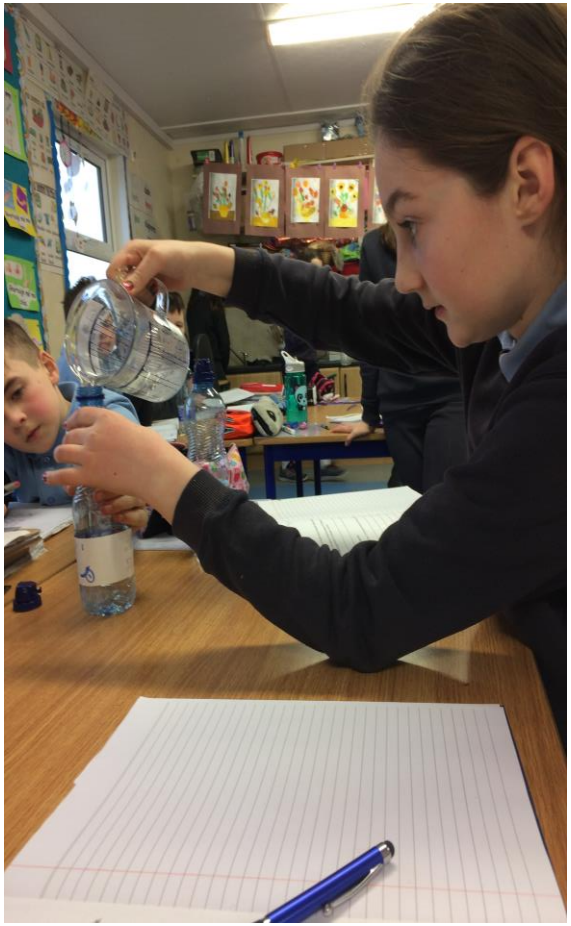
Step 1 – Science – Materials

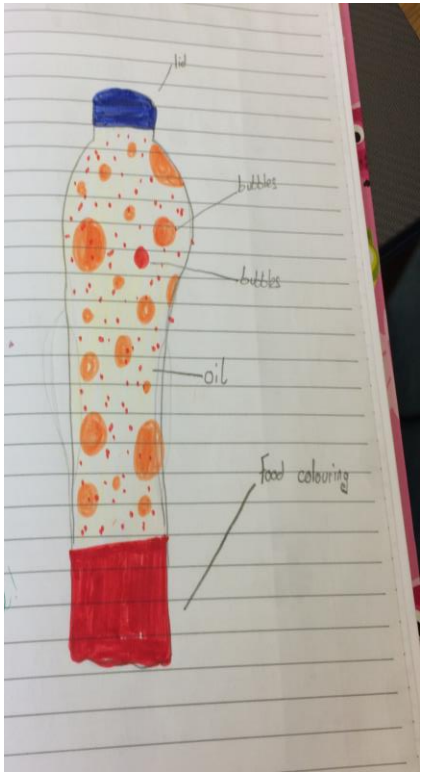
Rang a 5 explored the PH of different materials using litmus paper



Step 1 – Science – Materials

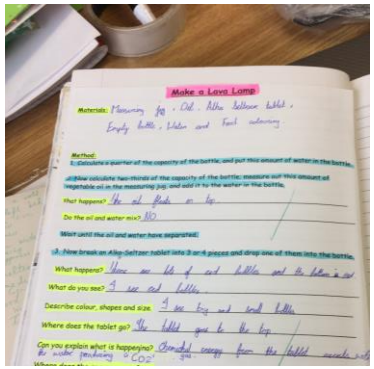
Rang 5 Making a Lava Lamp

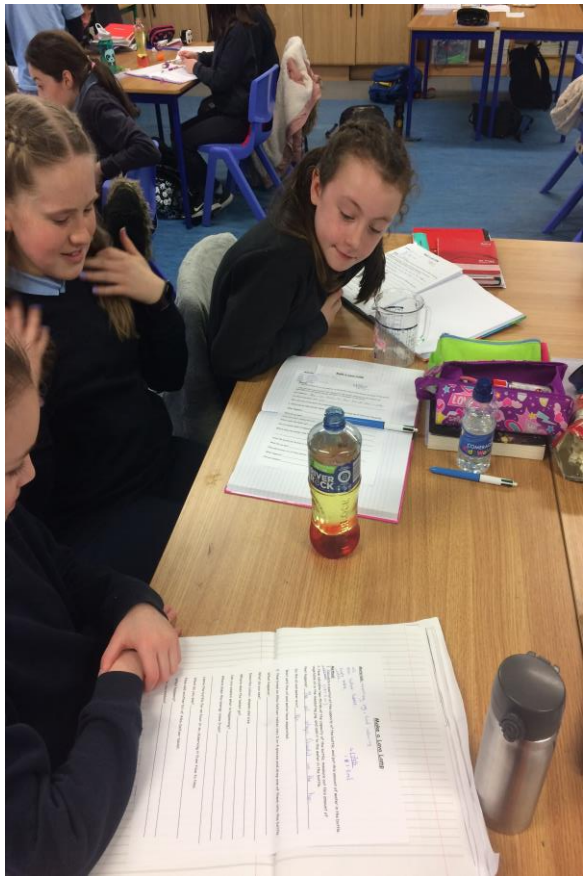




Step 1 – Science – Materials

Rang a 5 - Make a Lava Lamp





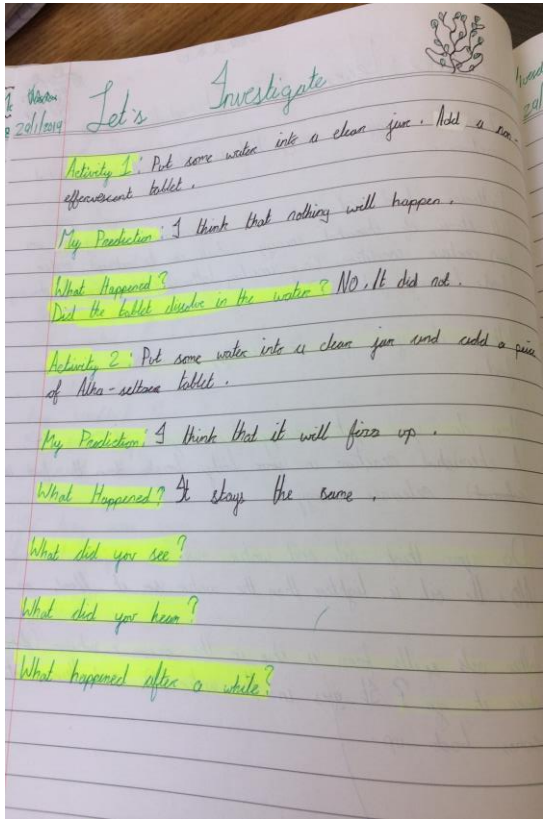
Mr Gallagher's 5th Class
Chemical Reactions

Step 1 – Science – Materials

Mr Gallagher's 5th Class
Chemical Reactions

Step 1 – Science – Materials

Rang a 5 - Make a Lava Lamp


Let's Investigate

Activity 1: Put some water into a clean jar. Add a piece of effervescent tablet.

My Prediction: I think that nothing will happen.

What Happened?
Did the tablet dissolve in the water? NO, It did not.

Activity 2: Put some water into a clean jar and add a piece of Alka-seltzer tablet.

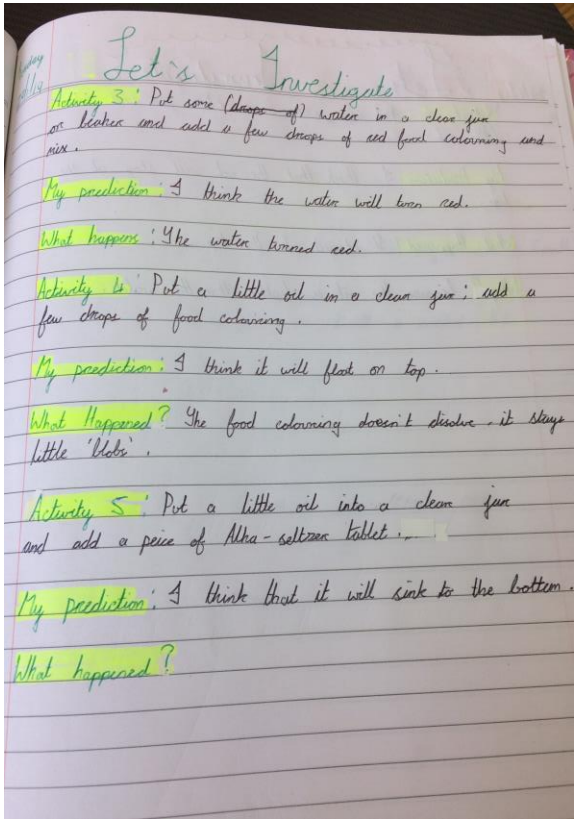
My Prediction: I think that it will fizz up.

What Happened? It stays the same.

What did you see?

What did you hear?

What happened after a while?


Let's Investigate

Activity 3: Put some (drops of) water in a clear jar or beaker and add a few drops of red food colouring and mix.

My prediction: I think the water will turn red.

What happens: The water turned red.

Activity 4: Put a little oil in a clean jar; add a few drops of food colouring.

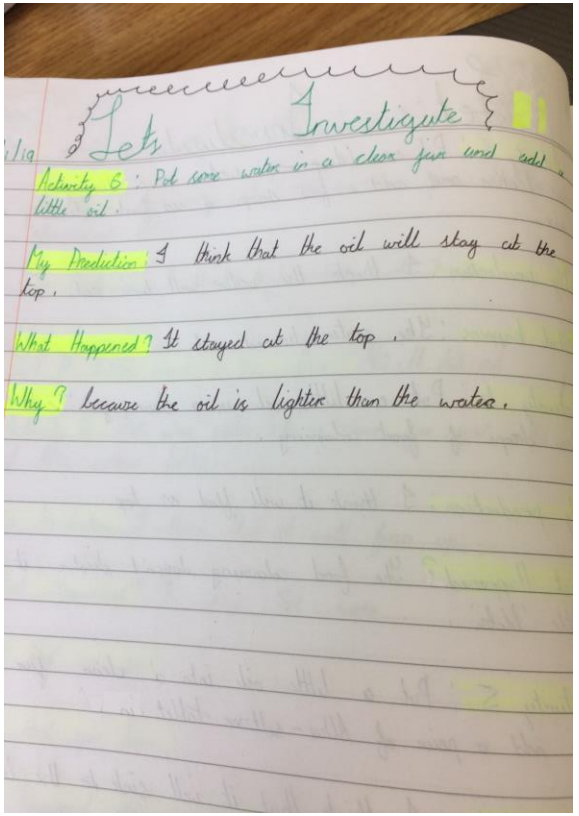
My prediction: I think it will float on top.

What Happened? The food colouring doesn't dissolve - it stays little 'blobs'.

Activity 5: Put a little oil into a clean jar and add a peice of Alka-seltzer tablet.

My prediction: I think that it will sink to the bottom.

What happened?


Let's Investigate

Activity 6: Put some water in a clean jar and add a little oil.

My Prediction: I think that the oil will stay at the top.

What Happened? It stayed at the top.

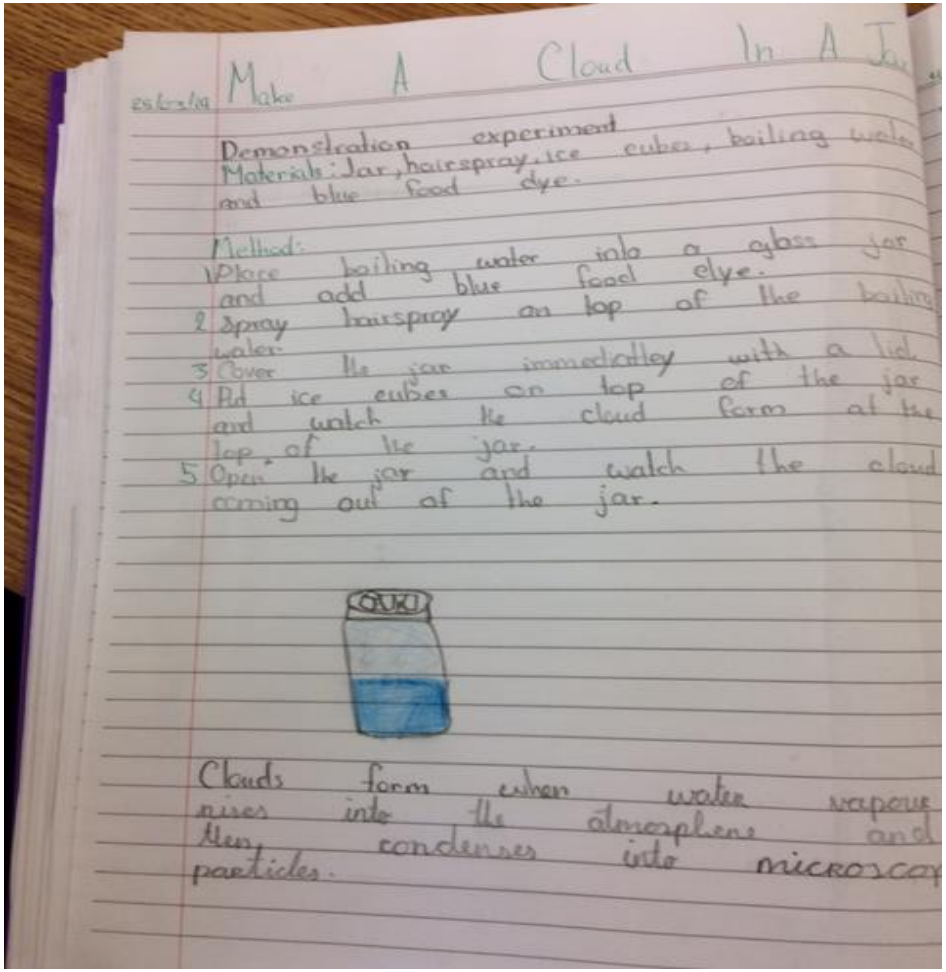
Why? Because the oil is lighter than the water.

Step 1 – Science – Materials

Mr Gallagher's 5th Class
Making a Cloud

Step 1 – Science – Materials

5th Class - Cloud in a jar



Make A Cloud In A Jar

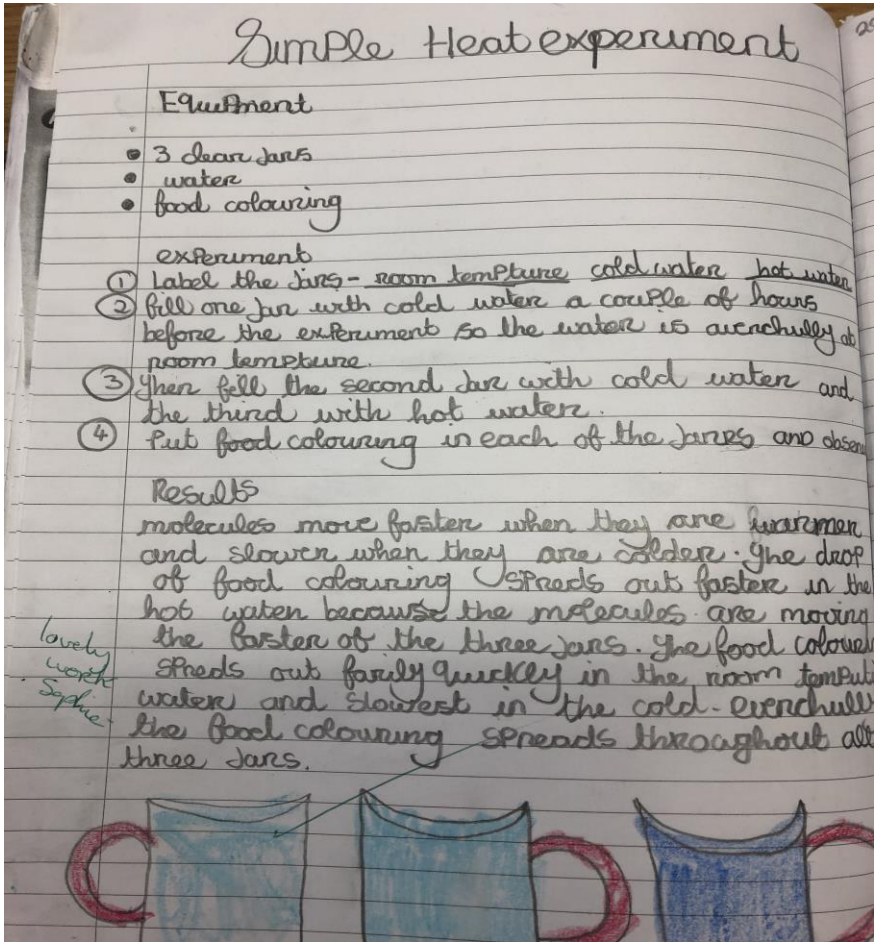
Demonstration experiment
Materials: Jar, hairspray, ice cubes, boiling water and blue food dye.

Method:
1 Place boiling water into a glass jar and add blue food dye.
2 Spray hairspray on top of the boiling water.
3 Cover the jar immediatley with a lid.
4 Put ice cubes on top of the jar and watch the cloud form at the top of the jar.
5 Open the jar and watch the cloud coming out of the jar.

Clouds form when water vapour rises into the atmosphere and then condenses into microscop particles.

Energy and Forces

Rang 3 Investigating Heat



Simple Heat experiment

Equipment

- 3 clear jars
- water
- food colouring

experiment

1. Label the jars - room temperature, cold water, hot water
2. Fill one jar with cold water a couple of hours before the experiment so the water is overchully at room temperature.
3. Then fill the second jar with cold water and the third with hot water.
4. Put food colouring in each of the jars and observe

Results

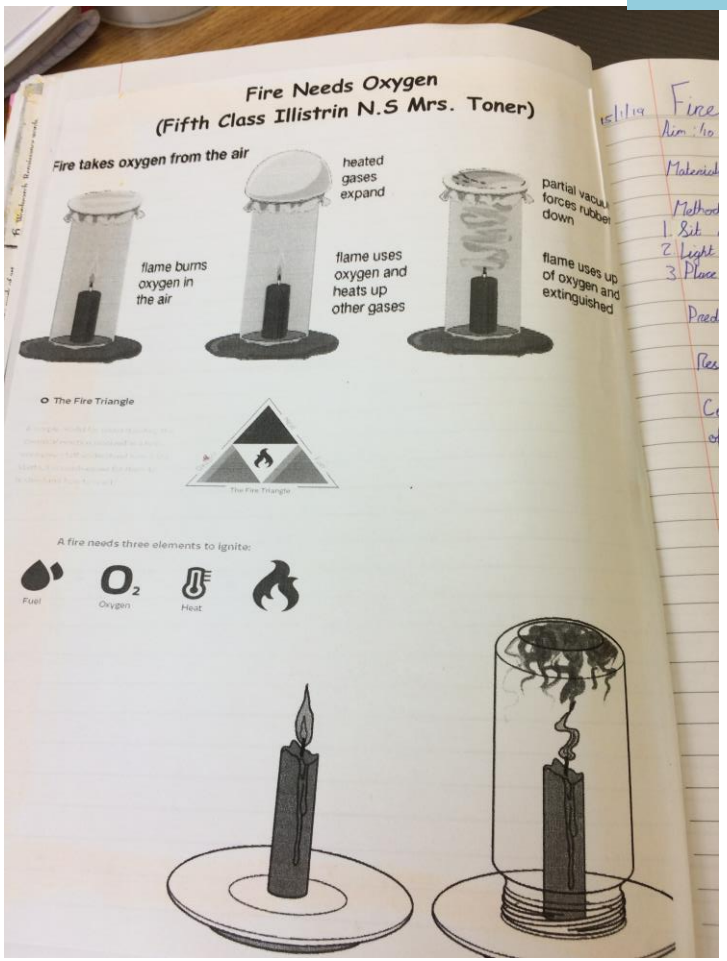
molecules move faster when they are warmer and slower when they are colder. The drop of food colouring spreads out faster in the hot water because the molecules are moving the faster of the three jars. The food colour spreads out fairly quickly in the room temp water and slowest in the cold. Overchully the food colouring spreads throughout all three jars.

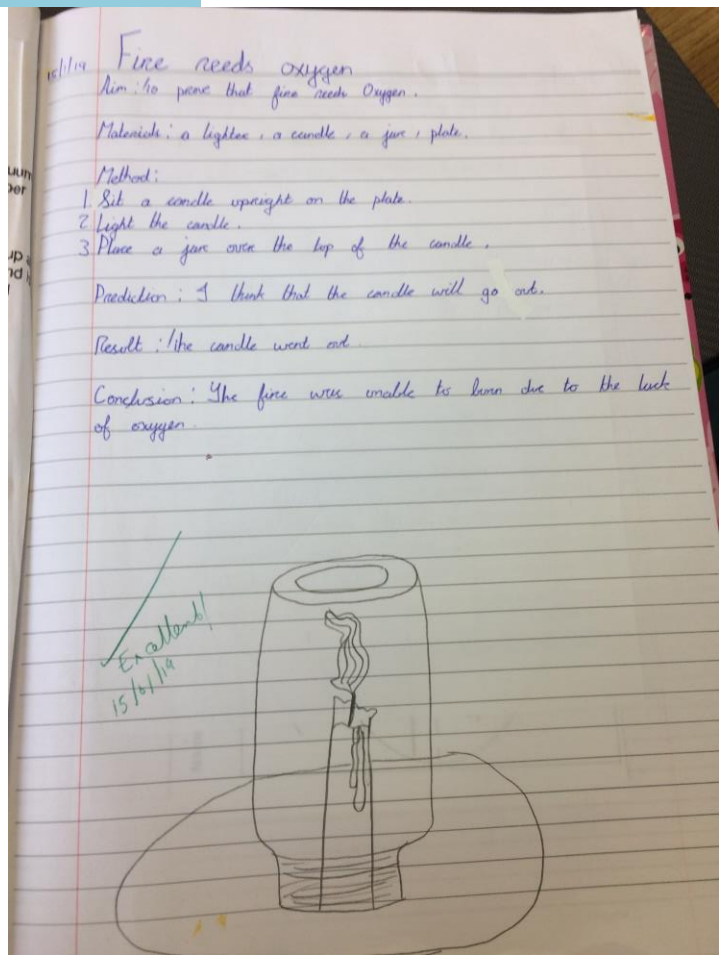
lovely work Sophie

Step 1 – Science – Materials

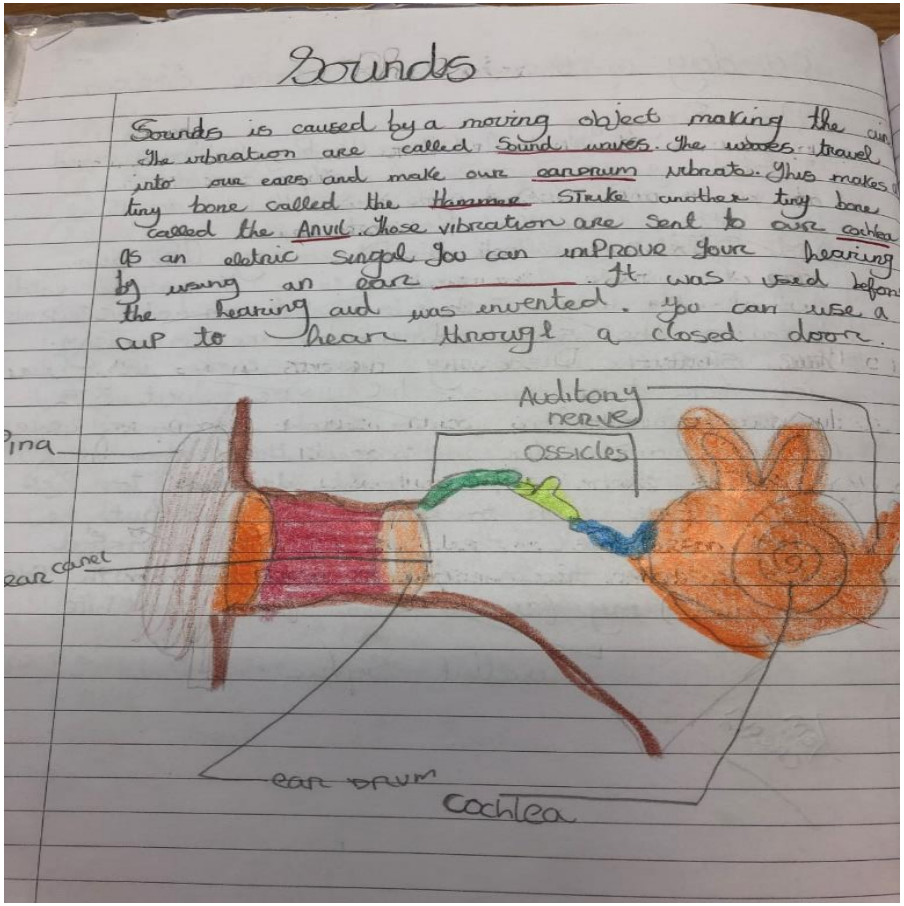
5th Class - Heat

Step 1 – Science – Materials





Rang 4 - Strange Sounds

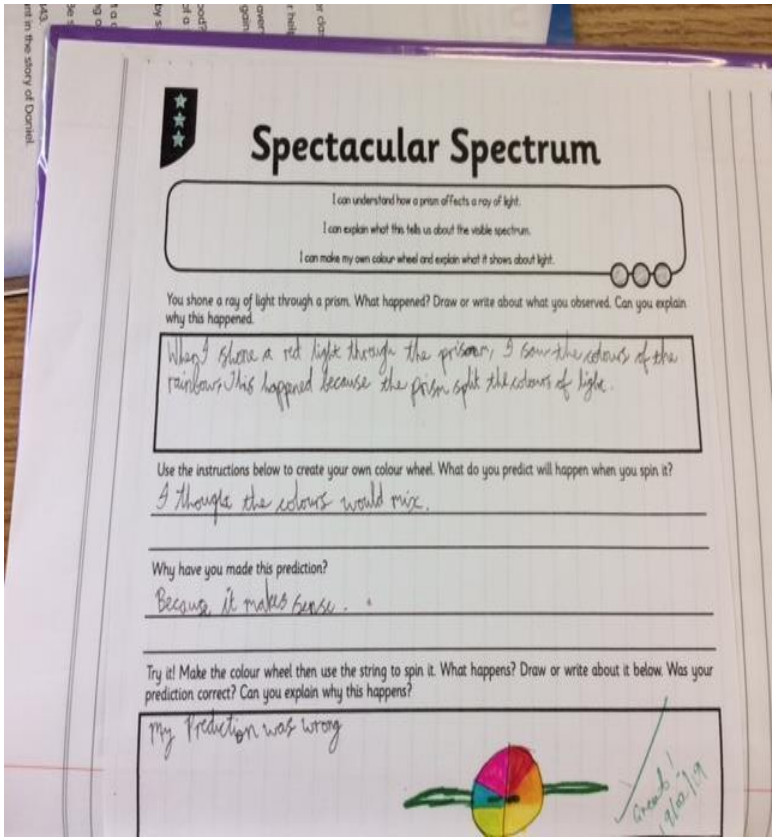


Feeling sound by putting your hand on your throat.

Step 1 – Science – sound

Sound travelling through the desk

Spectacular Spectrum
Exploring the splitting of light using Prisms



Spectacular Spectrum

I can understand how a prism affects a ray of light.
I can explain what this tells us about the visible spectrum.
I can make my own colour wheel and explain what it shows about light.

You shone a ray of light through a prism. What happened? Draw or write about what you observed. Can you explain why this happened.

When I shone a red light through the prism, I saw the colours of the rainbow. This happened because the prism split the colours of light.

Use the instructions below to create your own colour wheel. What do you predict will happen when you spin it?

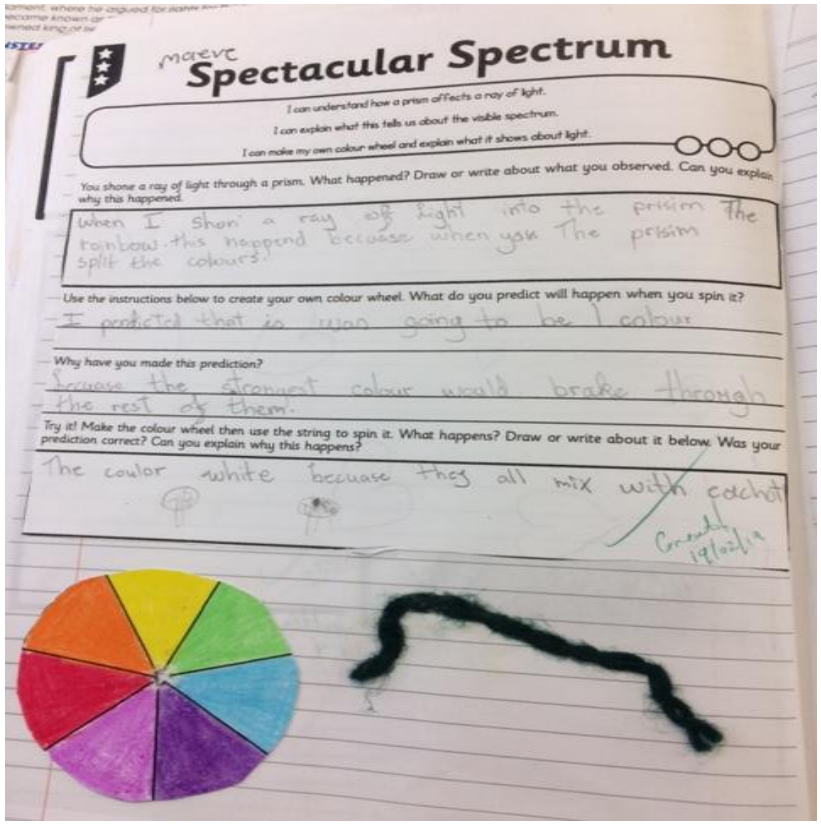
I thought the colours would mix.

Why have you made this prediction?

Because, it makes sense.

Try it! Make the colour wheel then use the string to spin it. What happens? Draw or write about it below. Was your prediction correct? Can you explain why this happens?

My prediction was wrong



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Spectacular Spectrum

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When I shon a ray of light into the prism the rainbow this happend because when you The prism split the colours.

Use the instructions below to create your own colour wheel. What do you predict will happen when you spin it?

I predicted that it was going to be 1 colour

Why have you made this prediction?

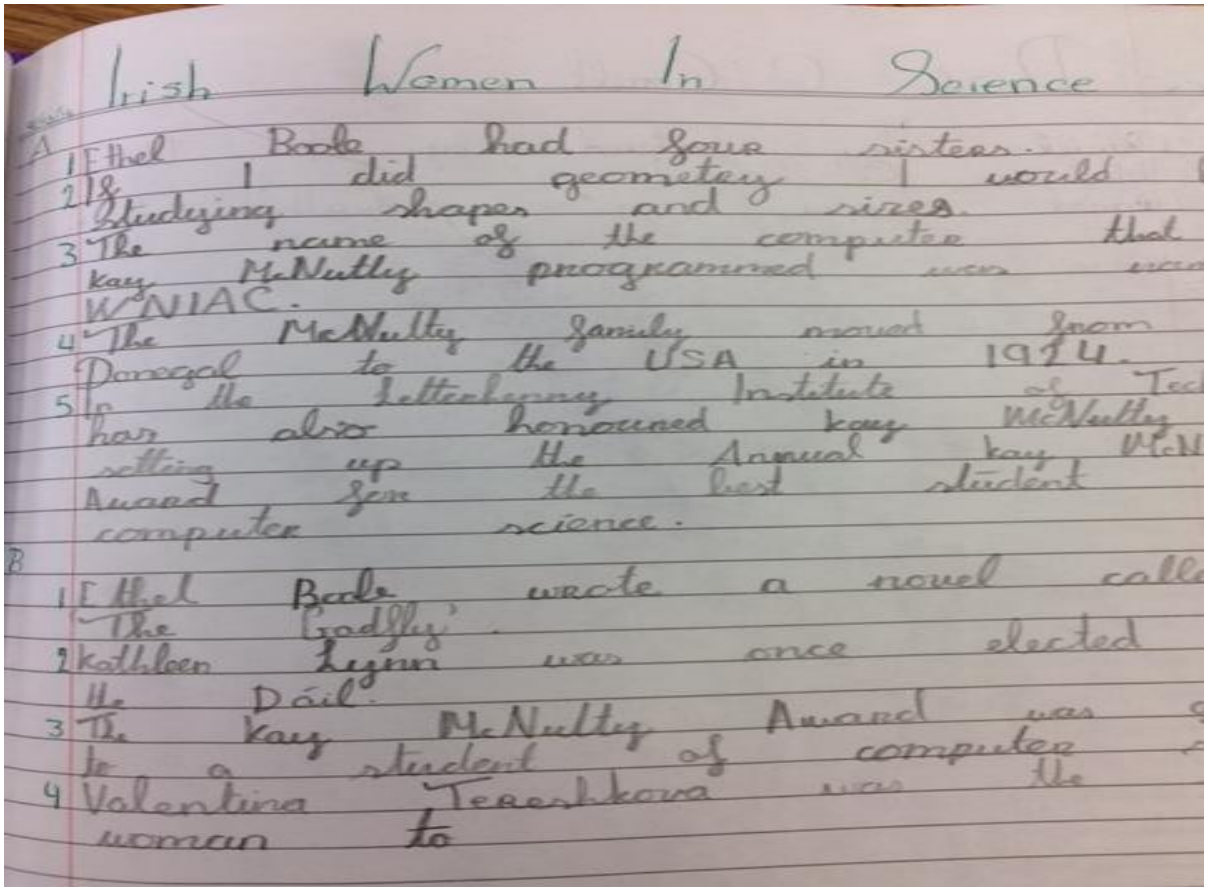
because the strongest colour would brake through the rest of them.

Try it! Make the colour wheel then use the string to spin it. What happens? Draw or write about it below. Was your prediction correct? Can you explain why this happens?

The cowlor white because they all mix with eachot

Step 1 – Science – Energy and Forces

Spectacular Spectrum



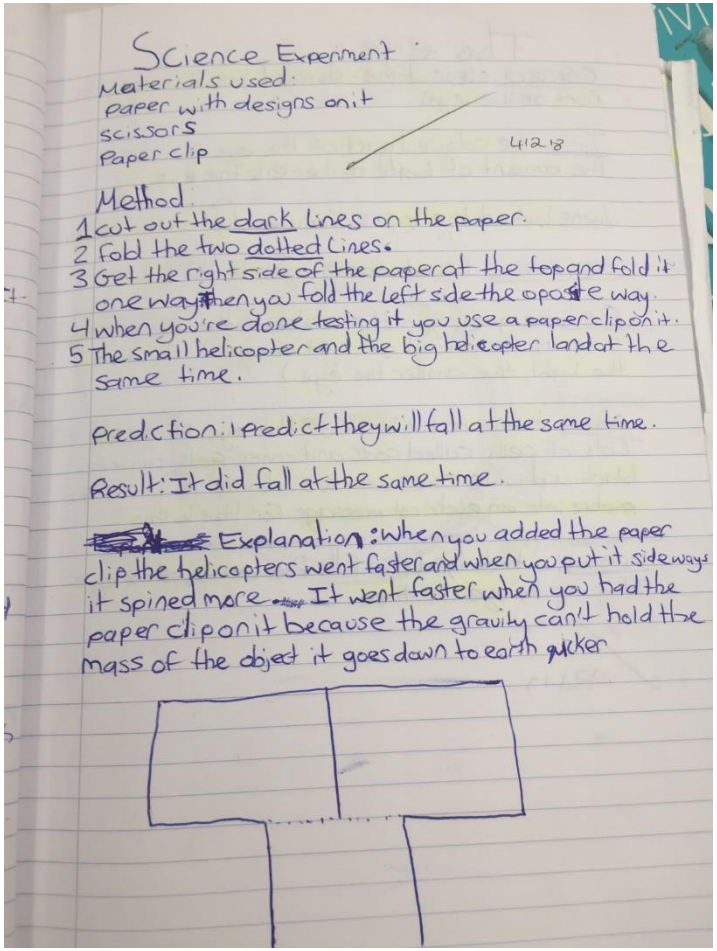
Irish Women In Science

A
1 Ethel Boole had four sisters.
2 If I did geometry I would
Studying shapes and sizes.
3 The name of the computer that
Kay McNulty programmed was
WANIAC.
4 The McNulty family moved from
Donegal to the USA in 1914.
5 The Letterkenny Institute of Tec
has also honoured Kay McNulty
setting up the Annual Kay McN
Award for the best student
computer science.

B
1 Ethel Boole wrote a novel call
The Godfly.
2 Kathleen Lynn was once elected
the Dáil.
3 The Kay McNulty Award was
for a student of computer
4 Valentina Tereshkova was the
woman to

Step 1 – Science – Energy and Forces

Forces – Rang a 4
Paper Helicopters



Science Experiment

Materials used:
paper with designs on it
scissors
Paper clip

4128

Method
1 cut out the dark lines on the paper.
2 fold the two dotted lines.
3 Get the right side of the paper at the top and fold it one way then you fold the left side the opposite way.
4 when you're done testing it you use a paperclip on it.
5 The small helicopter and the big helicopter land at the same time.

Prediction: I predict they will fall at the same time.

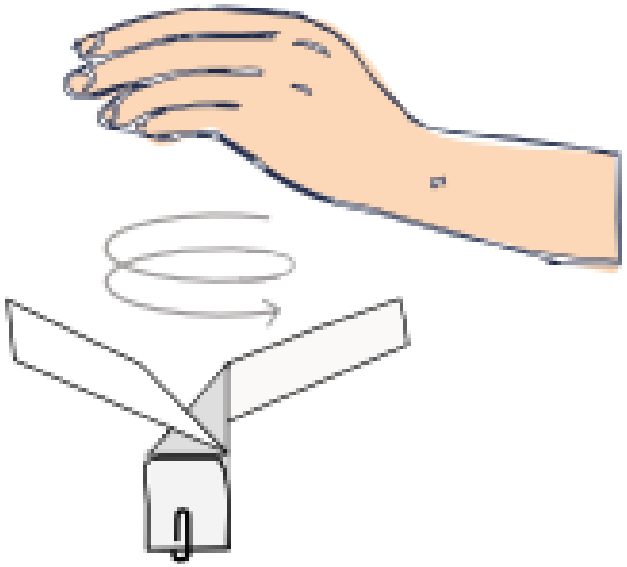
Result: It did fall at the same time.

Explanation: when you added the paper clip the helicopters went faster and when you put it sideways it spined more. It went faster when you had the paper clip on it because the gravity can't hold the mass of the object it goes down to earth quicker

Does adding weight by attaching a paperclip have any effect on how the paper helicopters fall? Yes, they gain momentum as they fall with the added weight.

Step 1 – Science – Energy and Forces

Forces – Rang a 6
Make a Paper Helicopter

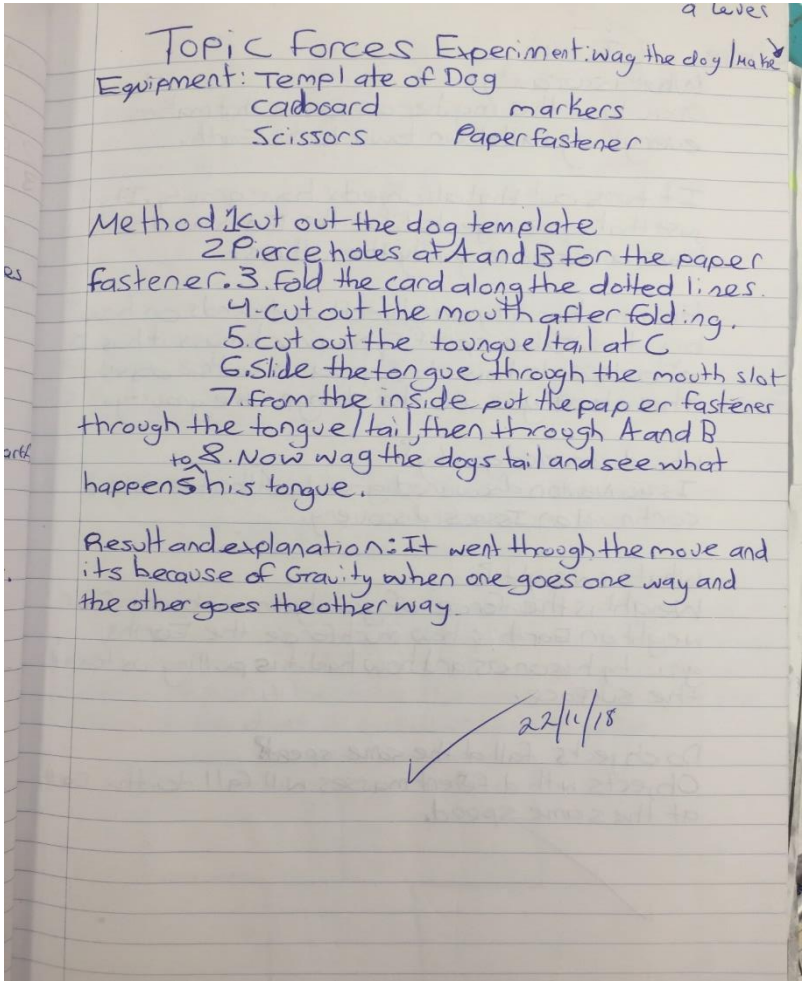


Step 1 – Science – Energy and Forces

Moving Air
Rang a 5 explored how air can make things move

Step 1 – Science – Energy and Forces

Rang a 6 – Forces – Make a Lever
Wag the Dog



Topic Forces Experiment: wag the dog / make a lever

Equipment: Template of Dog
cardboard markers
Scissors Paper fastener

Method 1. cut out the dog template
2. Pierce holes at A and B for the paper fastener. 3. fold the card along the dotted lines.
4. cut out the mouth after folding.
5. cut out the tounge/tail at C
6. Slide the tongue through the mouth slot
7. from the inside put the paper fastener through the tongue/tail, then through A and B
to 8. Now wag the dogs tail and see what happens his tongue.

Result and explanation: It went through the move and its because of Gravity when one goes one way and the other goes the other way.

22/11/18

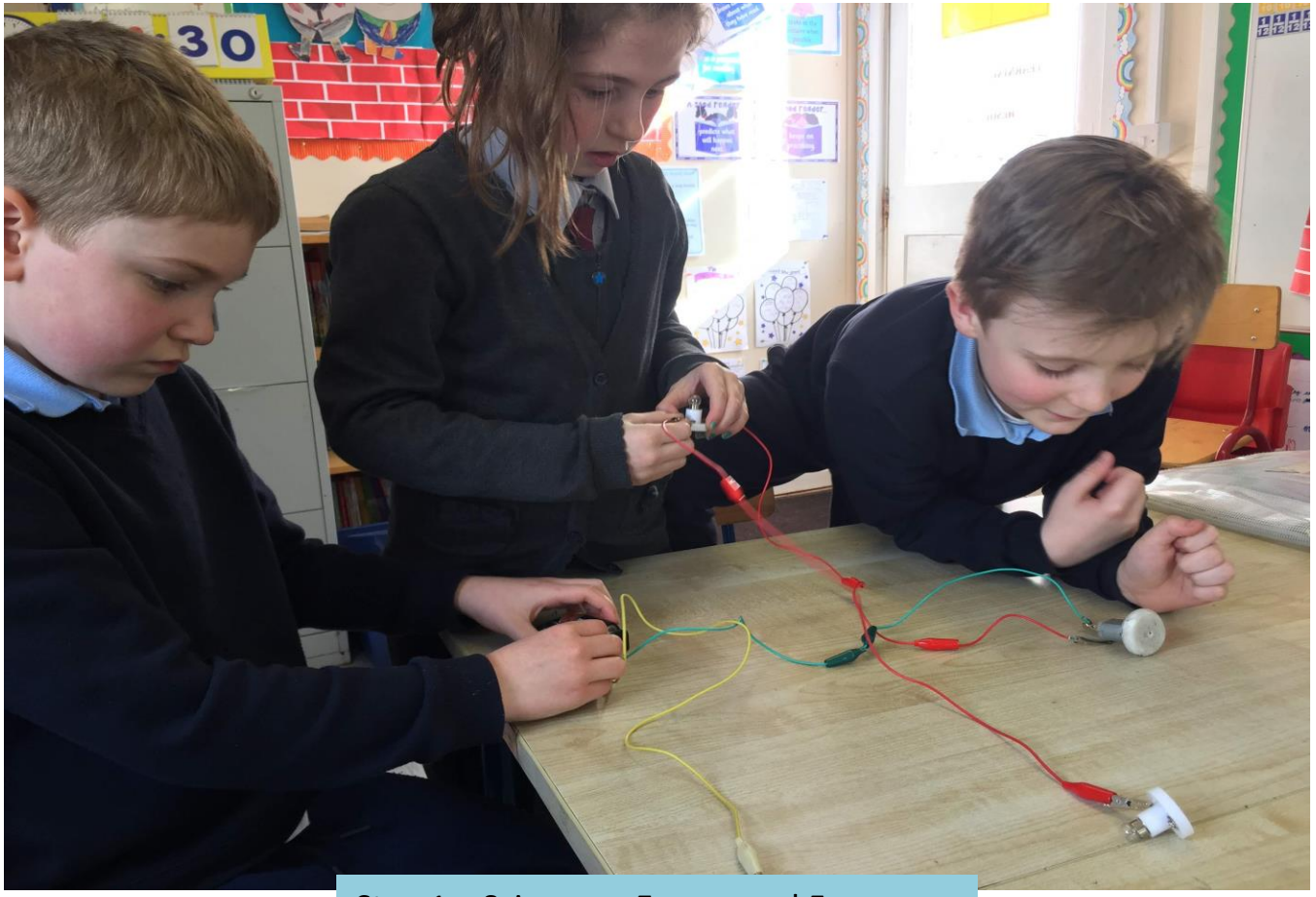
Step 1 – Science – Energy and Forces

1st Class Investigations with Magnets

Step 1 – Science – Energy and Forces: Magnetism & Electricity

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

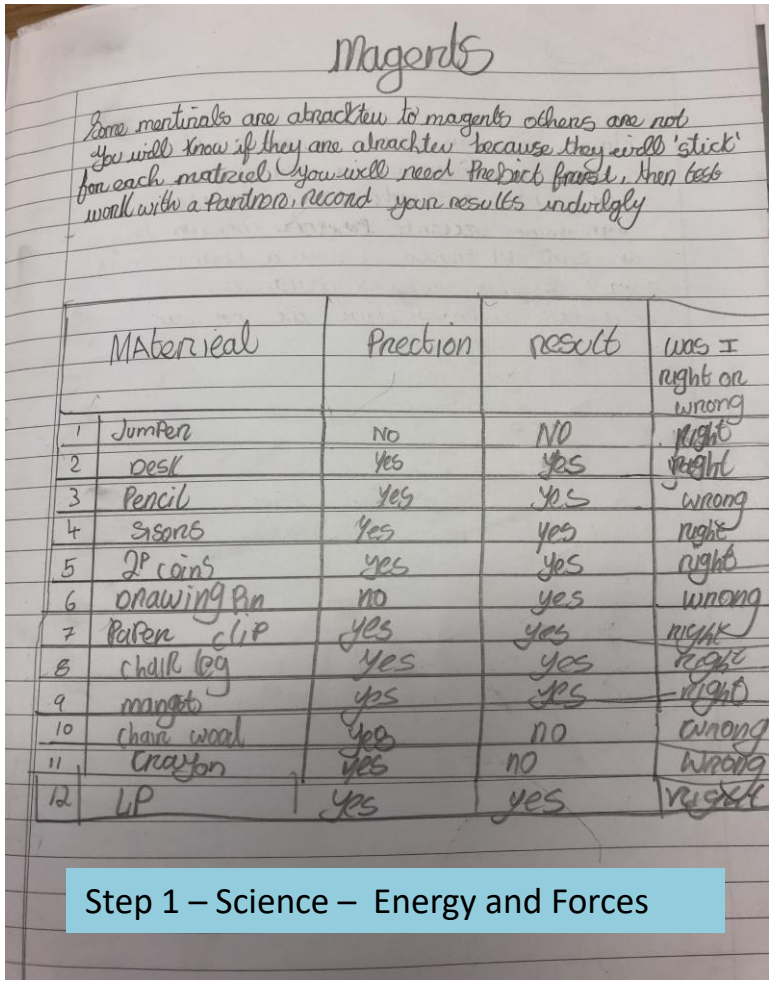
Rang 2 Circuits



Step 1 – Science – Energy and Forces

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

Rang 3 Magnets



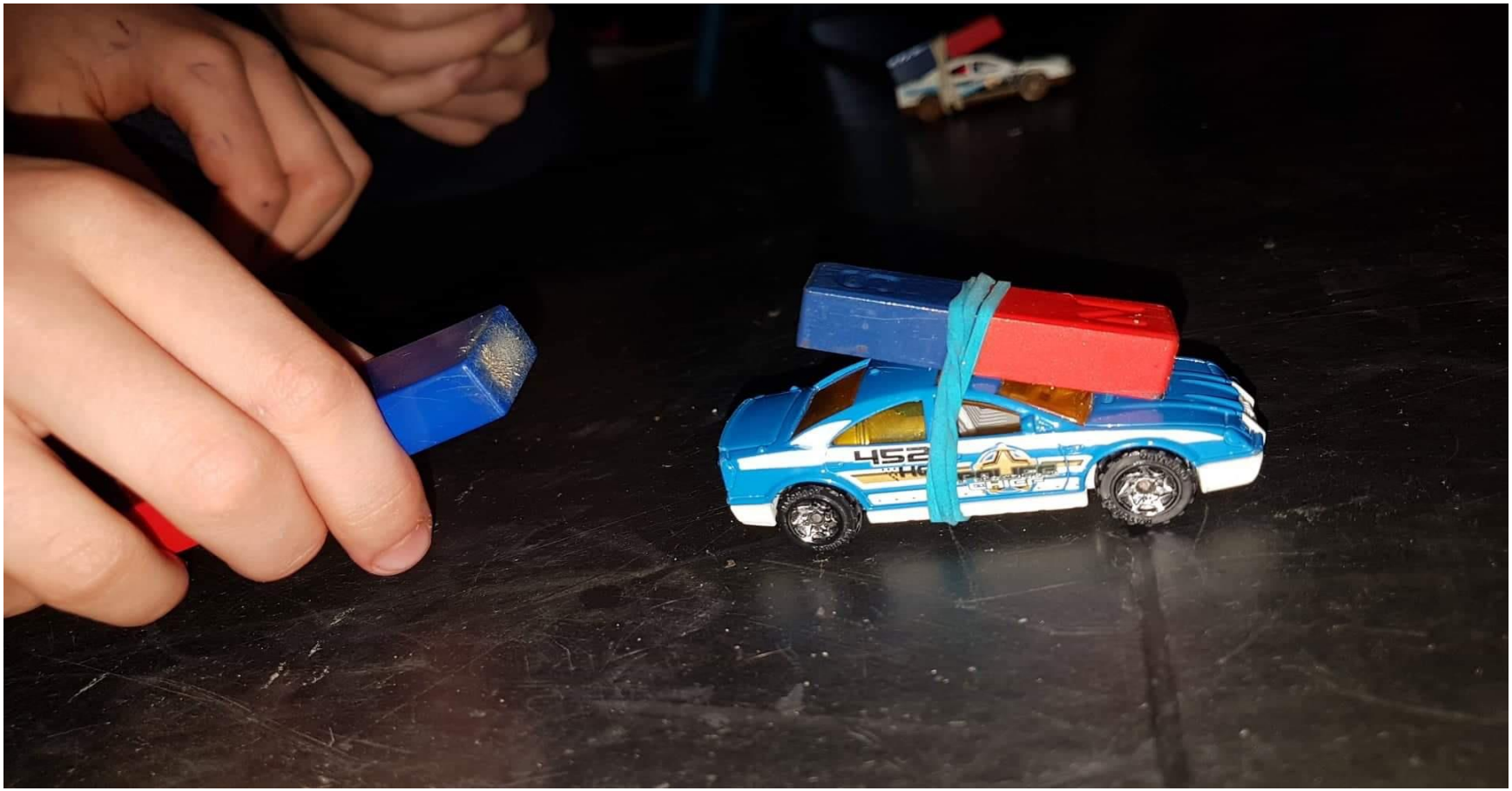
Magents

Some mentinals are abracktew to magents othens are not
You will know if they are abracktew because they will 'stick'
for each matriel you will need Predict first, then test
work with a Partnor, record your results indvidgly

	MAtenieal	Prection	result	was I right on wrong
1	JumPen	NO	NO	right
2	Desk	Yes	Yes	right
3	Pencil	yes	yes	wrong
4	Sisons	Yes	yes	right
5	2P coins	yes	yes	right
6	Onawing Pin	no	yes	wrong
7	Paper clip	yes	yes	right
8	chair leg	yes	yes	right
9	magets	yes	yes	right
10	chaire wood	yes	no	wrong
11	Crayon	yes	no	wrong
12	LP	yes	yes	right

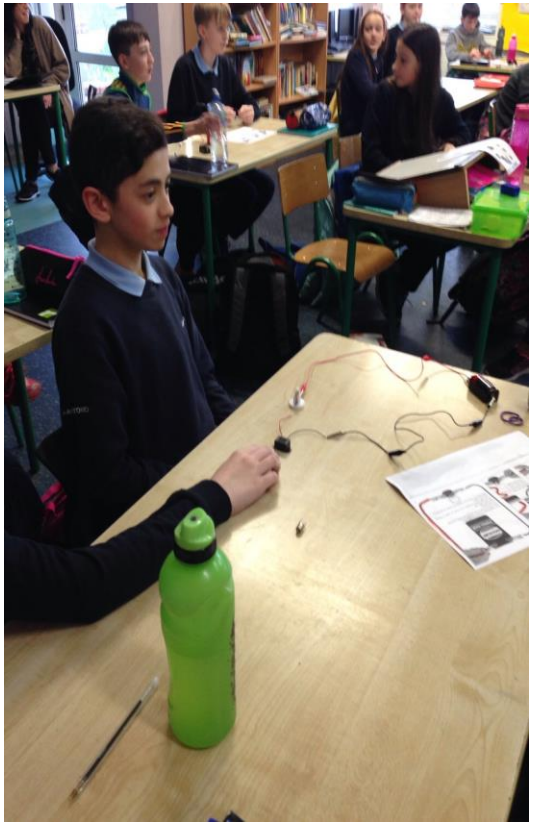
Step 1 – Science – Energy and Forces

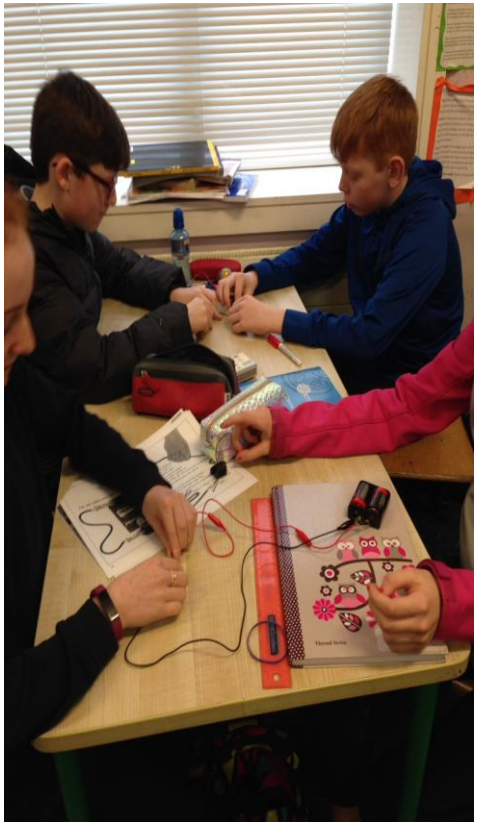
3rd Class - Magnets

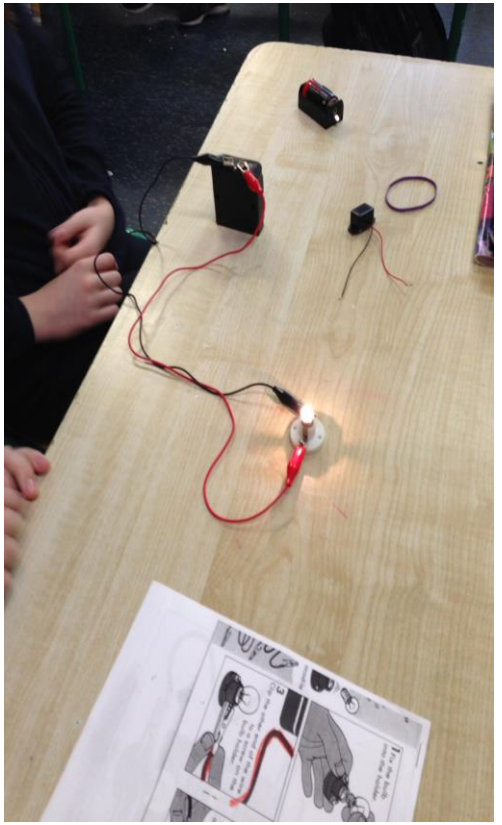


Step 1 – Science – Energy and Forces

Rang a 5 - Magnetism and Electricity

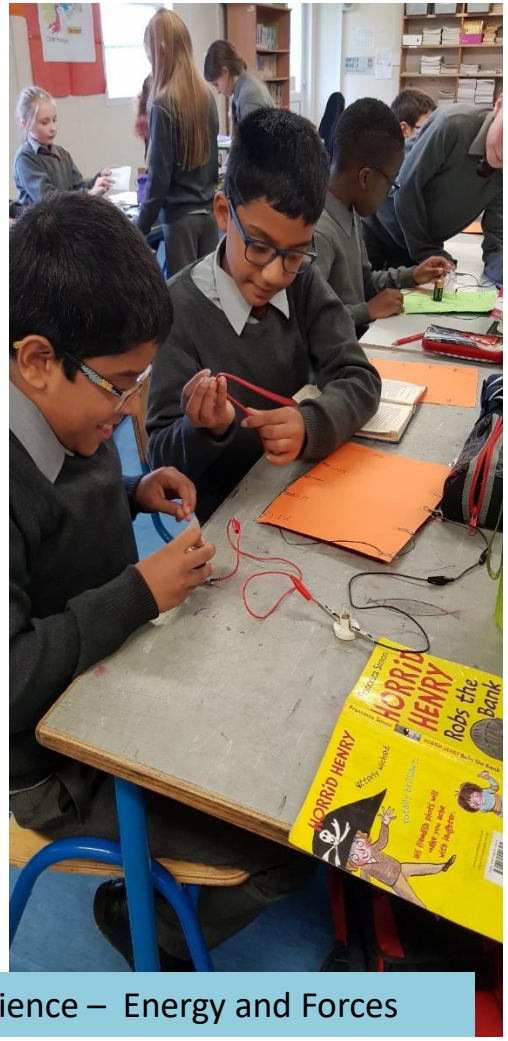






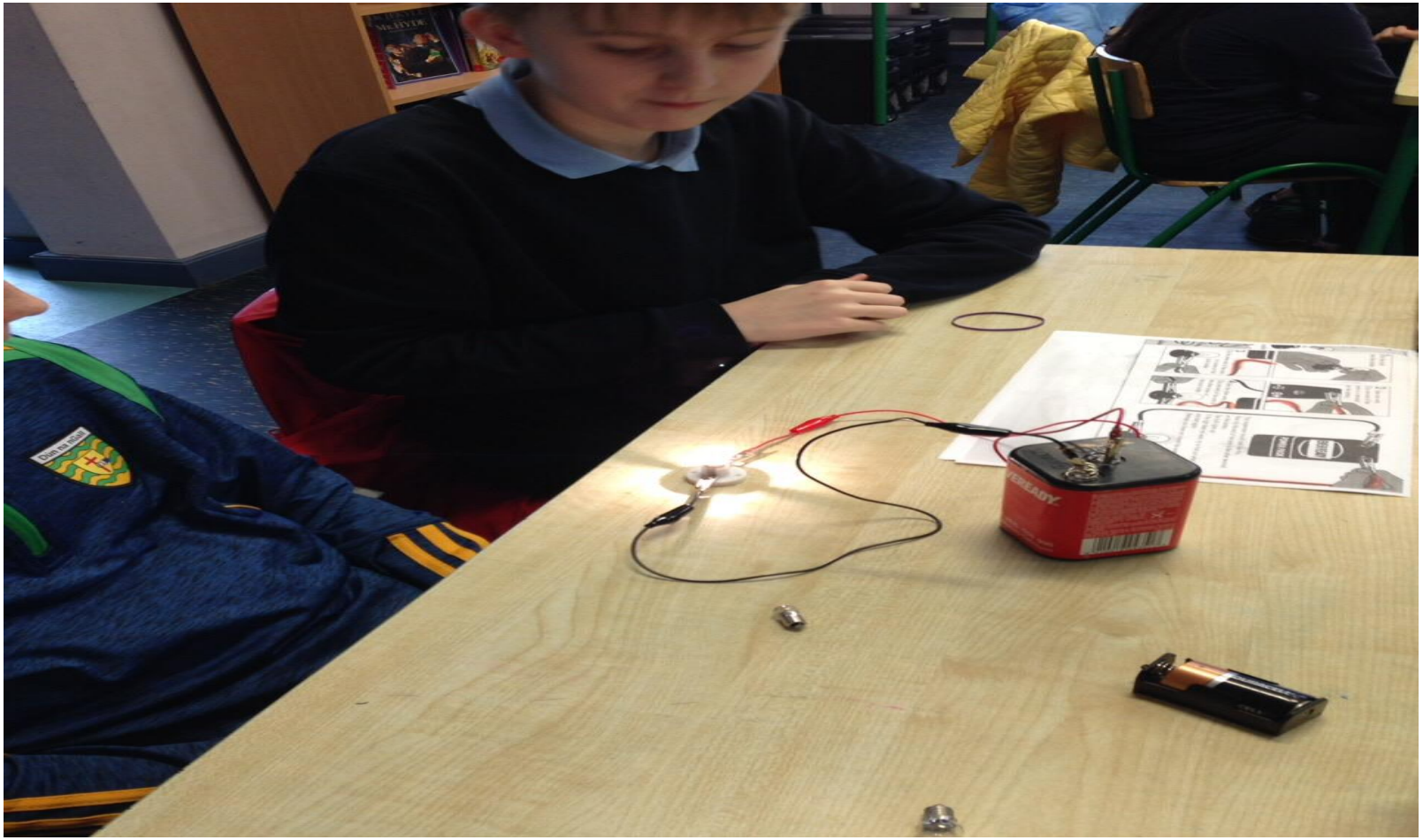
Step 1 – Science – Energy and Forces: Magnetism & Electricity

Rang 4 – Electricity Quiz



Step 1 – Science – Energy and Forces

Rang a 5 - Magnetism and Electricity



Step 1 – Science – Energy and Forces

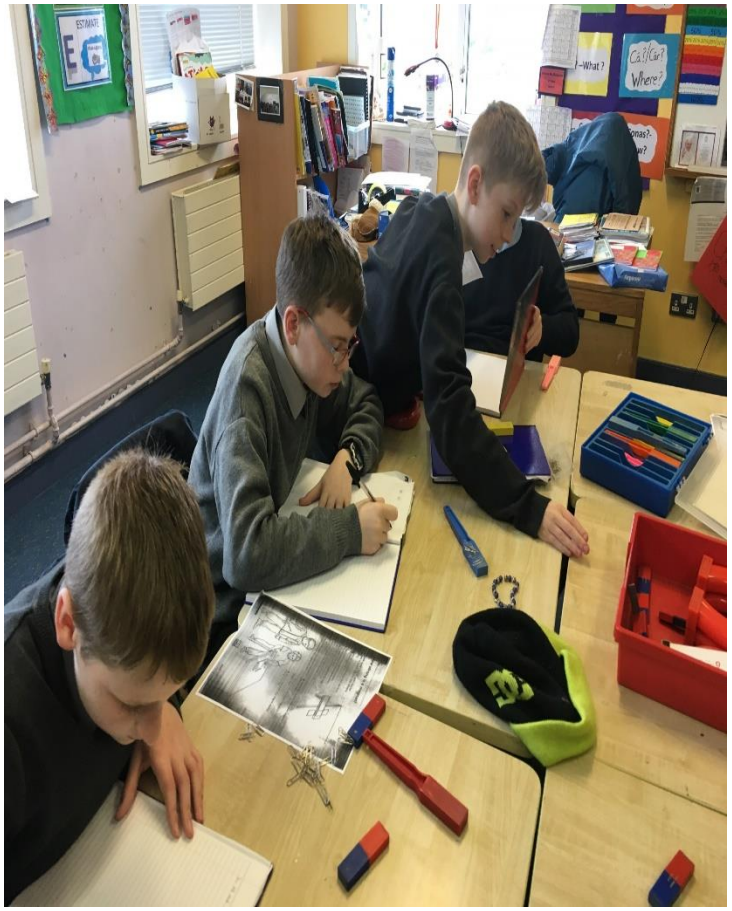
STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

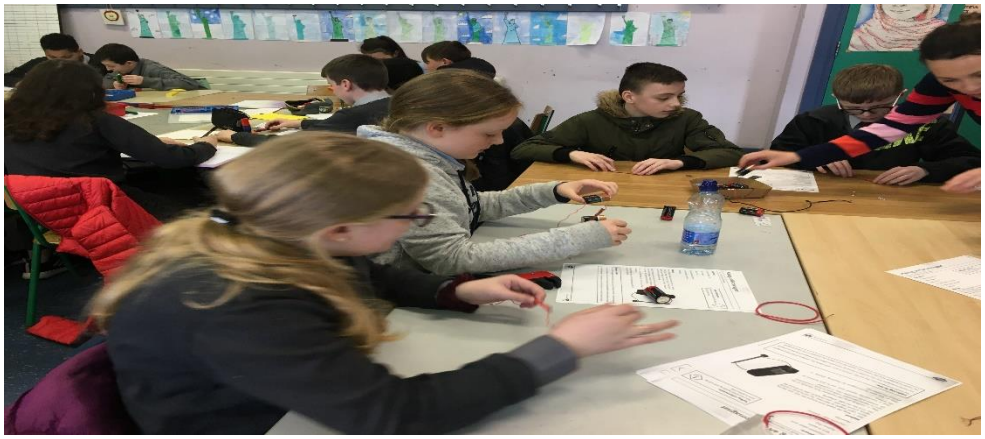
Static Electricity

Step 1 – Science – Energy and Forces

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

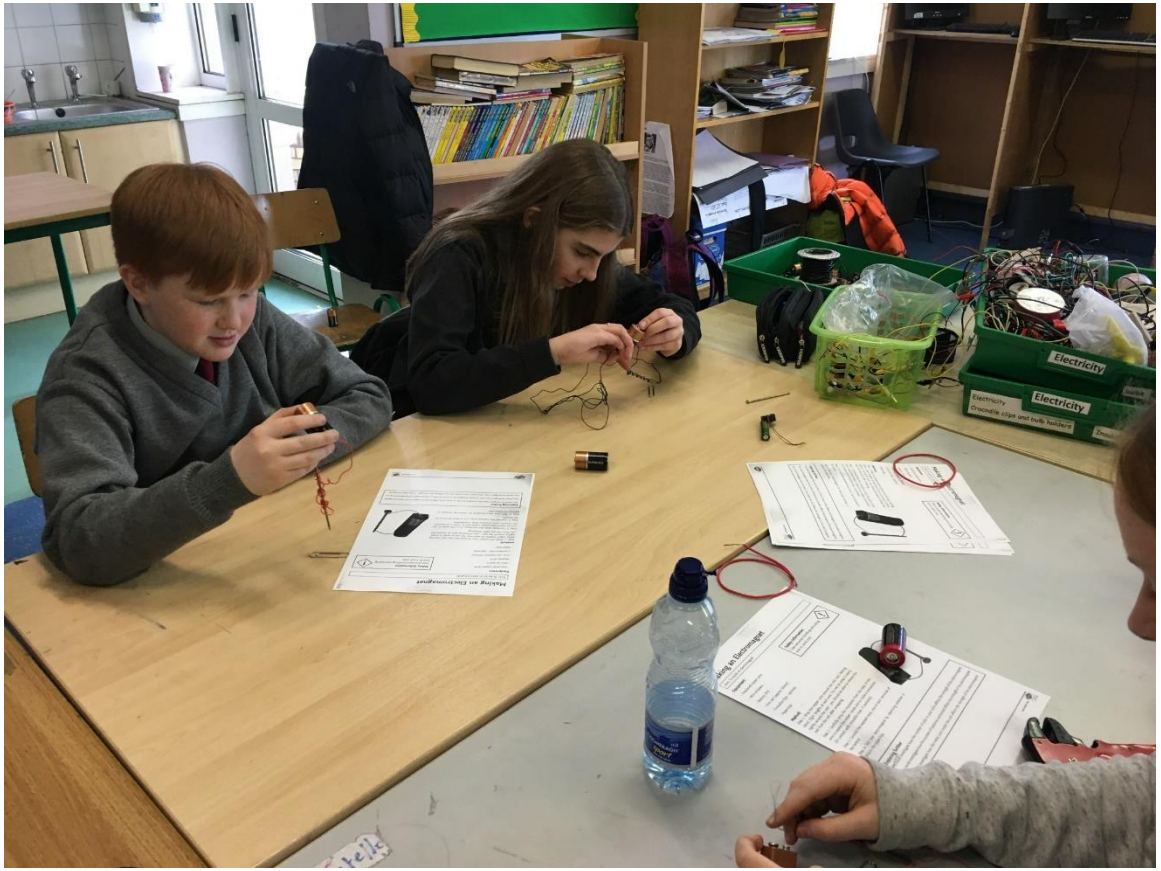
Rang a 6 – Testing the strongest magnet





Step 1 – Science – Energy and Forces: Magnetism & Electricity

Rang a 6 – Making an electromagnet



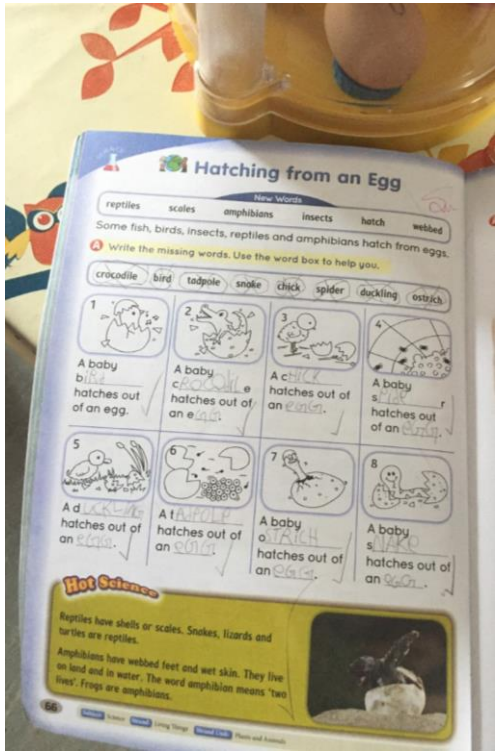
Step 1 – Science – Energy and Forces: Magnetism & Electricity

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

Environmental Awareness and Care

Signs of spring with 1st Class Newborn Chicks

Recently Mr. Maguire incubated hen eggs with his 1st Class.



Step 1 – Science – Environmental awareness and care

Signs of spring
Rang 1 Spring Hunt

Step 1 – Science – Living Things/ Environmental awareness

Observing and developing an awareness of living things in the local environment

Signs of Spring- observing tadpoles in the school pond - 1st Class

Observing and developing an awareness of living things in the local environment

Step 1 – Science –Environmental awareness and care

Looking for bugs at Our Bug Hotel

‘Don’t pick the dandelions as our bee’s need them’

Step 1 – Science – Environmental awareness and care

Rang 5 – Our Garden

Mr Gallagher's 5th class have reflected on the global goals by becoming involved in the incredible edibles project where they have been growing their own vegetables.

By growing your own vegetables, you can cut down on the use of plastic packaging as we found that a lot of fruit and vegetables are packaged in plastic wrapping

Step 1 – Science – Environmental awareness and care

Rang 5 – Our Garden

Step 1 – Science – Environmental awareness and care

5th Class - Garden in a Jar

Step 1 – Science – Environmental awareness and care

Environmental Awareness and Care

Litter Pickers and students caring for our school grounds

Step 1 – Science – Environmental Awareness and Care

Rang 5 Irish Aid Project
Explored the Global Goals
Theme: Leave No One Behind

Step 1 – Science – Environmental awareness and care
Projects on sustainability and the environment

Rang a 5 brought in any recycled material they had save from home over three days

Maths Link: Measuring weight of recycled waste

They were amazed to find that they collected 75 water bottles over 3 days from just 24 households. They calculated that if every class in the school collected this number of bottles over 3 days that it would amount to 1575 bottles in total! Children got through to the Regional Finals of the 'Irish Aid Award.'

Step 1 – Science – Environmental Awareness and Care

FACTS!

Right now an estimated 12.7 million tonnes of plastic enters the worlds oceans each year.

Since the 1950s around 7.53 million tonnes of plastic has been produced worldwide which is the same as 800,000 Eiffel towers

Only 9% of this was recycled!!!!!!!!

1 million plastic bottles are bought every minute!

In Finland 94% of all plastic bottles are recycled

In Kenya anyone to be found producing, selling or even buying plastic bags can face four years imprisonment or fines of up to £31,000.

Step 1 – Science – Environmental awareness and care

We then used the recycled packaging to make a city to display the 'Global Goals' in a display area in our school.

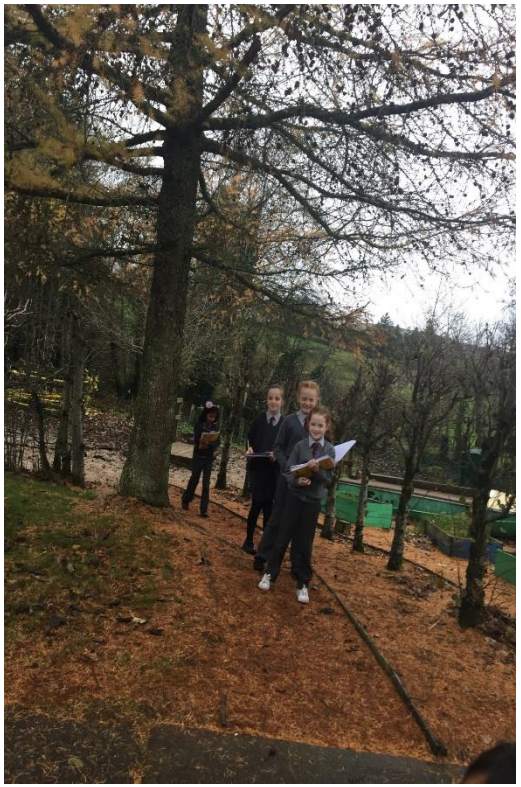
Step 1 – Science – Environmental awareness and care

Finished Model

Step 1 – Science – Environmental awareness and care

3rd Class Trees

Exploring ways to Protect, Conserve & Enhance the Environment

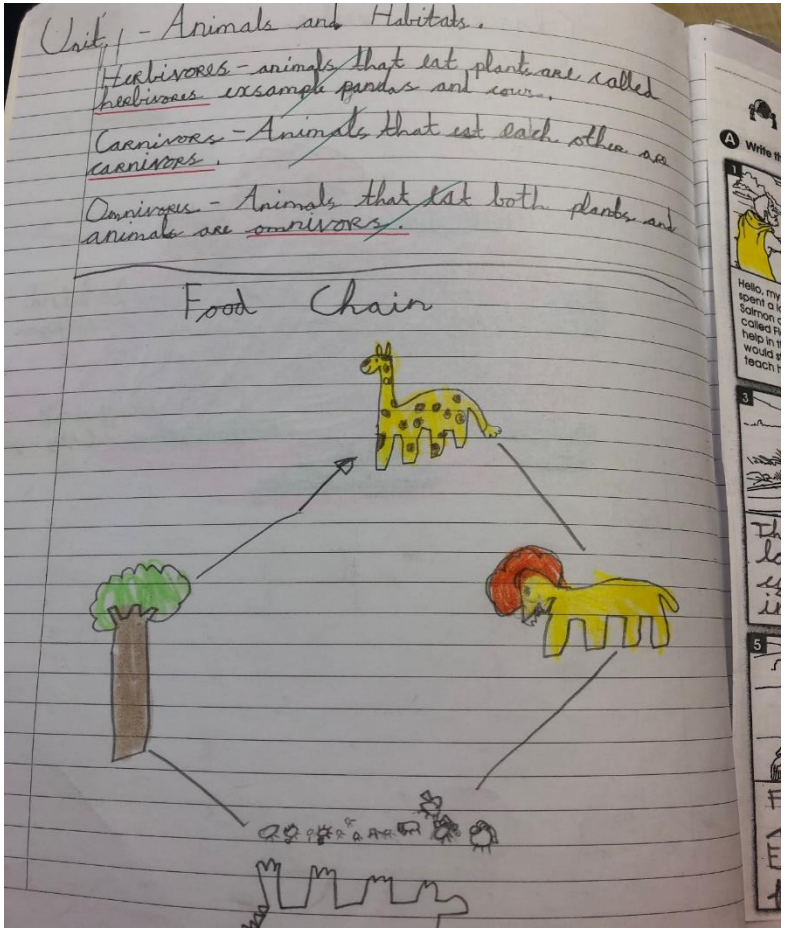


Step 1 – Science – Environmental Awareness and Care

Scoil Naomh Fiachra is the *Incredible Edibles School of the week*

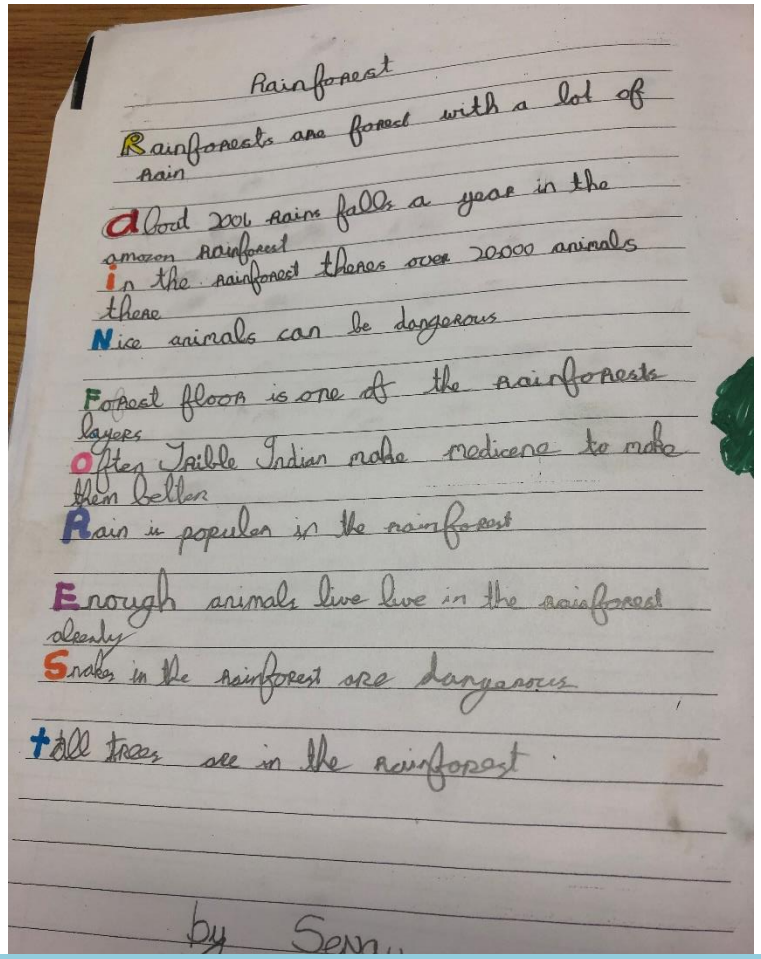
Step 1 – Science – Environmental awareness and care

Rang a 3 Animal Habitats



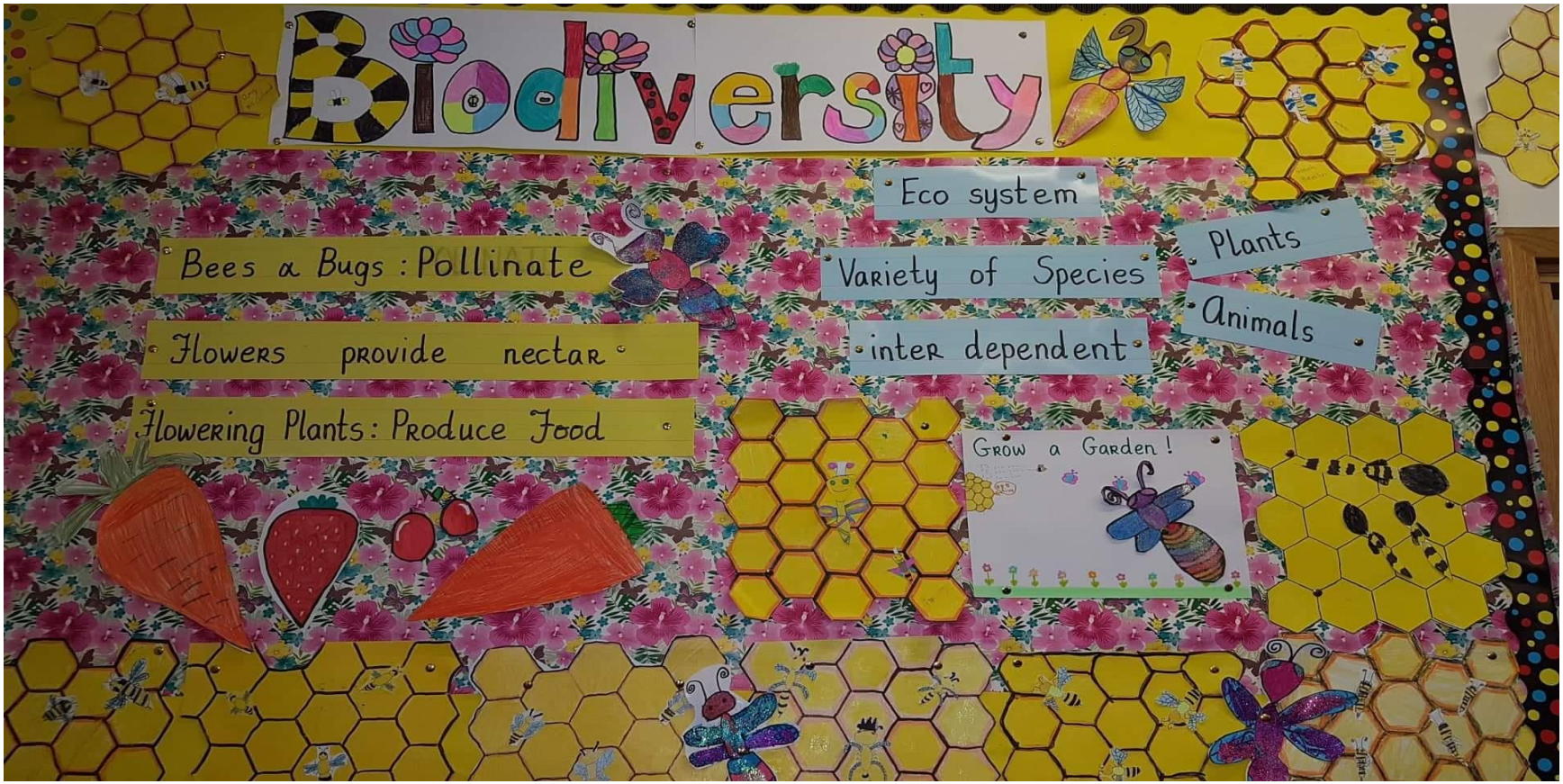
Step 1 – Science : Environmental Awareness and Care

Rang 3 Rainforest



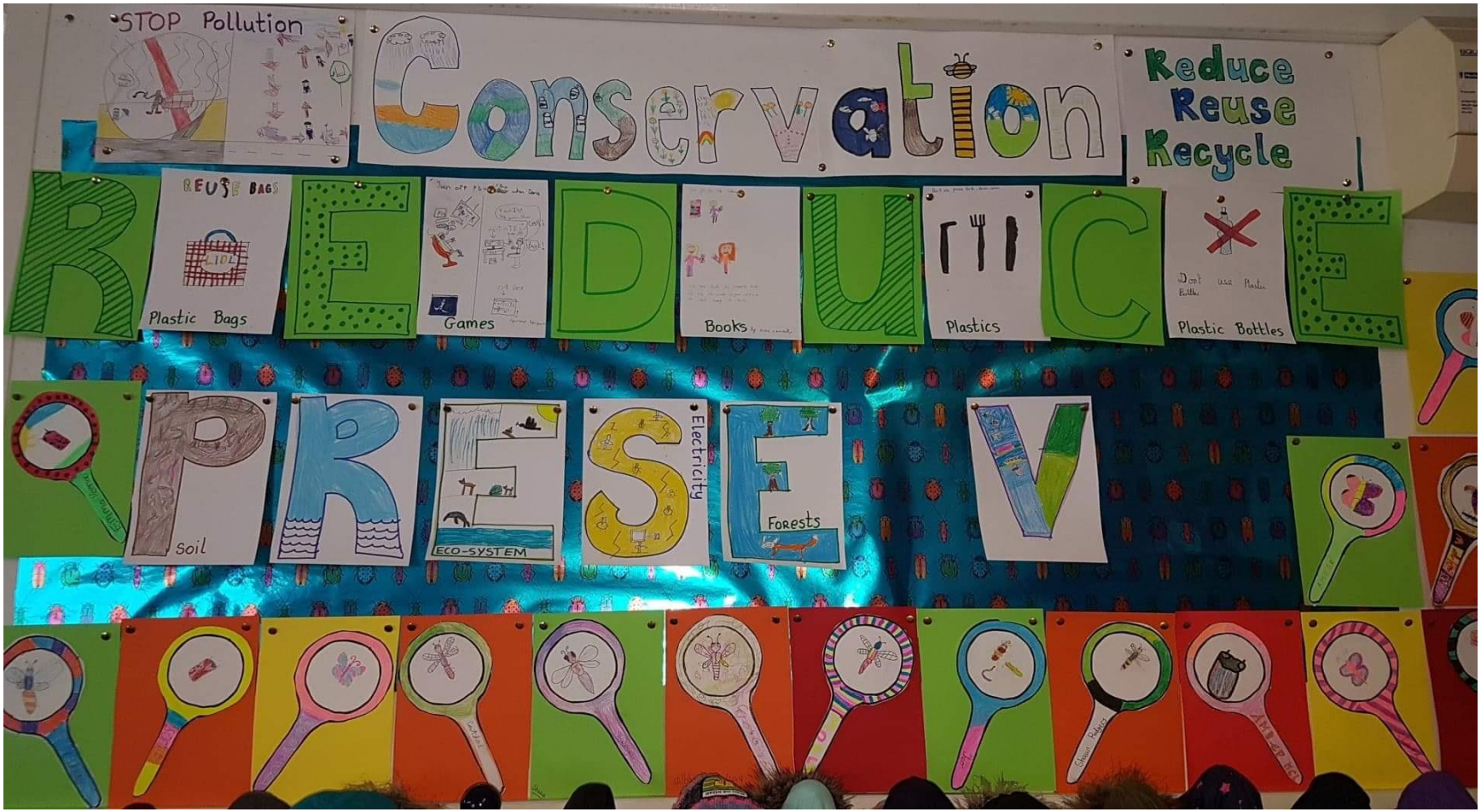
Step 1 – Science – Environmental awareness and care

Biodiversity



Step 1 – Science – Environmental awareness and care

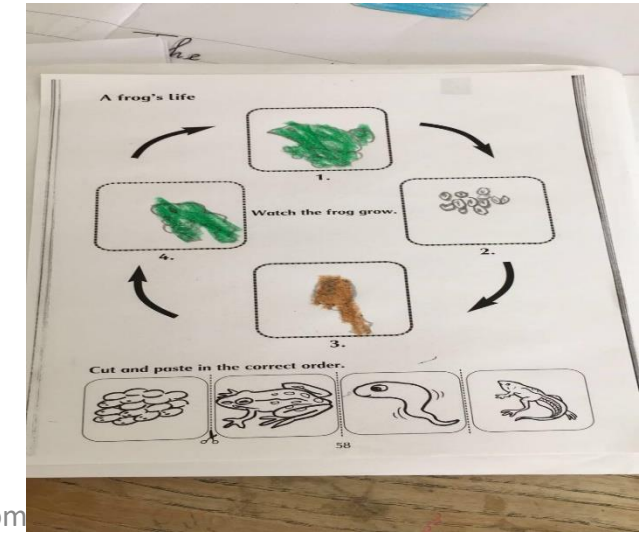
Conservation



Technology

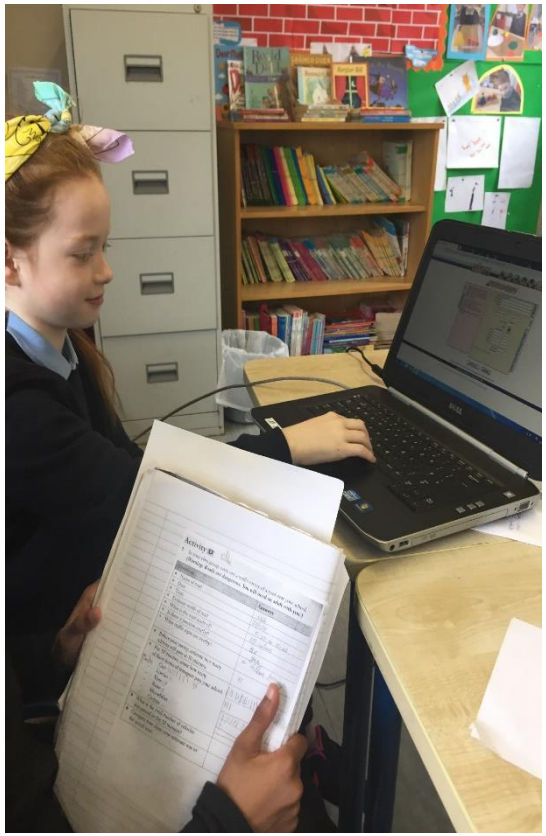
Step 2 – Technology and ICT

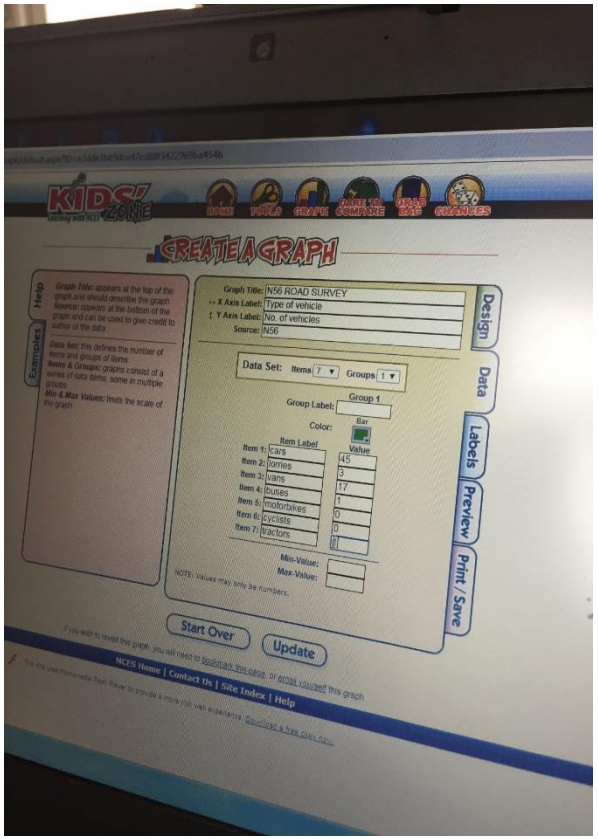
Junior Infants investigating the Life Cycle of a Frog using video's, Powerpoint & their ladybug.

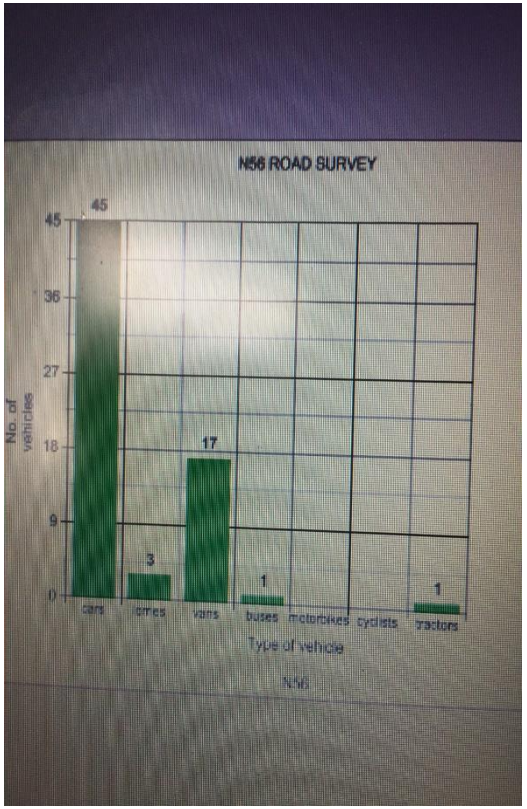


Step 2 – Technology and ICT

Traffic Survey



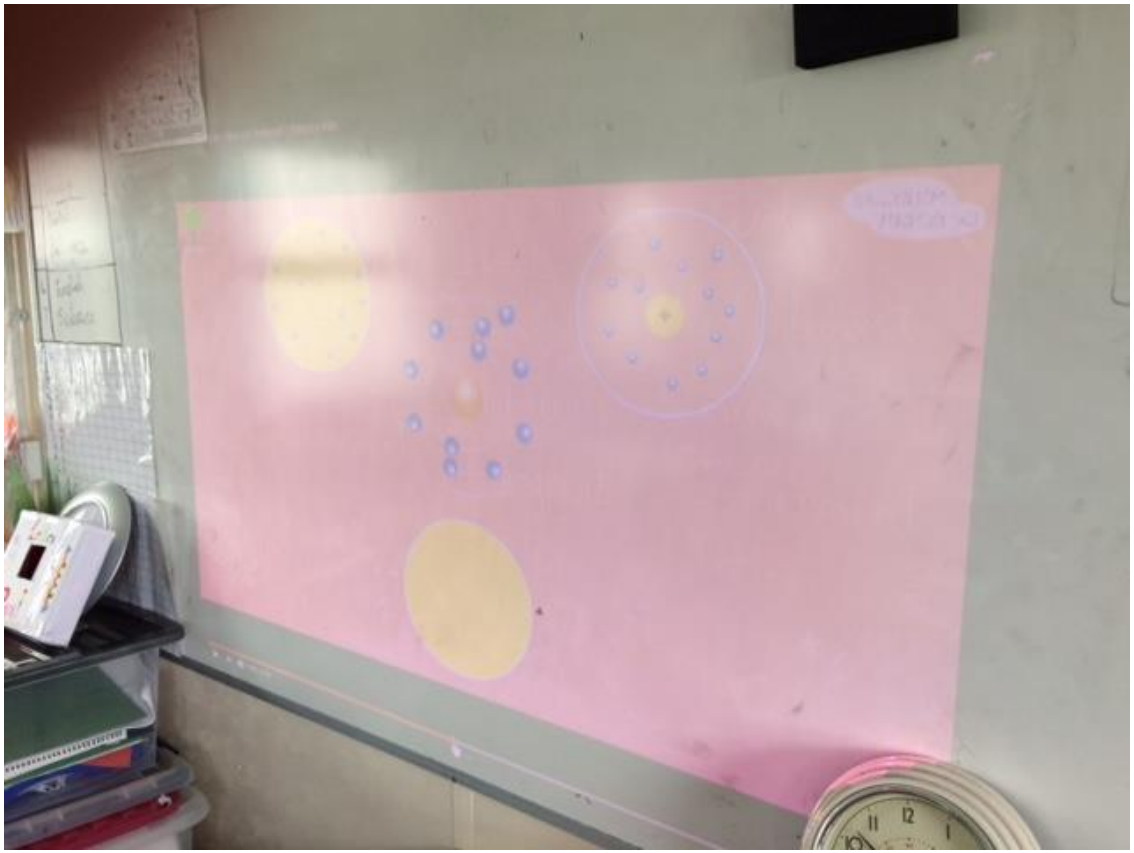




Step 2 – Technology and ICT

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

5th Class using Youtube clip to teach Science



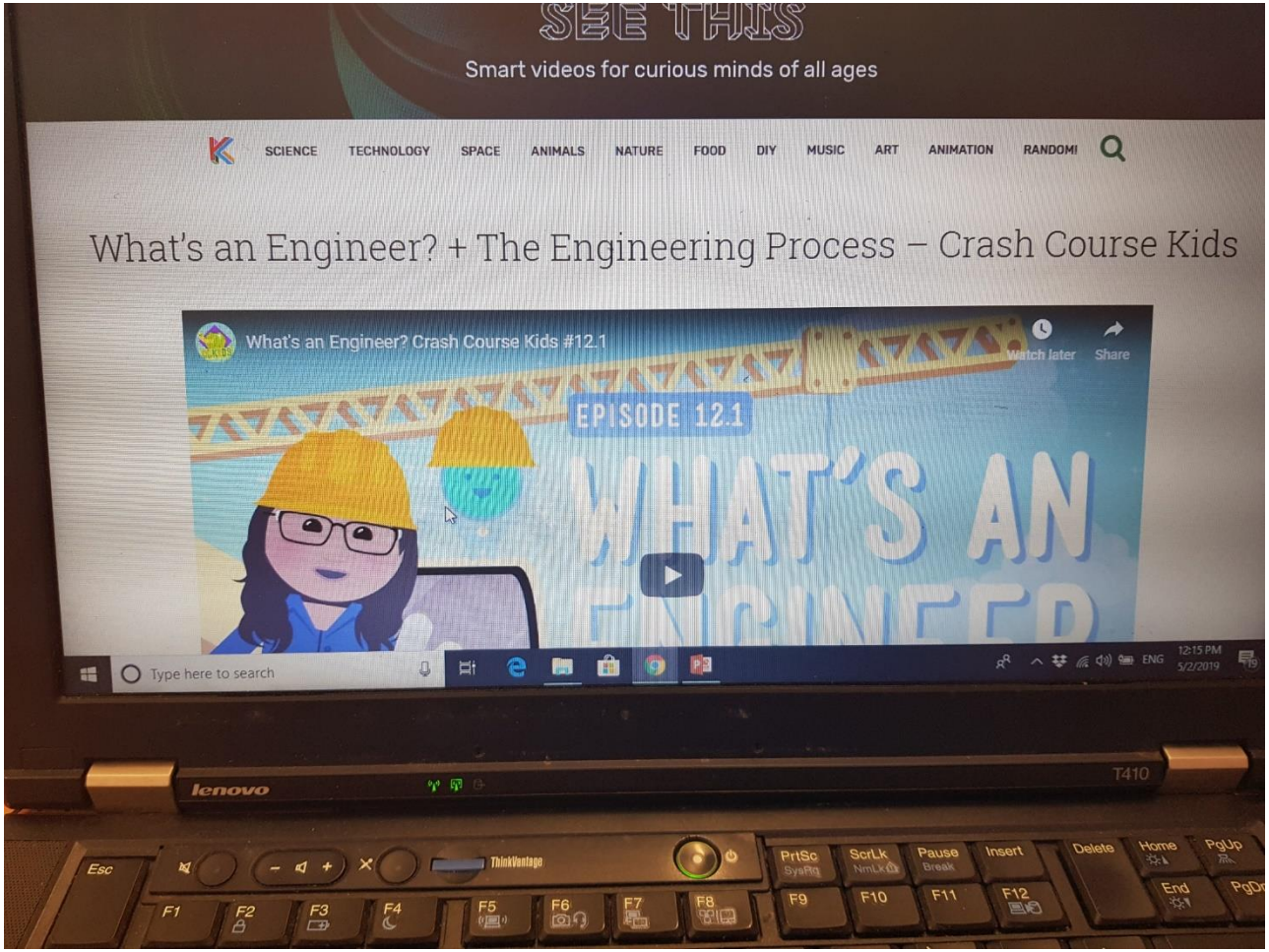
Step 2 – Technology and ICT

4th Class interview with an engineer

Video's of interview recorded

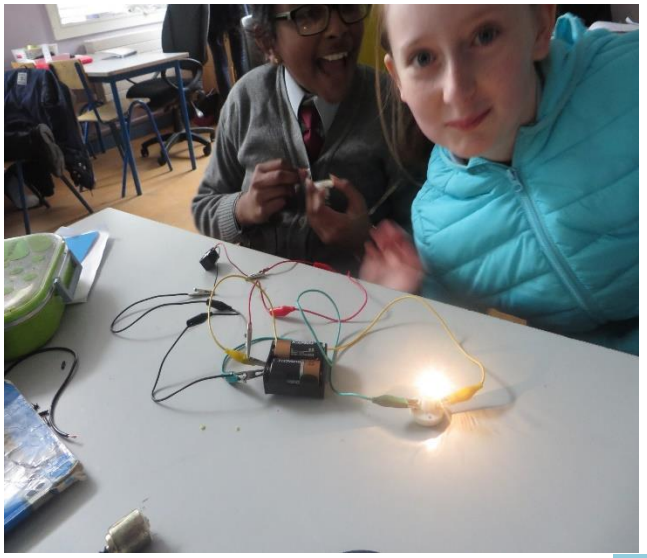
Step 2 – Technology and ICT

6th Class: Engineering Research

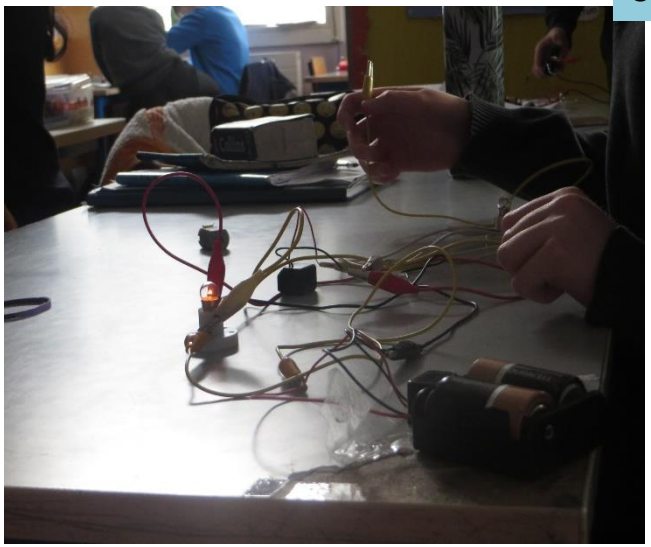


Step 2 – Technology and ICT

Rang 4 - Electricity



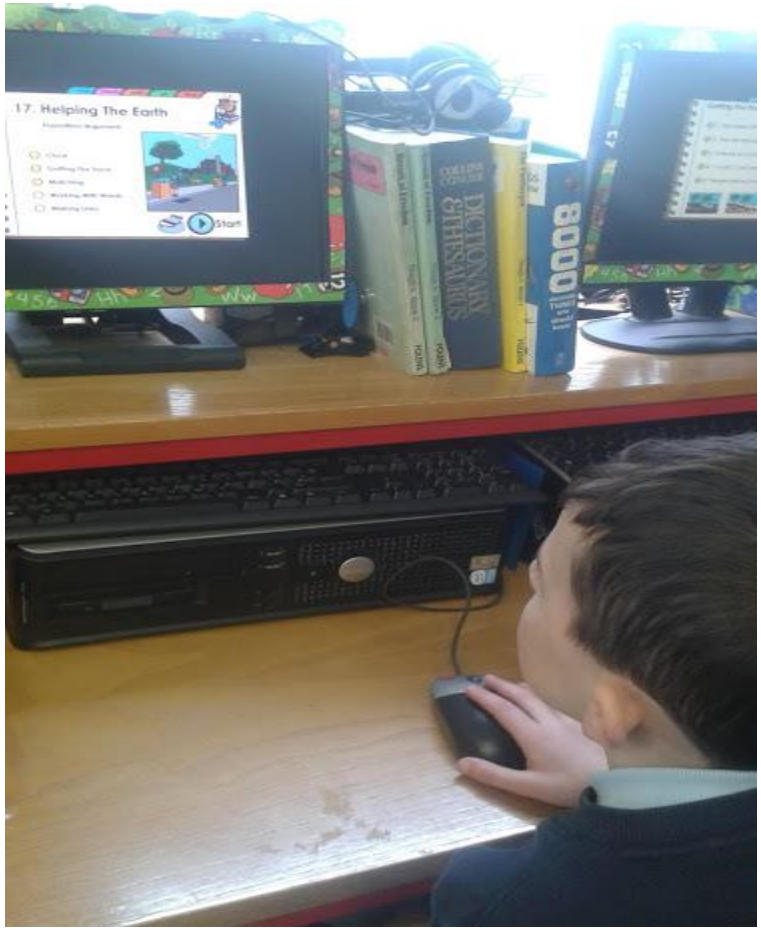
Step 1 – Science – Energy and Forces



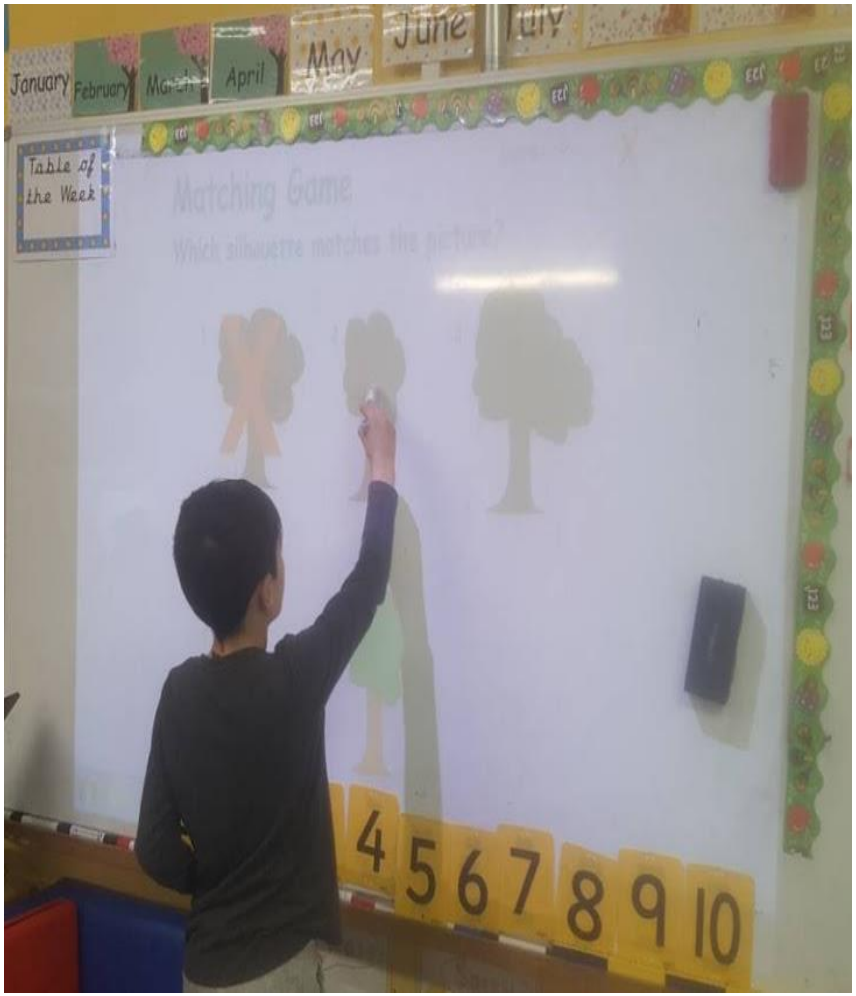
The Letterkenny Youth service delivered a workshop on safe internet use and cyberbullying for Rang a 5 pupils

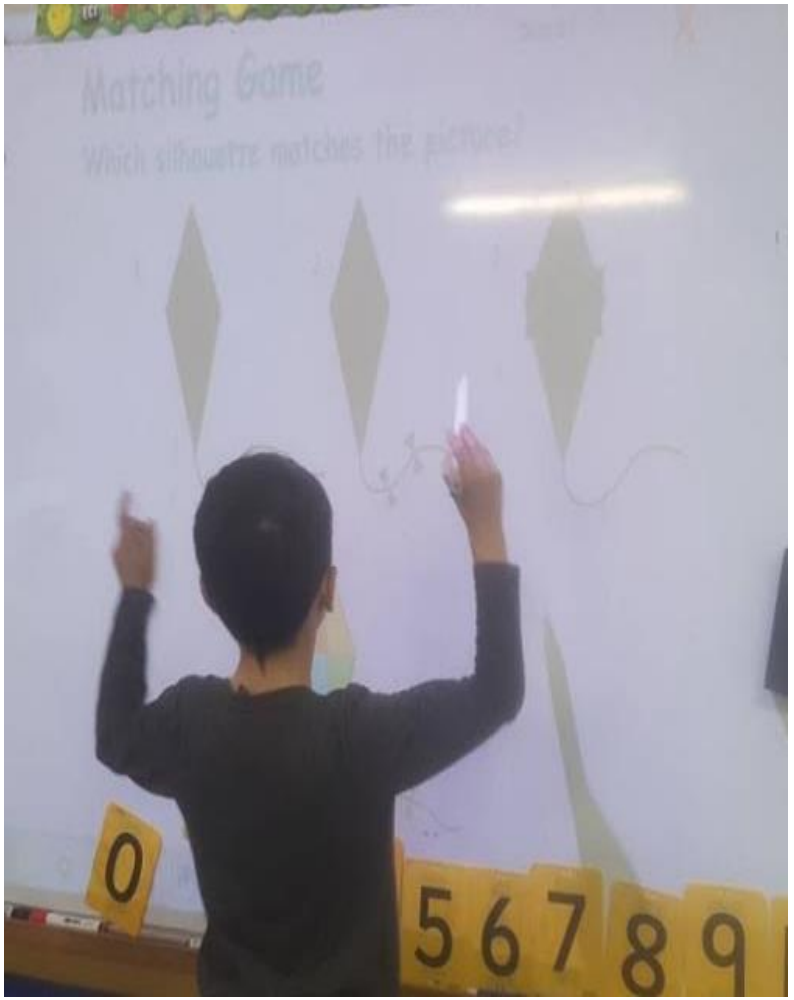
Step 2 – Technology and ICT

Pupil in 1st class using computer programmes to explore Environmental awareness and Care



Pupil in senior infants using IWB to explore shadows and silhouettes.



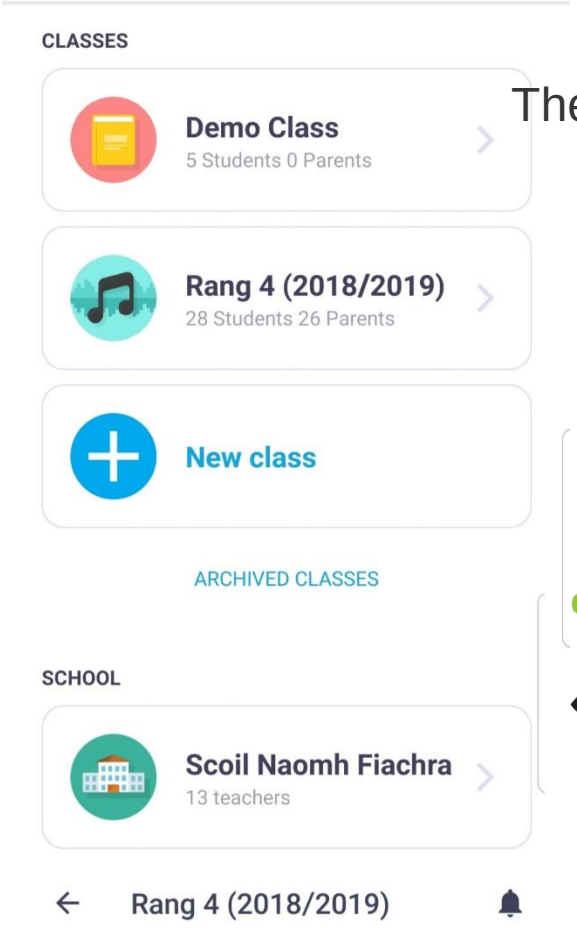


Science: Light

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

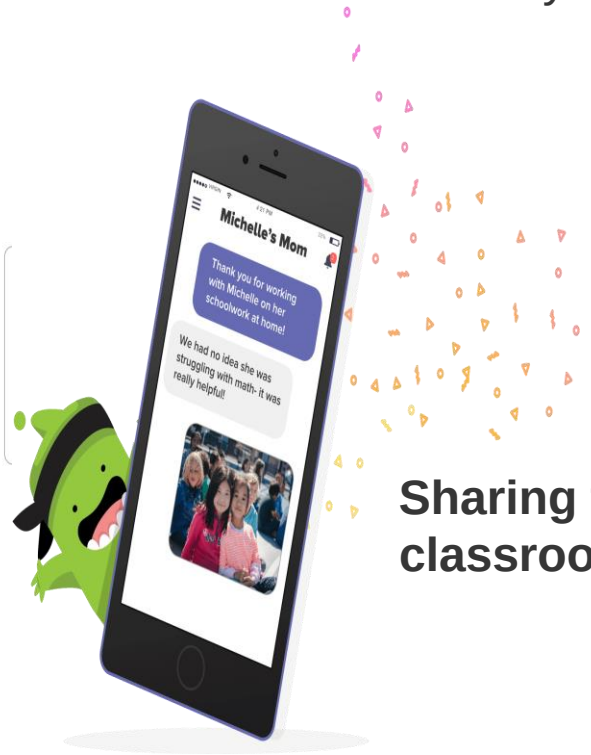
Step 2 – Technology and ICT

4th Class Dojo



Happier Classrooms

The simple way to build an amazing classroom community



Sharing the story of the classroom with Parents

Safer Internet

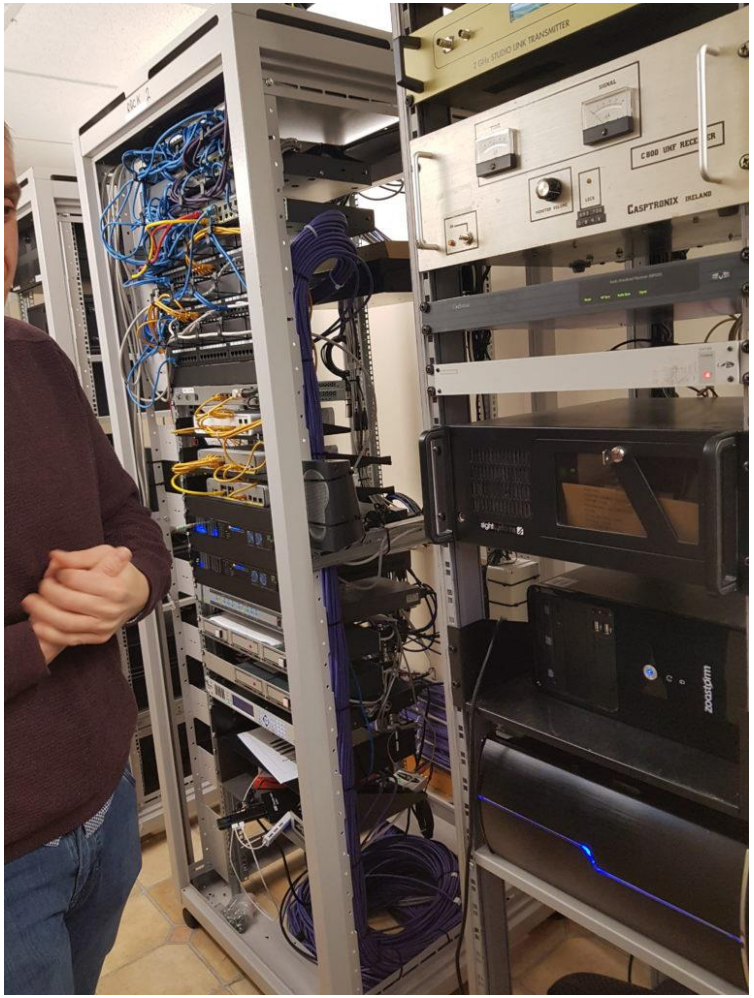
Internet Safety Talk

Safer Internet Day was held on 5th February 2019. Teachers took the opportunity to teach internet safety lessons to our pupils. As a follow up, Garda Talbot and Garda Raftery from Milford Garda Station hosted a seminar for our 5th and 6th class pupils on 18th February 2019. Pupils were taught about the best way to use the internet. Cyber bullying was discussed. Photo sharing and Apps that our children know a lot about were covered during the seminar.

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

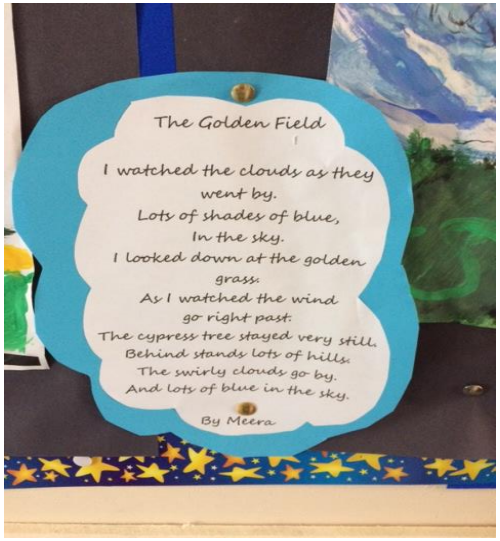
Step 2 – Technology and ICT

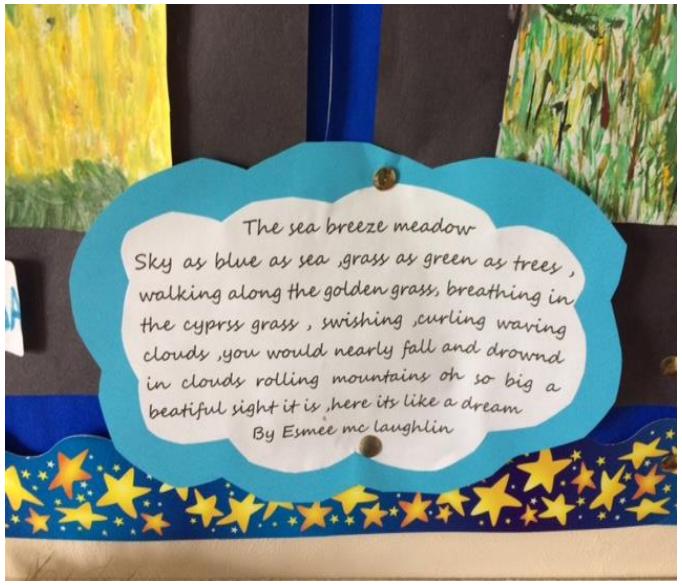
Trip to local radio station



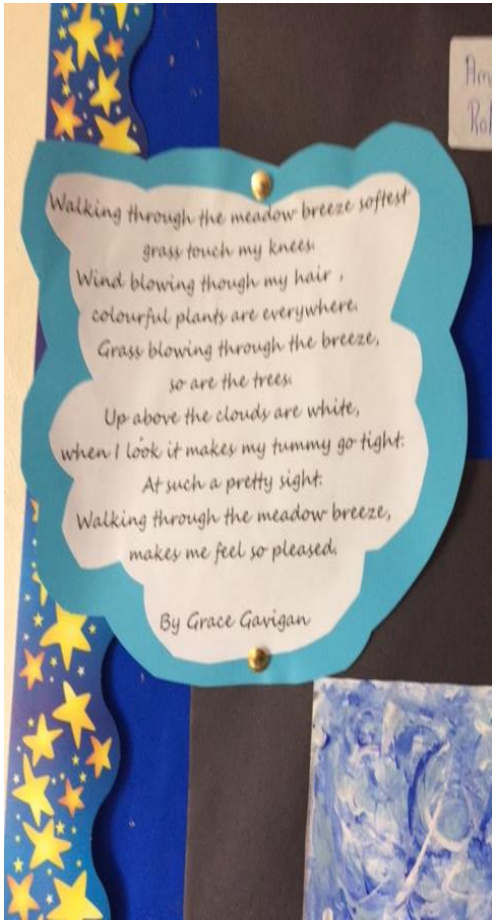
Step 2 – Technology and ICT

3rd Class Environment Poems using Microsoft word

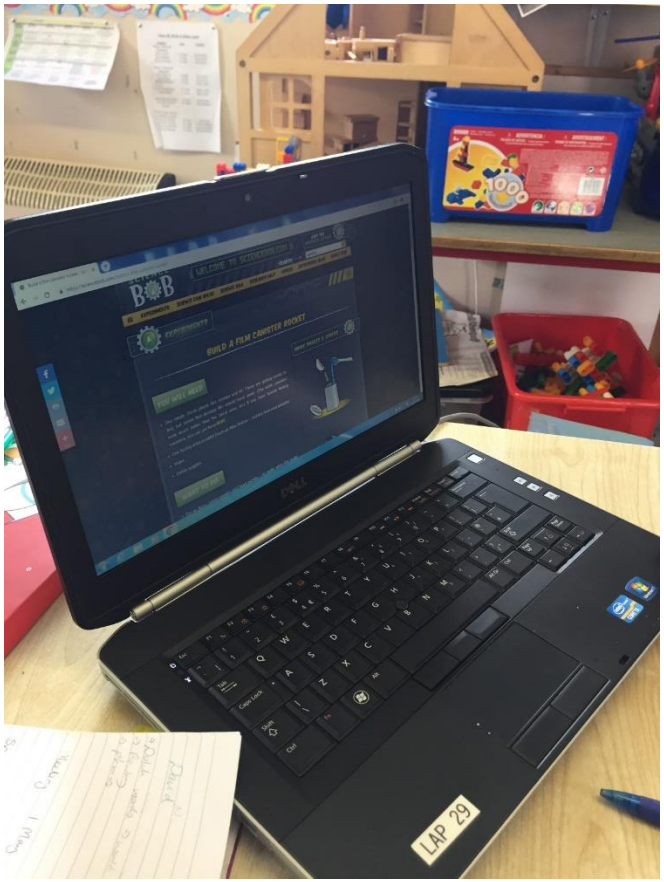




Step 2 – Technology and ICT



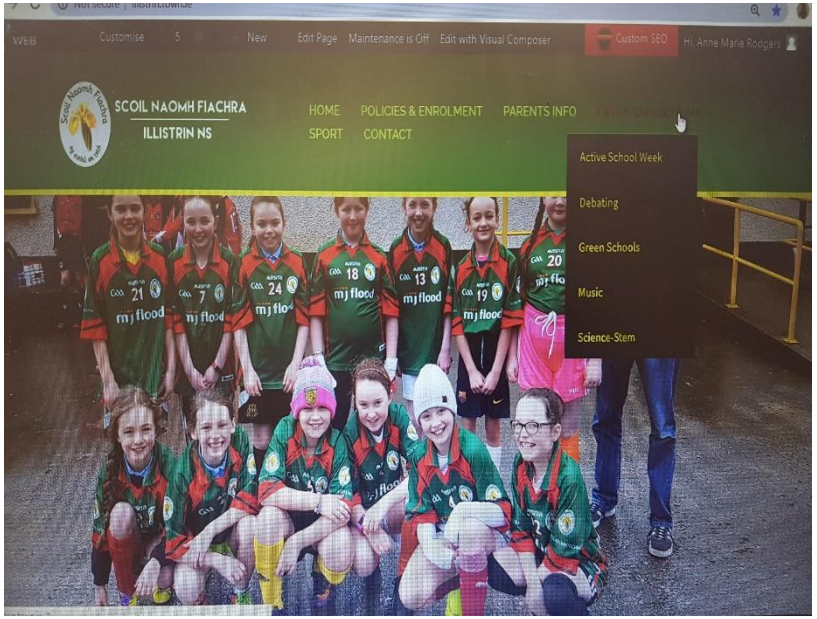
6th Class using the website 'BOB' – Science Experiments

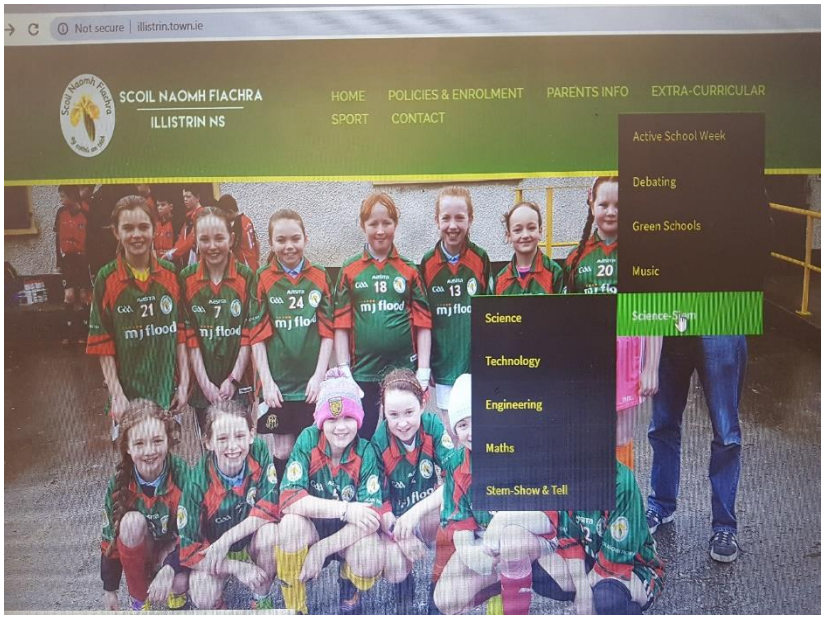


Step 2 – Technology and ICT

We are now in the processing of presenting all our STEM work online via our School Website

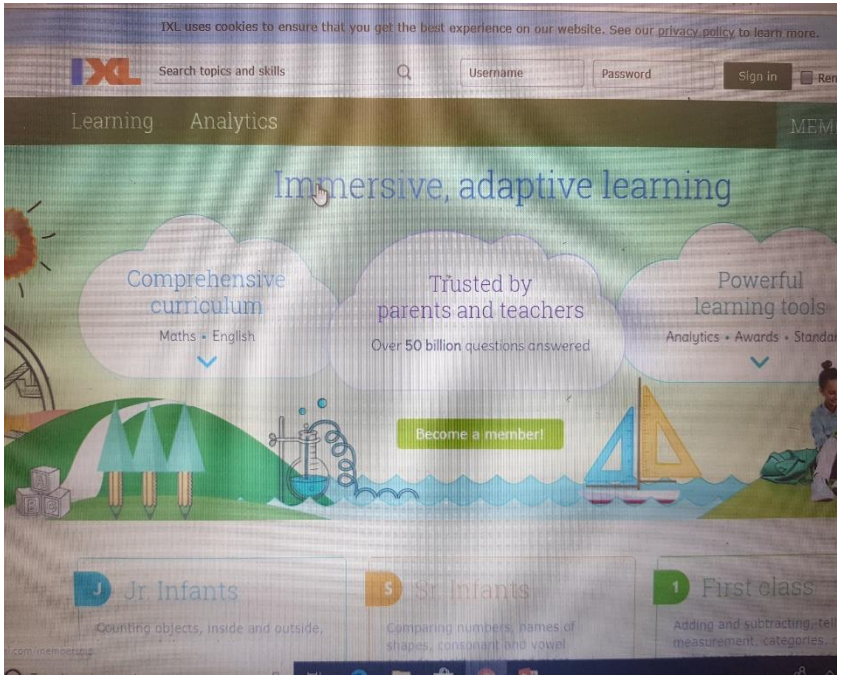
http://illistrin.town.ie/

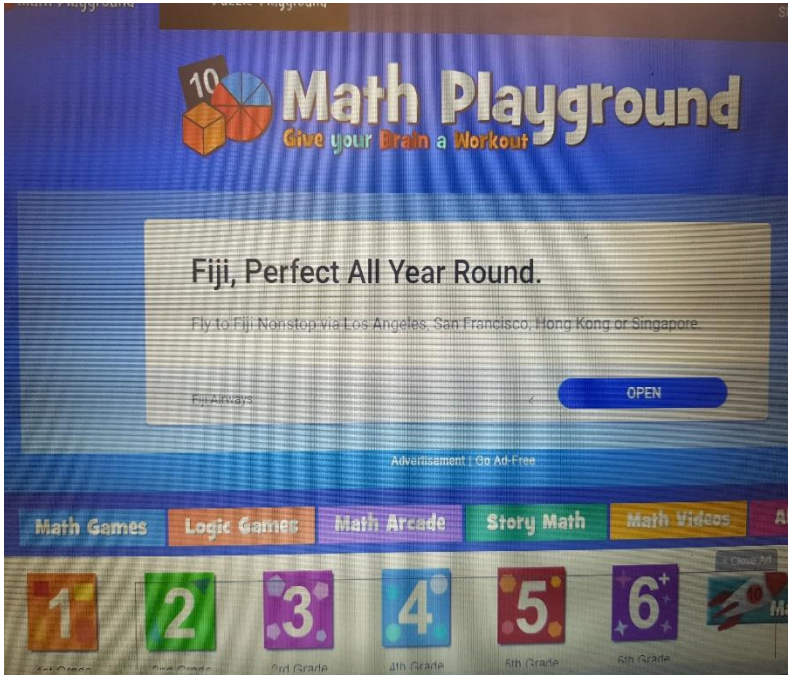




Step 2 – Technology and ICT

Pupils using Technology to explore maths

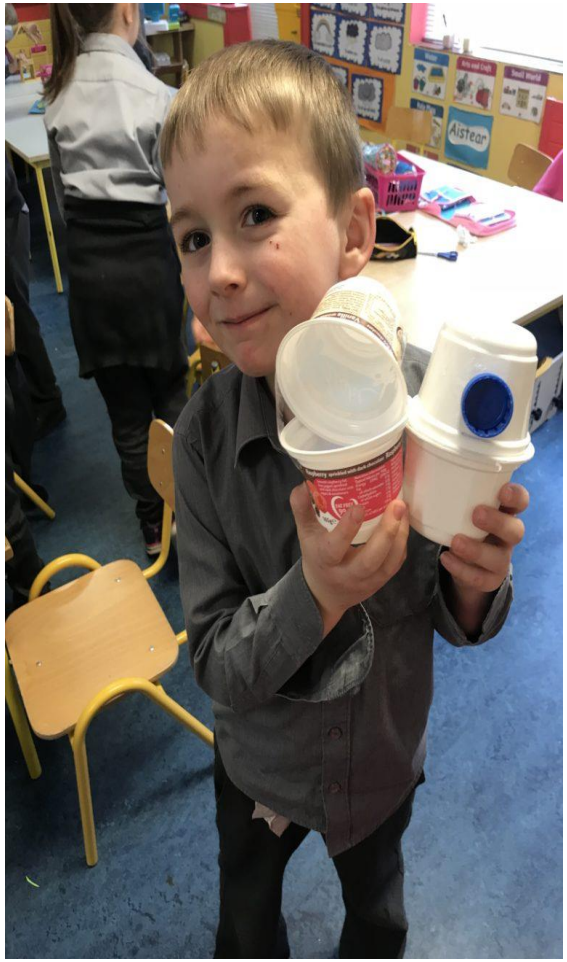


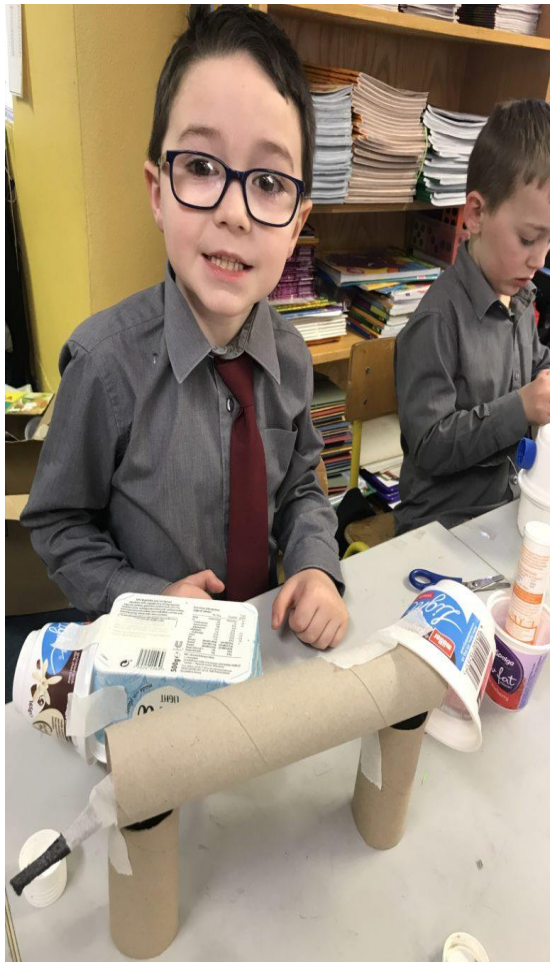


Step 2 – Technology and ICT

Engineering

Senior Infants designing and making Farm Models





Step 3 – Engineering

Designing and making a Farm in Senior Infants

Step 3 – Engineering

Constructing a Farm in Ms McGroarty's Senior Infants

Step 3 – Engineering

Ms McGrath's Senior Infants designing and making a Farm

Step 3 – Engineering

1st Class - Constructing bird feeders

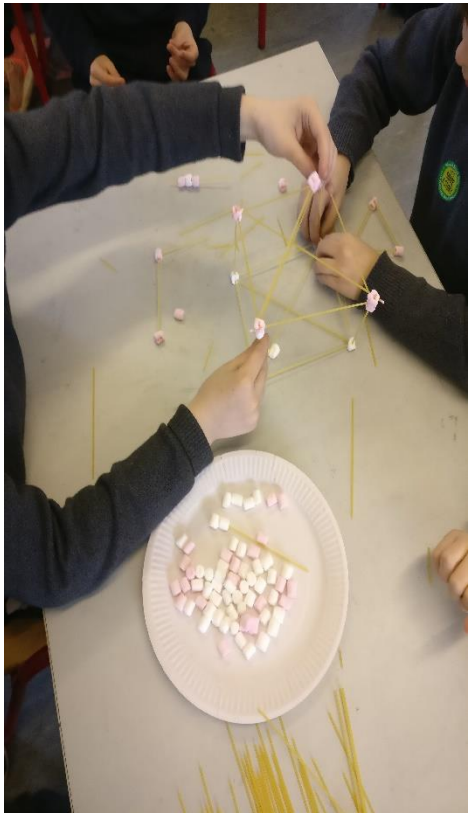
Step 3 – Engineering

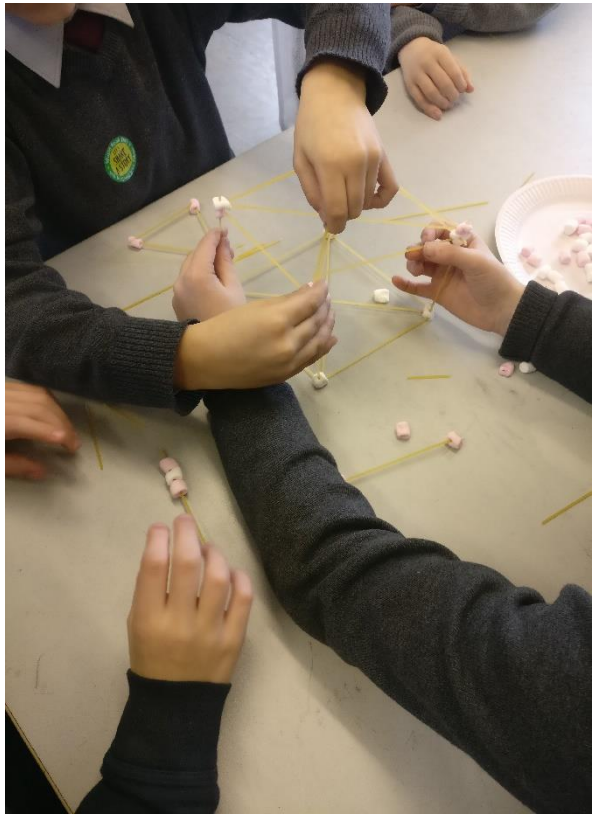
Science and Engineering
Rang a 2 – Amazing Triangle

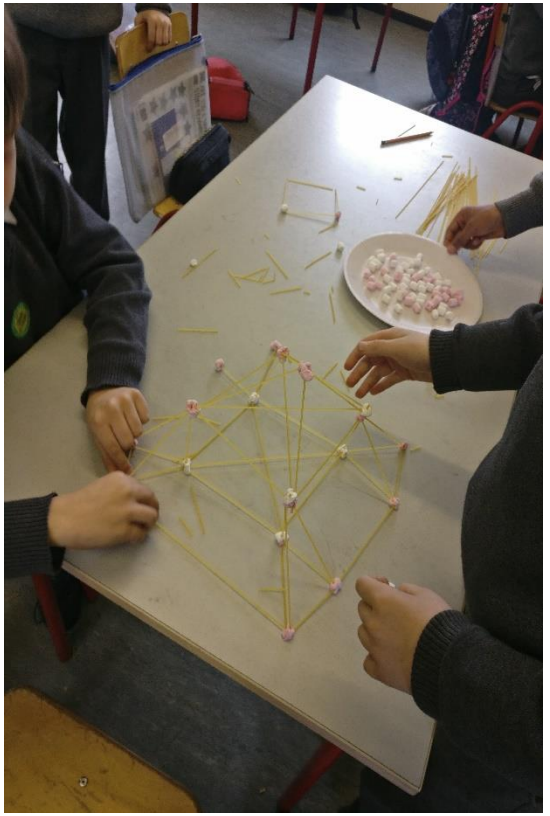
Linked to maths and Engineering

Step 3 – Engineering

Science and Engineering
Rang a 2 Amazing Triangles







Linked to maths and Engineering

Step 3 – Engineering

Building a cardboard Chair

Mr Kenny's 4th Class students were very busy this week with 'Engineers Week'. Our challenge was to design and build a cardboard chair with no glue or tape or anything. This proved a very difficult challenge, but all the students brainstormed together and came up with amazing models!

Step 3 – Engineering

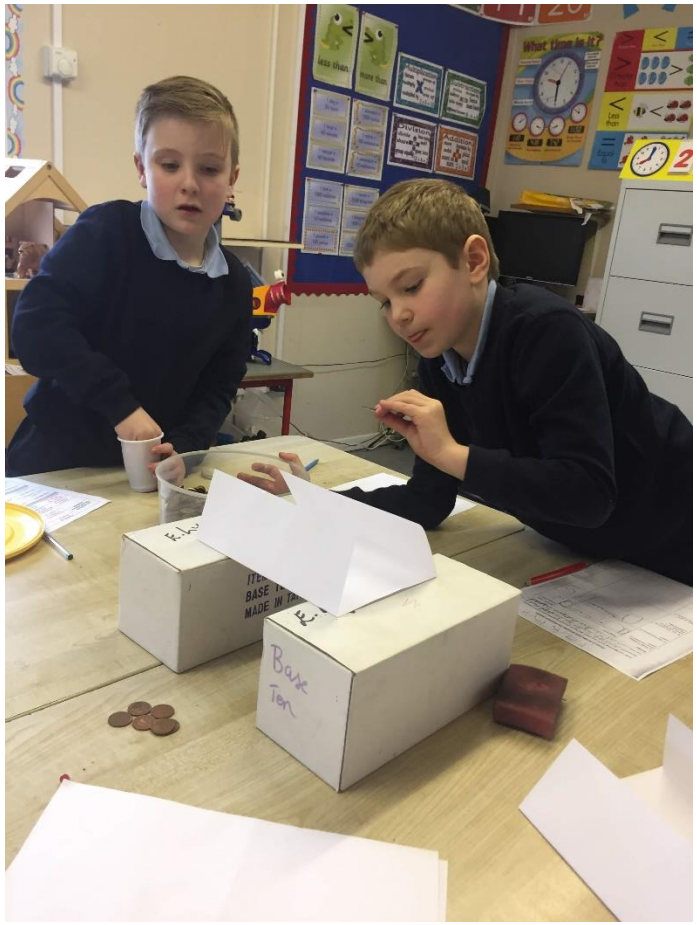
Making Cupcakes with Playdough

Linked to maths and Engineering

A student preparing for baking real cupcakes by discussing ingredients, how to make them, designing and decorating them using playdough first with the help of her assistant.

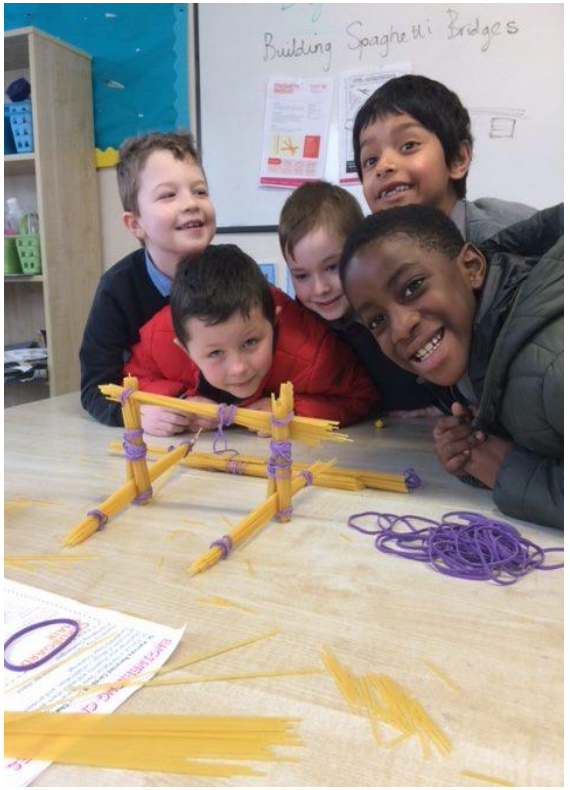
Step 3 – Engineering

2nd Class Designing and making the strongest bridge



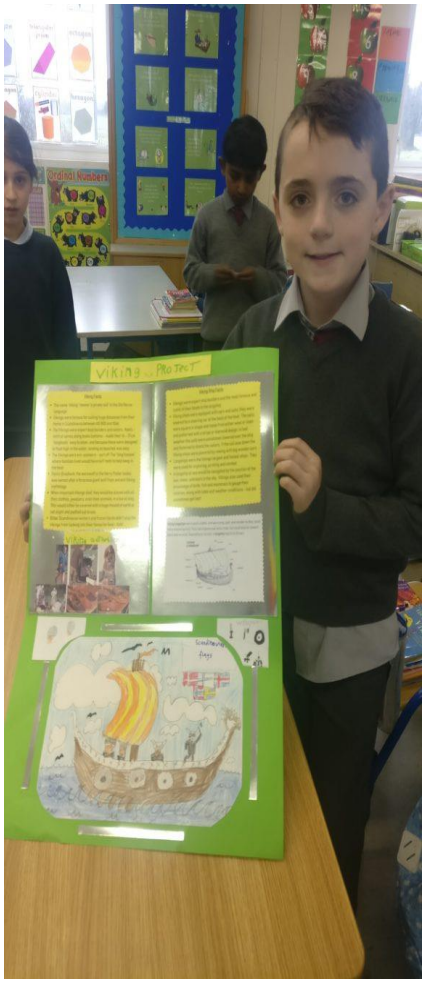
Building a bridge

Ms McLaughlin's and Ms Dillon's 1st classes working as civil engineers for Engineer's week. Their task was to build a bridge to hold half a pound or just over 200g of weight using only spaghetti and elastic bands. One group managed to put 700g of weight on their structure!



Step 3 – Engineering

3rd Class Constructing Viking projects



Step 3 – Engineering

3rd Class – Easter Chicks

3rd class were learning how to make pom-poms in Art. They had to bring in some old cereal boxes and Ms Molloy bought some yellow wool. Pictured below are their wonderful little Easter chicks.

Step 3 – Engineering

3rd Class – Easter Chicks

Step 3 – Engineering

5th Class - Christmas Log Making

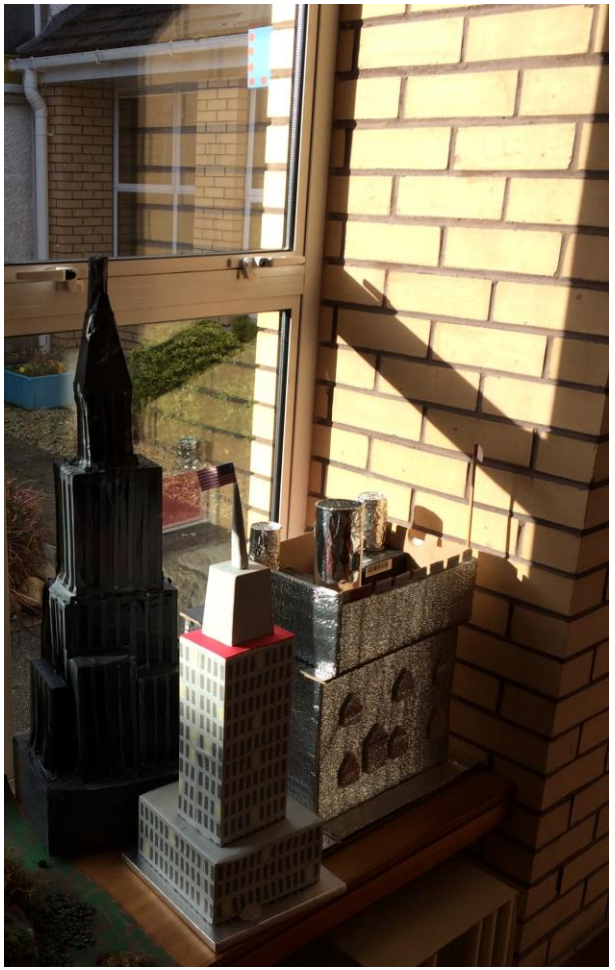
5th Classes, teachers, helpers, parents & grandparents who were involved in the Christmas Log making. The logs were cut, holes drilled in them for candles, holly & they were then decorated with moss, ribbon and selected decorations chosen by the students.

Step 3 – Engineering

5th Class - Christmas Log Making

Step 3 – Engineering

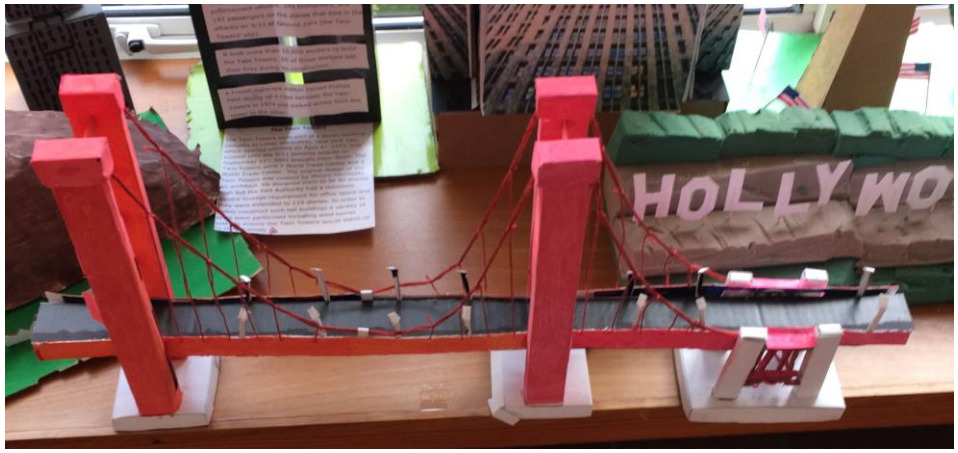
Rang a Sé designed and made models of important landmarks of the USA



STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

Step 3 – Engineering

Rang a Sé designed and made models of important landmarks of the USA



Step 3 – Engineering

Rang a 5 went to a show at the LYIT for Engineers week called 'Who Wants to be a Superhero' – They explored different types of engineers

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

Step 3 – Engineering

'Who Wants to be a Superhero'

Rang a 5 designed and made a city out of recycled materials for their Irish Aid Project on Global Goals

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

Step 3 – Engineering

Irish Aid Project on Global Goals

STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

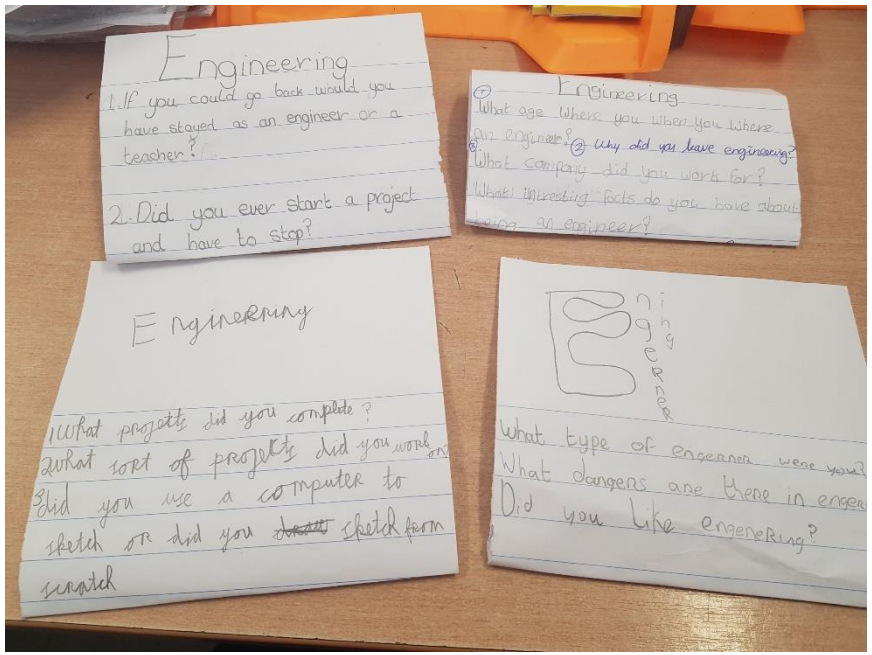
Step 3 – Engineering

Children research
‘What is an Engineer?’

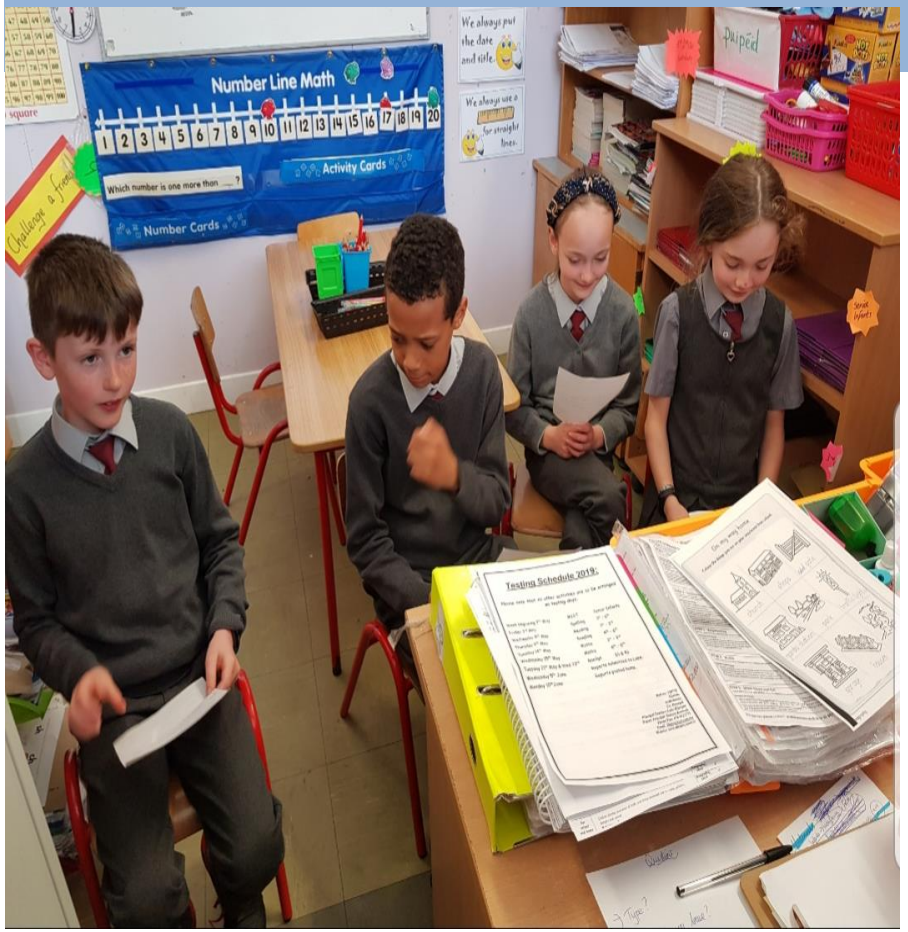
Step 3 – Engineering

4TH Class Interviewed an Engineer Mr Maguire from Arup

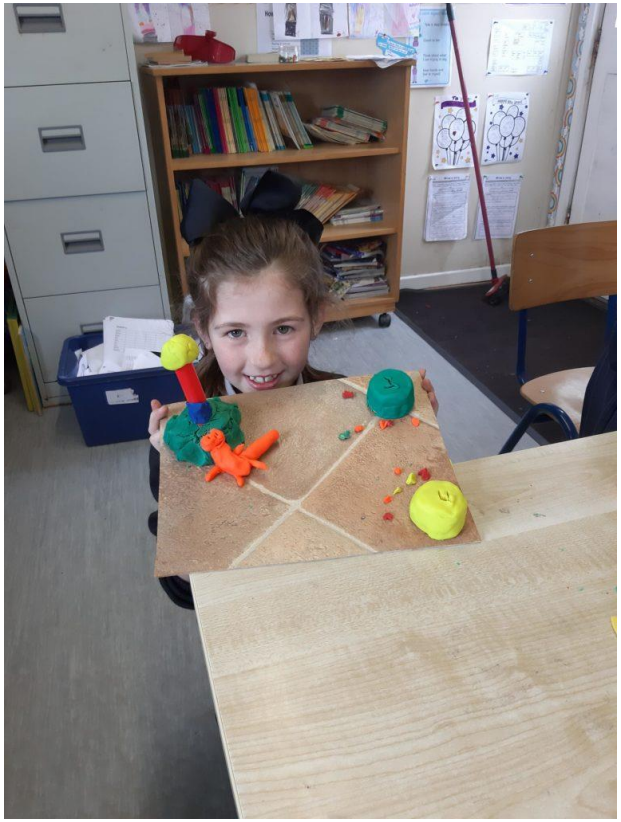
- 4th class interviewed Mr Maguire a past engineer and now a former teacher in our school. It was recorded and below are the questions the students thought of.



Interviewing Mr Maguire who worked for ARUP,
one of the largest engineering consulting firms in Ireland.



Children made models of the setting of '**Fantastic Mr Fox'** by Roald Dahl.

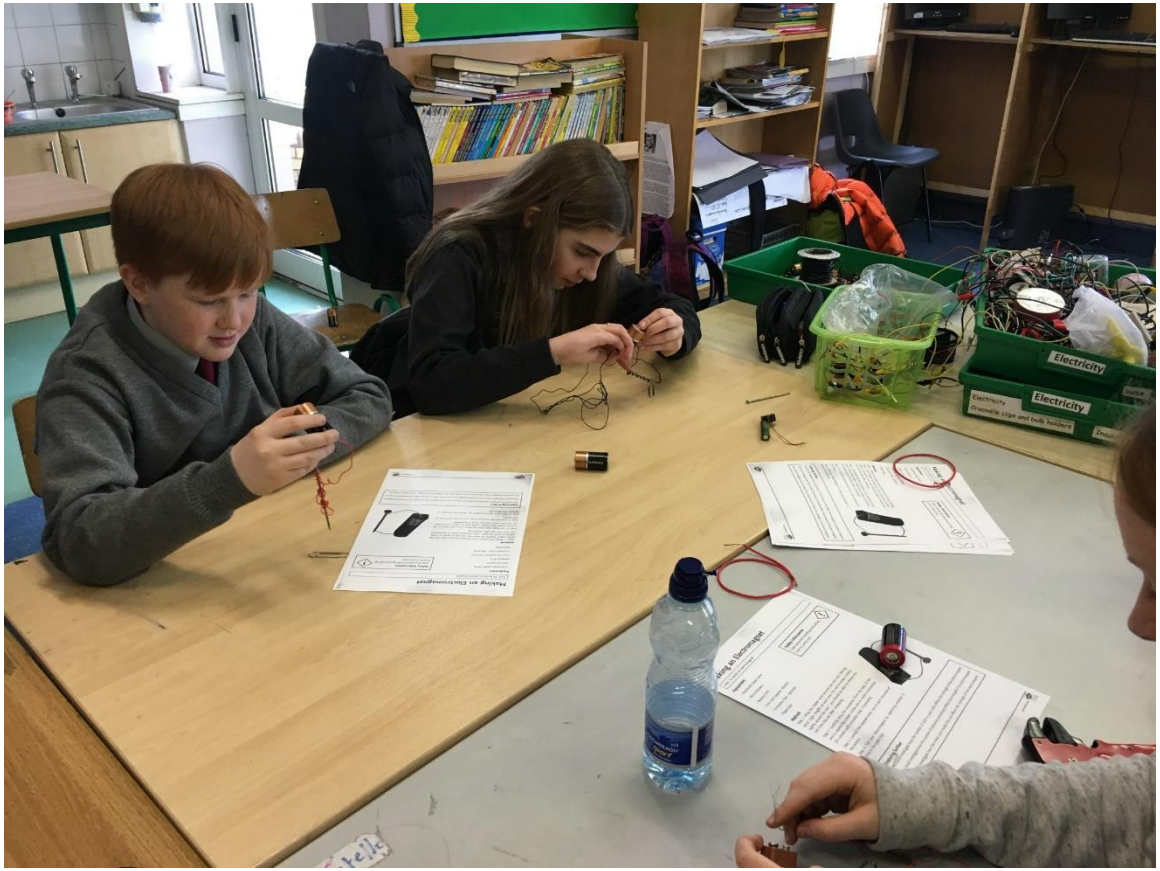


Step 3 – Engineering

Children made models of the setting of
‘**Fantastic Mr Fox’** by Roald Dahl.

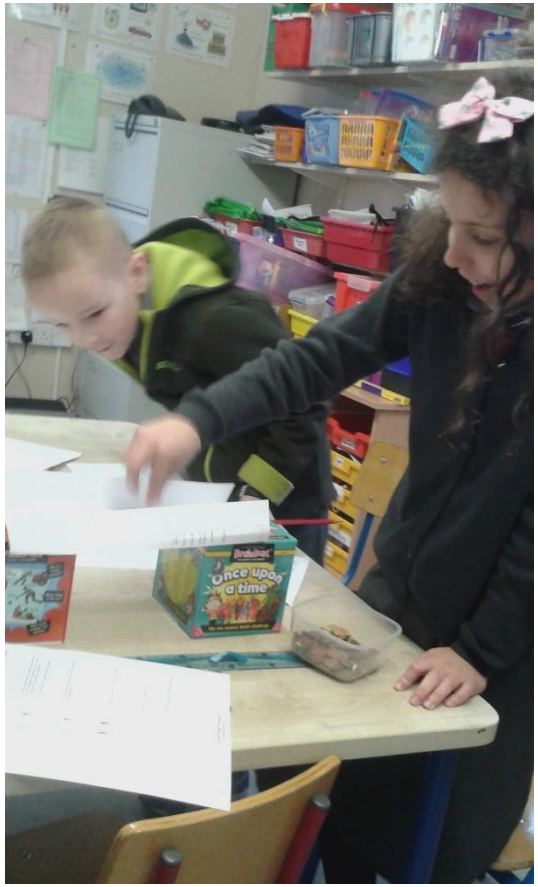
Step 3 – Engineering

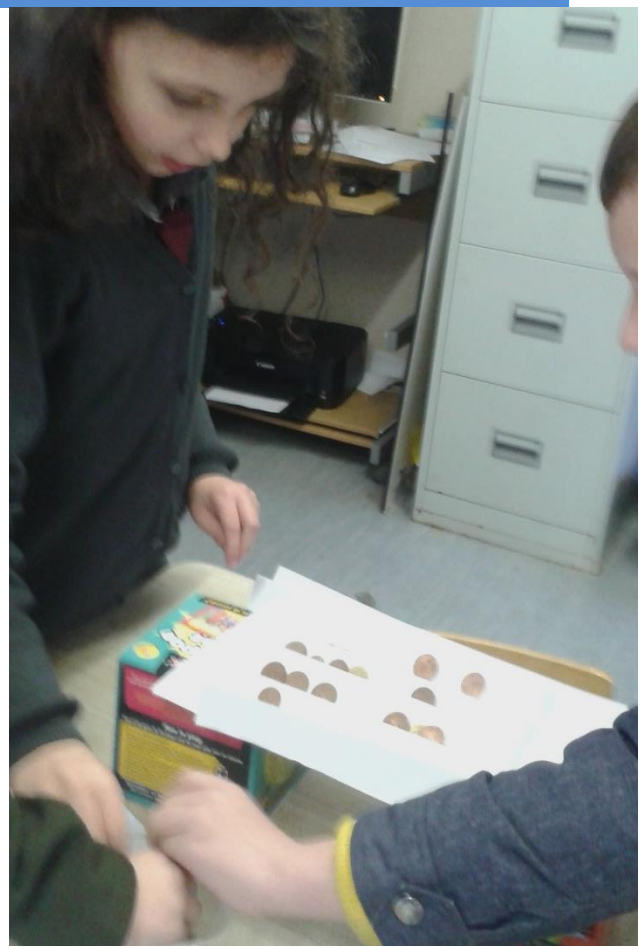
Engineers Week 2019
Rang a 6 – Making an Electromagnet



Step 3 – Engineering

Design and make a Bridge- Rang a 2





Step 3 – Engineering

Maths

Step 4 – Maths

Junior Infants using Maths skills to determine size and weight of bears

Step 4 – Maths

3rd Class Weight

Investigating Slopes, Lines & Angles

Step 4 – Maths

Rang 2
Making Cookies: Weight & Measuring

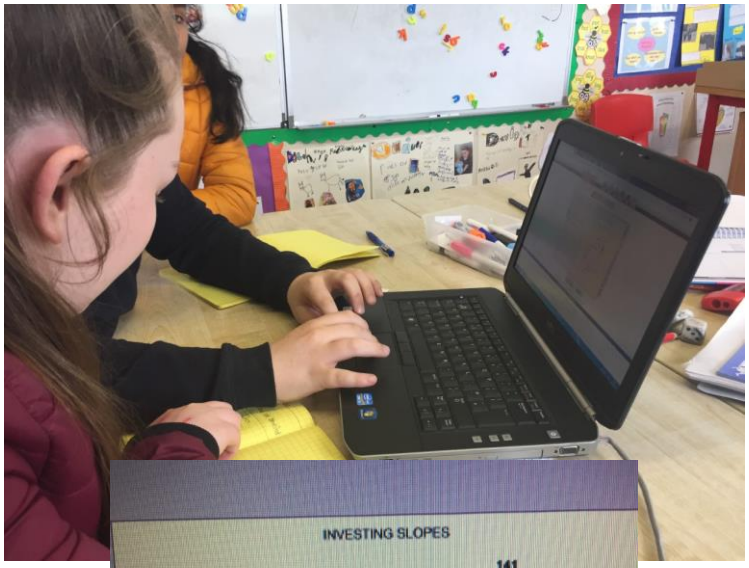
STEM Log Evidence, Scoil Naomh Fiachra
2019/DSM/662

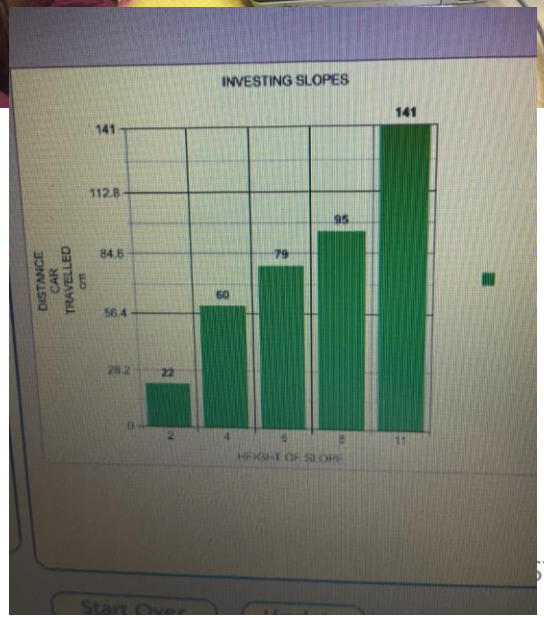
Step 4 – Maths

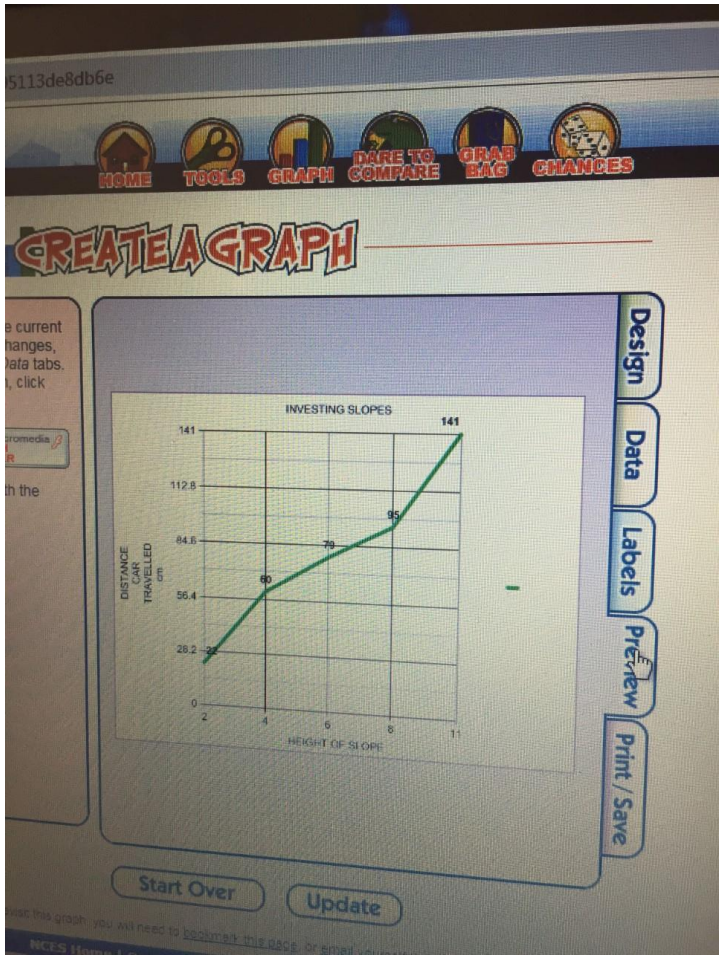
Rang 6 Making Apple Bread
Weight & Measuring

Step 4 – Maths

Rang a 6 Compiling Graphs based on investigating slopes experiment







Completing Maths Trail Around Our School

Identifying 2-D and 3-D shapes in the school environment

Spotting number patterns in playground games

Step 4 – Maths

Completing Maths Trail Around Our School

Problem Solving

THIRD AND FOURTH CLASS MATHS TRAIL 2014 **Team name** _____

Can you find an example of each of these 2D and 3D shapes and write down where they are.

A triangle _____
A square _____
A rectangle _____
A semi- circle _____
A circle _____
A hexagon _____
An octagon _____
A cuboid _____
A cone _____
A cylinder _____
A sphere _____

The length of the two playgrounds is 60 metres and 32 metres. Find the difference between the two _____

What fraction of the schools classrooms are inside? Do not include learning support rooms, offices, computer room. _____

If we had lunch time half an hour later what time would break be? _____

Estimate and then count the number of windows around the outside of the building. My estimate _____ actual number _____

Estimate and then count the number of doors around the outside of the building. My estimate _____ actual number _____

Multiply the number of flower pots\tyres by 8. _____

Write down all the odd numbers that you can see around the outside of the school.

Write down all the multiples of 2 up to 20. _____

If you share 116 pupils equally between the third and fourth classes. How many pupils would each class have?

FIFTH AND SIX CLASS MATHS TRAIL 2014 **Team name** _____

Can you find an example of each of these 2D and 3D shapes and write down where they are.

A triangle _____
A square _____
A rectangle _____
A semi- circle _____
A circle _____
A hexagon _____
An octagon _____
A cuboid _____
A cone _____
A cylinder _____
A sphere _____

Estimate then calculate the actual perimeter of the main playground.

My estimate _____ actual perimeter _____

Estimate then calculate the actual area of the main playground.
My estimate _____ actual area _____

What fraction of the schools classrooms are inside? Simplify your answer. _____

Estimate and then count the number of square windows around the outside of the building.

My estimate _____ actual number _____

Multiply the number of outside doors with the number of outside windows. _____

Name and estimate the size of the angle on the slope outside Ms McGee's prefab. _____

Calculate the percentage of blue cars. _____

Maths Week Ireland

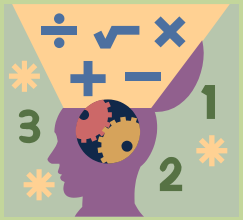
Step 4 – Maths

All classes completed maths trails on maths week – Here are some examples of the trails

INFANTS MATHS TRAIL 2014 **Team name**

_____

Take a picture of 5 different squares



Take a picture of 1 semi circle

Take a picture of 2 different circles

Take a picture of 3 different rectangles

Count the number of windows on the front of the school building. How many are there?

_____

Take a picture of something - green, black, white, grey, yellow, red, orange, purple, blue and brown

Count the number of full square windows on the front of the building. How many are there? _____

How many different shapes are there on the first aid door? Circle your answer – 1, 2 or 3?

Find a pattern and take a picture of it

Stand in front of infant bench in infant yard. Take 5 steps forward, turn left, take seven steps turn right. Take a picture of what you can see

FIRST AND SECOND CLASS MATHS TRAIL 2014 **Team name**

_____

Using the length of your hand estimate the length of the bench in the front of the school.
Then measure using the length of your hand
My estimate is _____
Actual length in hands is _____

Can you find an example of each of these 2D shapes and write down where it is
A triangle _____
A square
_____
A rectangle
_____
A semi- circle _____
A circle _____
A hexagon _____
An octagon
_____

How many wooden benches are there? _____

Estimate and then count the number of rungs outside Mrs Ferry's 1st class prefab?
My estimate is _____ Actual number_____

How many kerbing blocks around the lower senior yard? _____

Estimate and then count the number of windows around the outside of the building.
My estimate _____ Actual number_____

Estimate and then count the number of doors around the outside of the building.
(exclude prefabs and windows attached to doors)
My estimate_____ Actual number_____

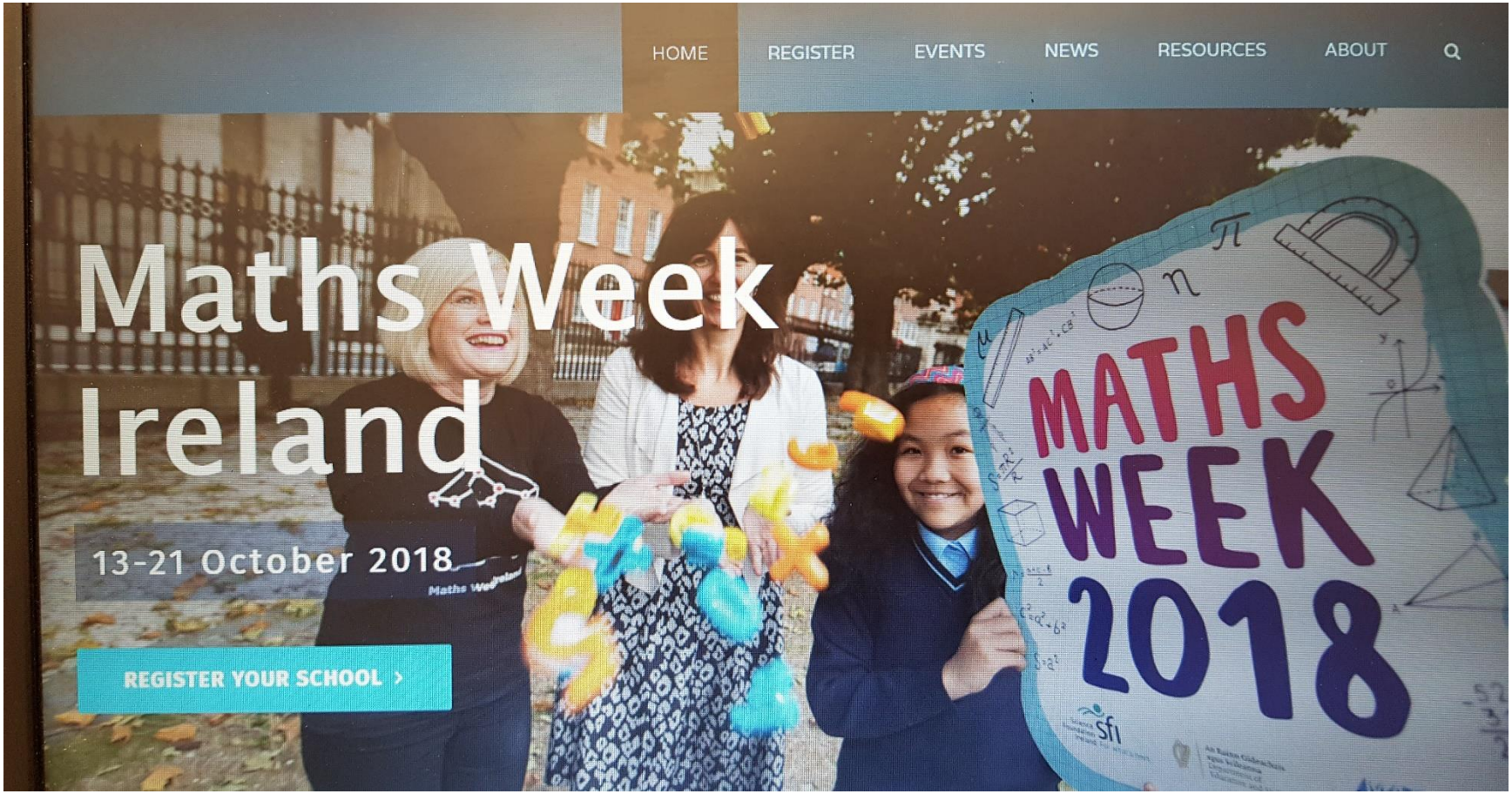
How many tens and units in the number on Ms Horkan's' door? _____

Write down all the odd numbers that you can see around the outside of the school.

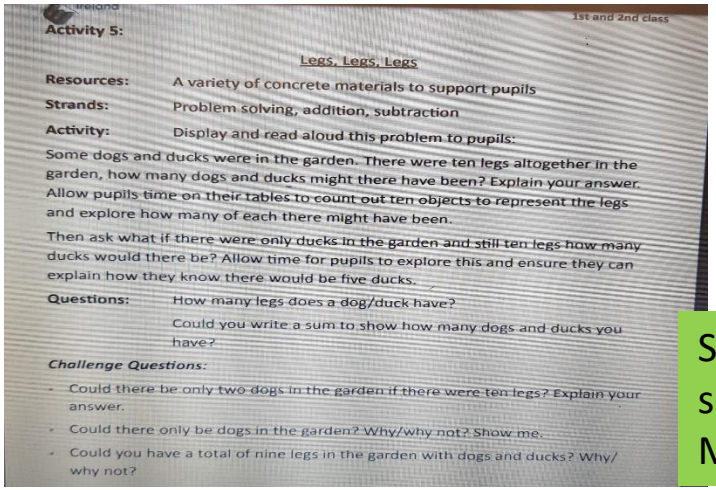
On the back of your sheet draw and colour in half of the bird table.

Step 4 – Maths

Maths WeeK - Ireland



Maths Week Activities



Activity 5: 1st and 2nd class

Legs, Legs, Legs

Resources: A variety of concrete materials to support pupils

Strands: Problem solving, addition, subtraction

Activity: Display and read aloud this problem to pupils:

Some dogs and ducks were in the garden. There were ten legs altogether in the garden, how many dogs and ducks might there have been? Explain your answer. Allow pupils time on their tables to count out ten objects to represent the legs and explore how many of each there might have been.

Then ask what if there were only ducks in the garden and still ten legs how many ducks would there be? Allow time for pupils to explore this and ensure they can explain how they know there would be five ducks.

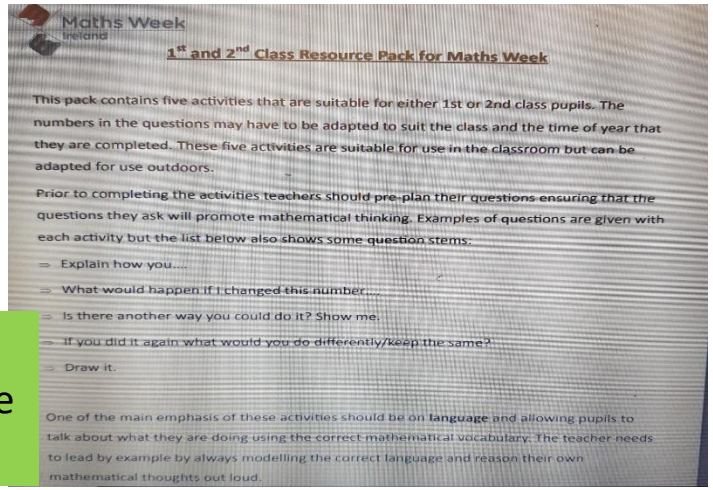
Questions: How many legs does a dog/duck have?

Could you write a sum to show how many dogs and ducks you have?

Challenge Questions:

- Could there be only two dogs in the garden if there were ten legs? Explain your answer.
- Could there only be dogs in the garden? Why/why not? Show me.
- Could you have a total of nine legs in the garden with dogs and ducks? Why/why not?

Step 4 – A selection of some Maths Activities



Maths Week Ireland

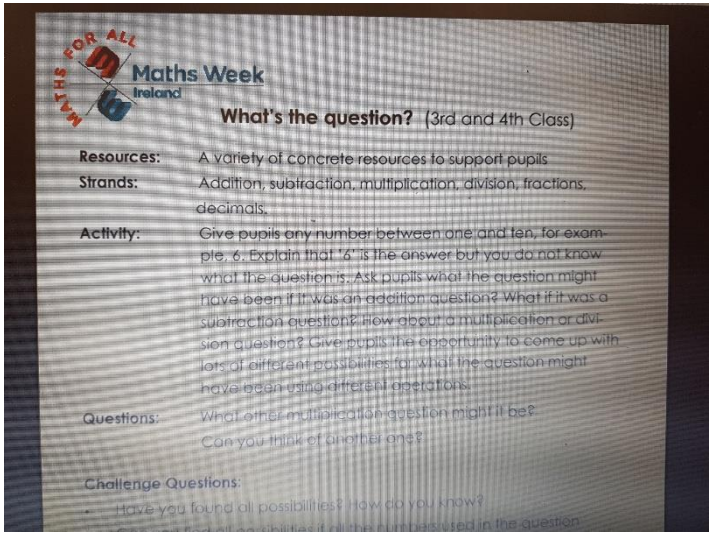
1st and 2nd Class Resource Pack for Maths Week

This pack contains five activities that are suitable for either 1st or 2nd class pupils. The numbers in the questions may have to be adapted to suit the class and the time of year that they are completed. These five activities are suitable for use in the classroom but can be adapted for use outdoors.

Prior to completing the activities teachers should pre-plan their questions ensuring that the questions they ask will promote mathematical thinking. Examples of questions are given with each activity but the list below also shows some question stems:

- Explain how you...
- What would happen if I changed this number...
- Is there another way you could do it? Show me.
- If you did it again what would you do differently/keep the same?
- Draw it.

One of the main emphasis of these activities should be on language and allowing pupils to talk about what they are doing using the correct mathematical vocabulary. The teacher needs to lead by example by always modelling the correct language and reason their own mathematical thoughts out loud.



MATHS FOR ALL

Maths Week Ireland

What's the question? (3rd and 4th Class)

Resources: A variety of concrete resources to support pupils

Strands: Addition, subtraction, multiplication, division, fractions, decimals.

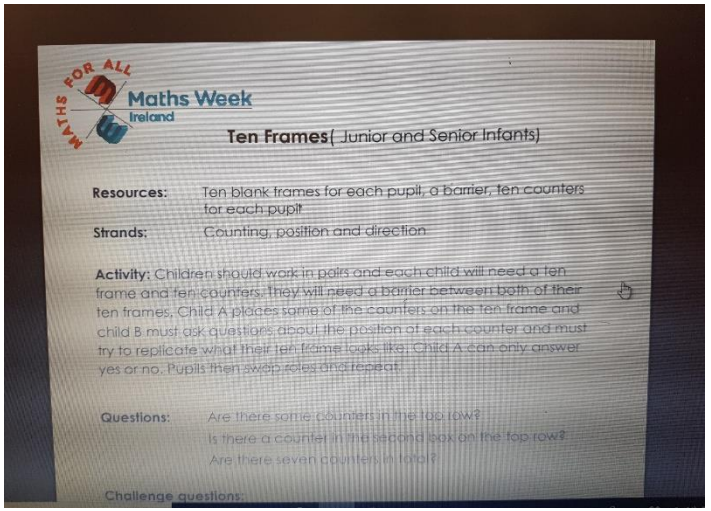
Activity: Give pupils any number between one and ten, for example, 6. Explain that "6" is the answer but you do not know what the question is. Ask pupils what the question might have been if it was an addition question? What if it was a subtraction question? How about a multiplication or division question? Give pupils the opportunity to come up with lots of different possibilities for what the question might have been using different operations.

Questions: What other multiplication question might it be?

Can you think of another one?

Challenge Questions:

- Have you found all possibilities? How do you know?



MATHS FOR ALL

Maths Week Ireland

Ten Frames (Junior and Senior Infants)

Resources: Ten blank frames for each pupil, a barrier, ten counters for each pupil

Strands: Counting, position and direction

Activity: Children should work in pairs and each child will need a ten frame and ten counters. They will need a barrier between both of their ten frames. Child A places some of the counters on the ten frame and child B must ask questions about the position of each counter and must try to replicate what their ten frame looks like. Child A can only answer yes or no. Pupils then swap roles and repeat.

Questions: Are there some counters in the top row?

Is there a counter in the second box on the top row?

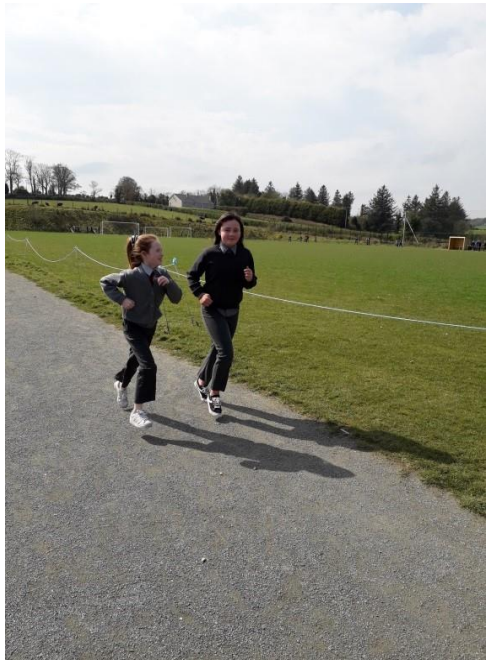
Are there seven counters in total?

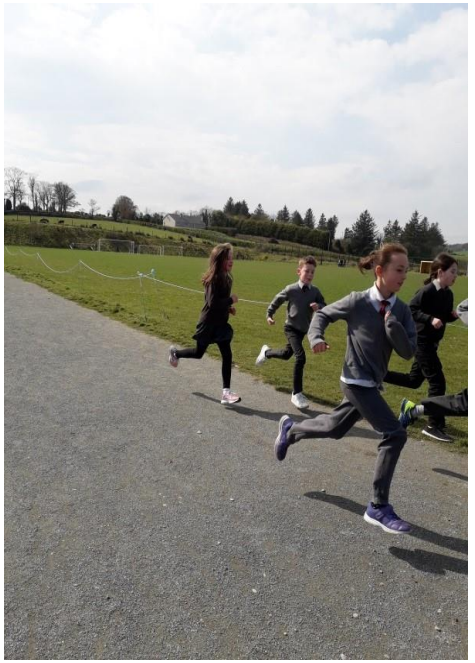
Challenge questions:

Step 4 – Maths

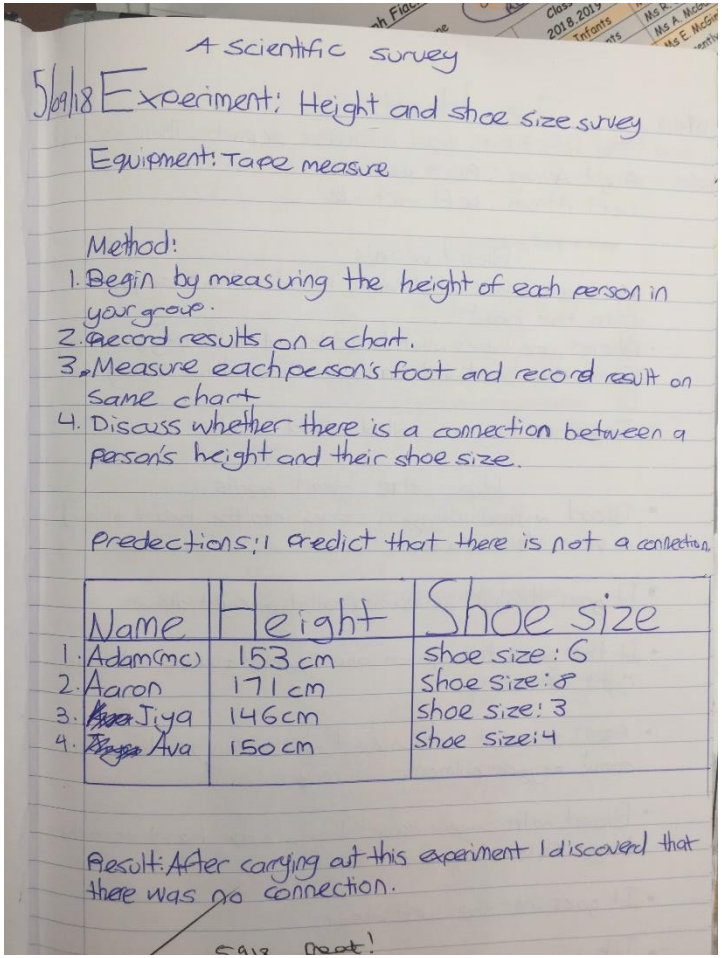
3rd Class run their First Marathon
42 Kilometres

Since September 2018, 3rd Class have been running one kilometre a day. When they started off in September, some found it really hard to even walk around the track once. Each week, they got better and they eventually ran their first marathon in April 2019 reaching 42 kilometres.





Height and Shoe size Survey and Graph Rang a 6



A scientific survey

5/09/18 Experiment: Height and shoe size survey

Equipment: Tape measure

Method:

1. Begin by measuring the height of each person in your group.
2. Record results on a chart.
3. Measure each person's foot and record result on same chart
4. Discuss whether there is a connection between a person's height and their shoe size.

Predections: I predict that there is not a connection

	Name	Height	Shoe size
1.	Adam(mc)	153 cm	shoe size: 6
2.	Aaron	171 cm	shoe size: 8
3.	Jiya	146cm	shoe size: 3
4.	Ava	150 cm	shoe size: 4

Result: After carrying out this experiment I discovered that there was no connection.

Great!

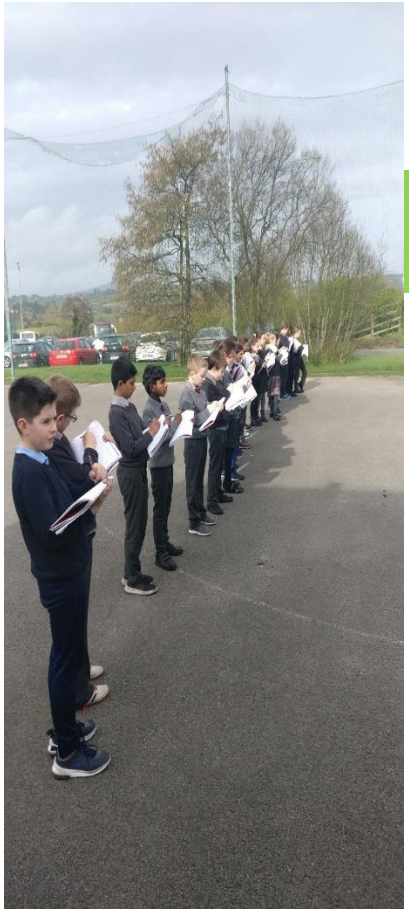
link– Science – Living Things

Step 4 – Maths

3rd Class observe and tally the volume of traffic passing the school

1. In your class group, carry out ... your school. (Warning: Roads are dangerous. You will need an adult with you.)

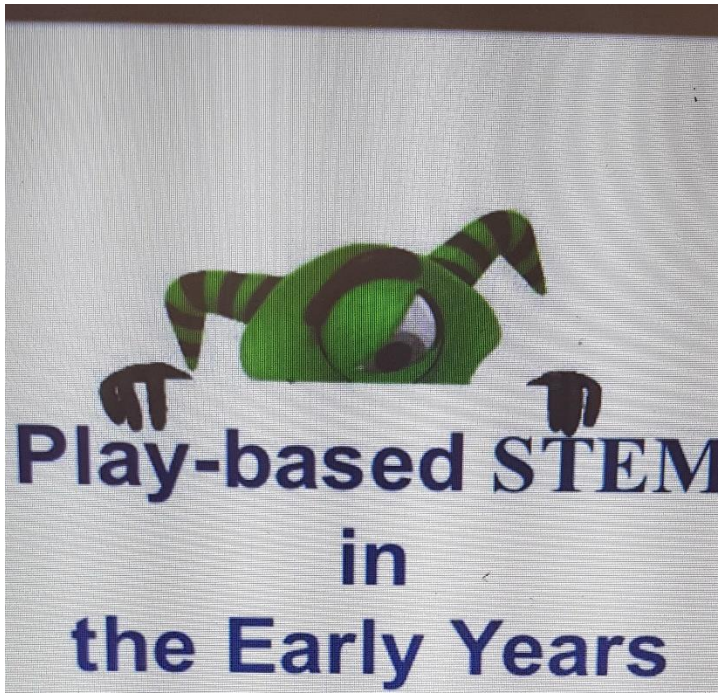
Questions	Answers
Name of road	N36
Date	8/03/19
Time	2.45
Estimate width of road	5m
What is the road made of?	tar
Is there a junction nearby?	Yes
What traffic signs are nearby?	
Before your survey, estimate how many vehicles will pass in 10 minutes.	100
For 10 minutes, count how many of these forms of transport pass your school. – Cars – Lorries – Vans – Buses – Motorbikes – Cyclists	
What is the total number of vehicles that passed in the 10 minutes?	180
Compare how close your estimate was to the actual total.	

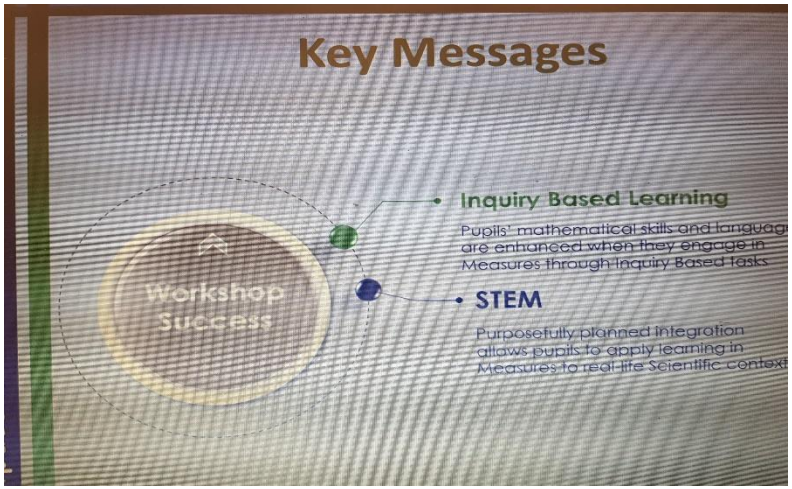


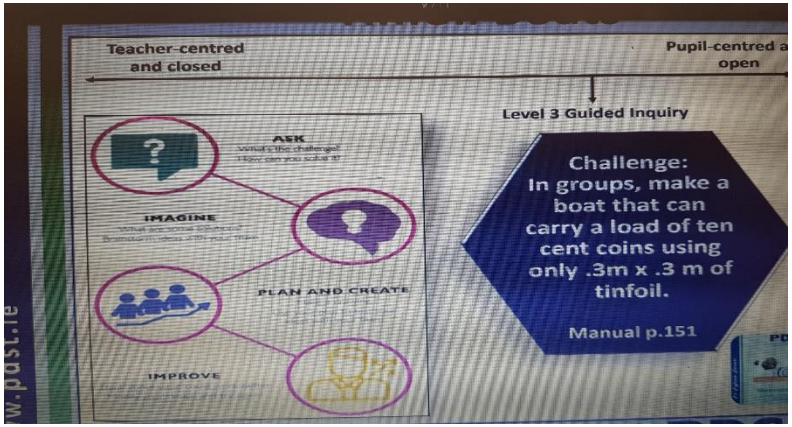
Step 4 – Maths

PDST Maths-Stem Staff Training Day

Promoting the use of STEM for measurements in Maths







Step 4 – Maths

2 Members of staff attend CPD For STEM

NATIONAL STEM LEARNING CENTRE

STEM Learning is the largest provider of education and careers support in science, technology, engineering and mathematics(**STEM**).

Courses give **teachers**, technicians and volunteers the ability to take professional development into their own hands and learn wherever and whenever suits their busy schedule.

STEM
SHOW AND TELL

Step 5 – Show and Tell

5th Class Demonstrating a Lava Lamp to 3rd Class

Step 5 – Show and Tell

Showing Magic Milk Experiment

Showing Magic Milk Experiment

Step 5 – Show and Tell

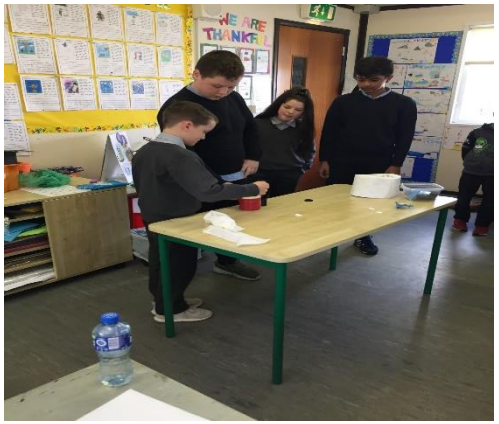
2nd Class show 3rd Class 'The Canister Rocket Experiment'

Step 5 – Show and Tell

Rang a 5 demonstrating Acids and Bases using Litmus paper to 3rd Class

Step 5 – Show and Tell

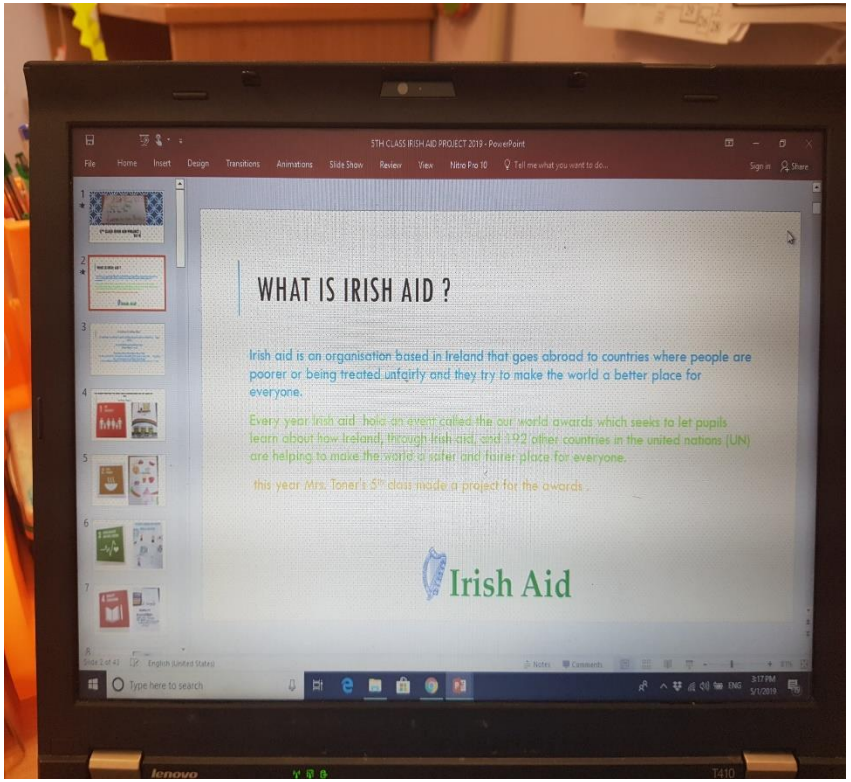
Rang a 6 demonstrating ‘The Canister Rocket’ Experiment to 2nd Class



Step 5 – Show and Tell

Rang a 6 demonstrating ‘The Canister Rocket’ Experiment to 6th Class

Rang a 5 – Showing the Irish Aid Powerpoint



Step 5 – Show and Tell

5th Class pupils presenting and explaining their Irish Aid Award Project on Environment & Sustainability to the school