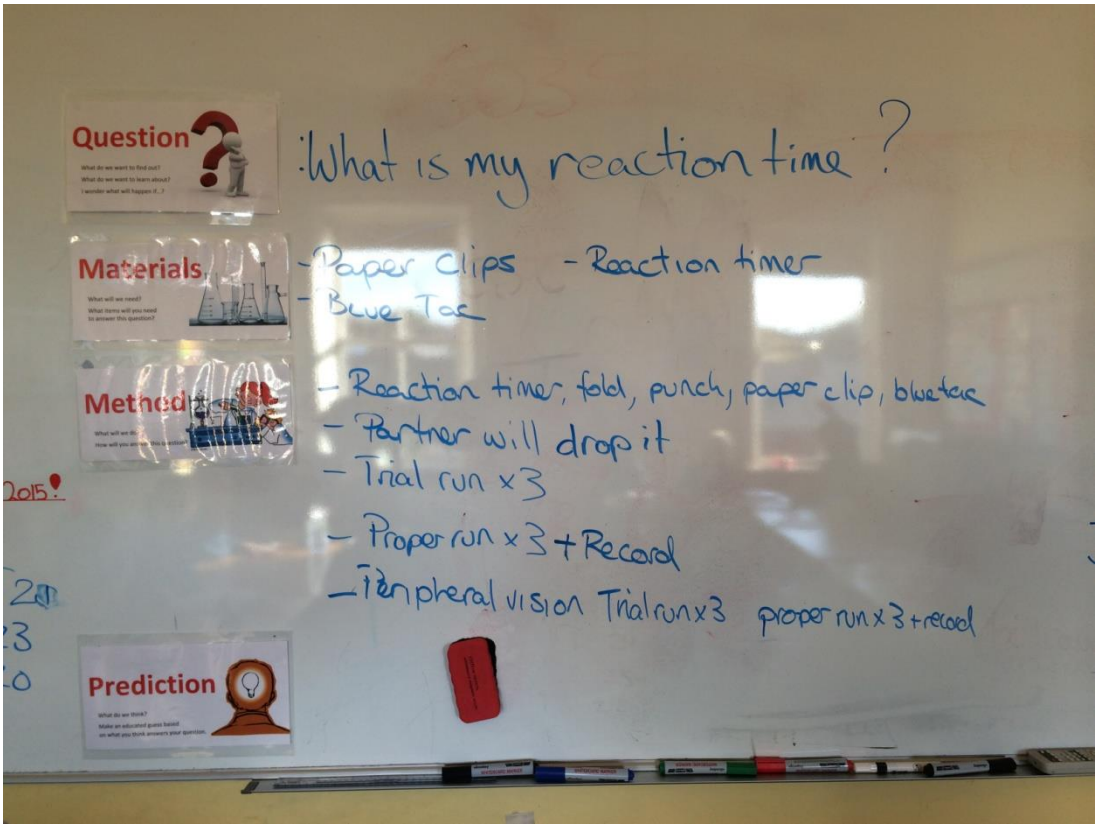
Step 1 – Science

Hands-on Science Investigation Number 1
Living Things

Third Class investigated what would be the correct conditions for seeds to germinate

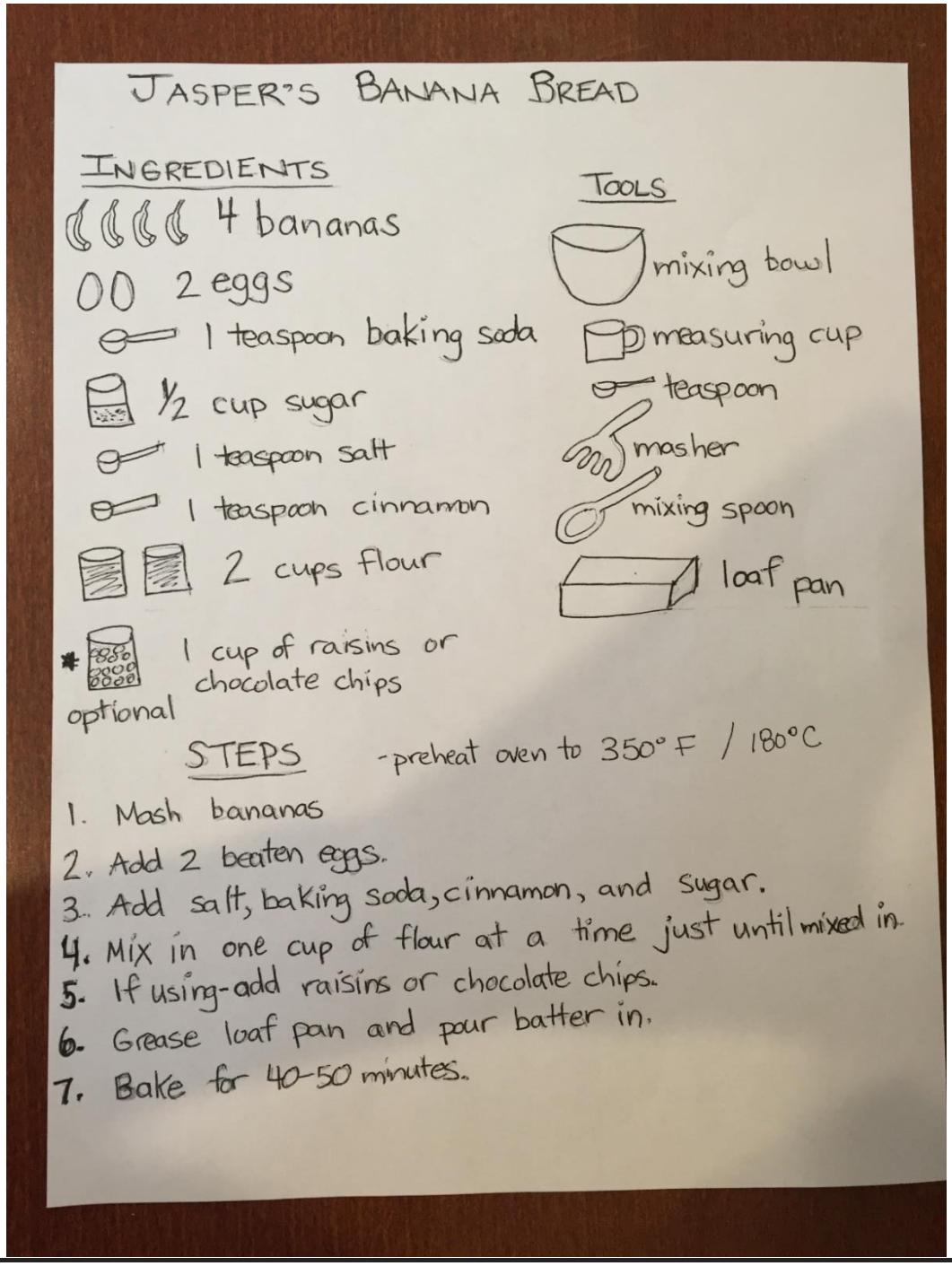
Hands-on Science Investigation Number 2
Energy and Forces

Fourth class investigated the effect gravity has on falling objects. They also investigated how their reaction times are affected under different conditions


Question
What do we want to find out?
What do we want to learn about?
I wonder what will happen if...?
:What is my reaction time ?
Materials
What will we need?
What items will you need to answer this question?
- Paper Clips
- Reaction timer
- Blue Tac
Method
What will we do?
How will you answer this question?
- Reaction timer, fold, punch, paper clip, bluetac
- Partner will drop it
- Trial run x3
- Proper run x3 + Record
- Peripheral vision Trial run x3 proper run x3 + record
2015!
Prediction
What do we think?
Make an educated guess based on what you think answers your question.

Hands-on Science Investigation Number 3
Materials

Junior infants based banana muffins and looked at the different ingredients and materials needed to make the best muffin.



JASPER'S BANANA BREAD

INGREDIENTS

- 4 bananas
- 2 eggs
- 1 teaspoon baking soda
- ½ cup sugar
- 1 teaspoon salt
- 1 teaspoon cinnamon
- 2 cups flour
- * 1 cup of raisins or chocolate chips

optional

TOOLS

- mixing bowl
- measuring cup
- teaspoon
- masher
- mixing spoon
- loaf pan

STEPS

-preheat oven to 350° F / 180° C

1. Mash bananas
2. Add 2 beaten eggs.
3. Add salt, baking soda, cinnamon, and sugar.
4. Mix in one cup of flour at a time just until mixed in.
5. If using-add raisins or chocolate chips.
6. Grease loaf pan and pour batter in.
7. Bake for 40-50 minutes.

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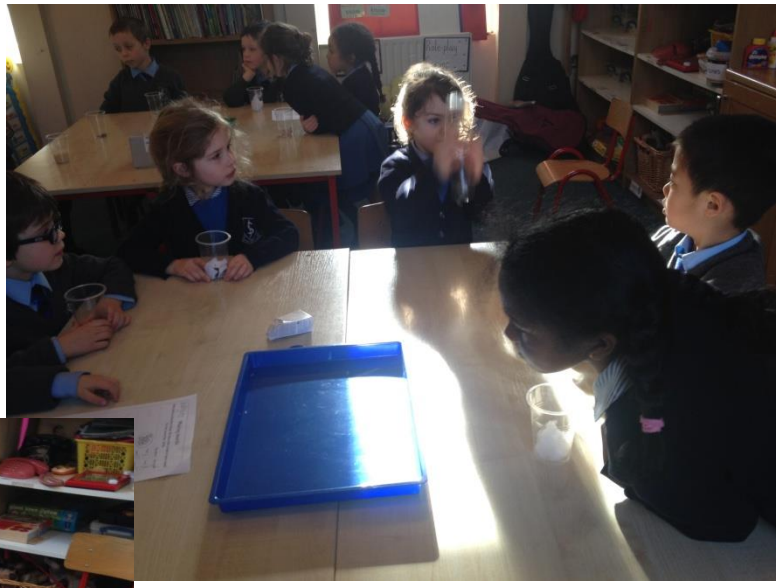
Hands-on Science Investigation Number 4
Environmental Awareness and Care

First class was busy looking after their garden bed. During Autumn First class planted "winter tares" or what is more commonly known as "green manure." These plants naturally replace nutrients into the soil from the air. When fully grown the boys and girls dug the green manure into the soil and covered the bed with polythene and allowed the worms to do their work. A natural way to fertilise the soil!

Hands-on Science Investigation Number 5

Materials

Senior infants tested each material and recorded which ones were loud, and which were quiet. We tested coins, rice, rubber bands, cotton wool, paper and paper clips.



Number 6 Living Things

Third class and fifth class planted potatoes. They investigated which growing medium would produce the greatest yield of potatoes and how to protect the potatoes against frost.

Visiting a Discover Centre

During Science week, Second class boys investigated how chemicals and toxic substances can leech into the soil from landfill sites. This information is especially useful as we are applying for our Green School flag in Litter and Waste. This raised significant awareness in the children about the effect litter and waste can have on the environment and our water.

Hosted Sciecne Week Event November 2015

This was the whole school plan for Science Week that each class followed. We also had fun and interactive assemblies each morning.

Science Week 2.0: Design Your Future

Theme: The School Garden

Junior and Senior Infants:

Design a bird house/bird table/bird bath

1st and 2nd Class

Design a minibeast hotel

3rd and 4th Class

Design a hibernaculum (hibernation box) for a hedgehog

5th and 6th Class

Design your ideal school garden

Focus on:

Whole class and paired discussion

Materials

Encourage creativity and imagination

Drawing and sketching (Birds Eye and profiles)

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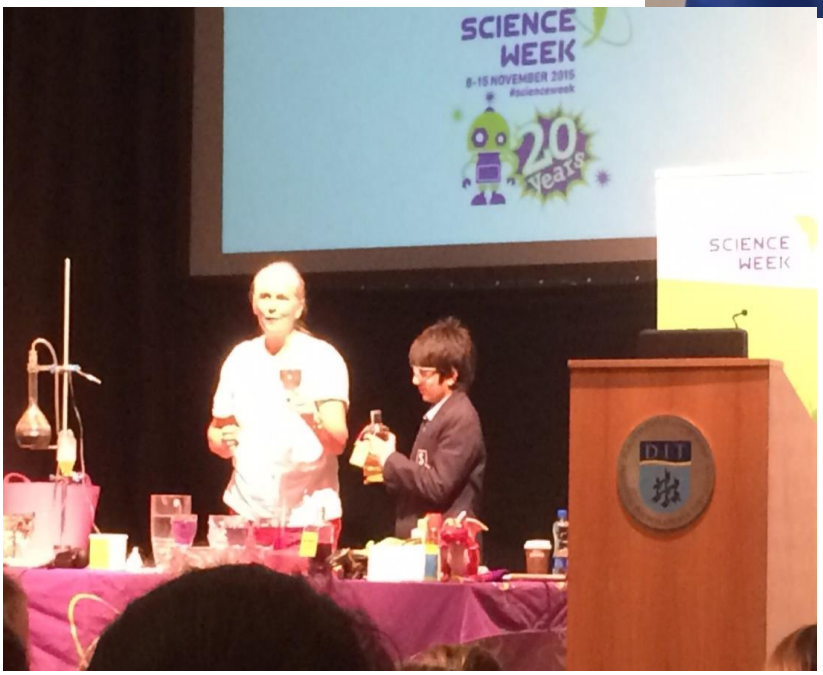
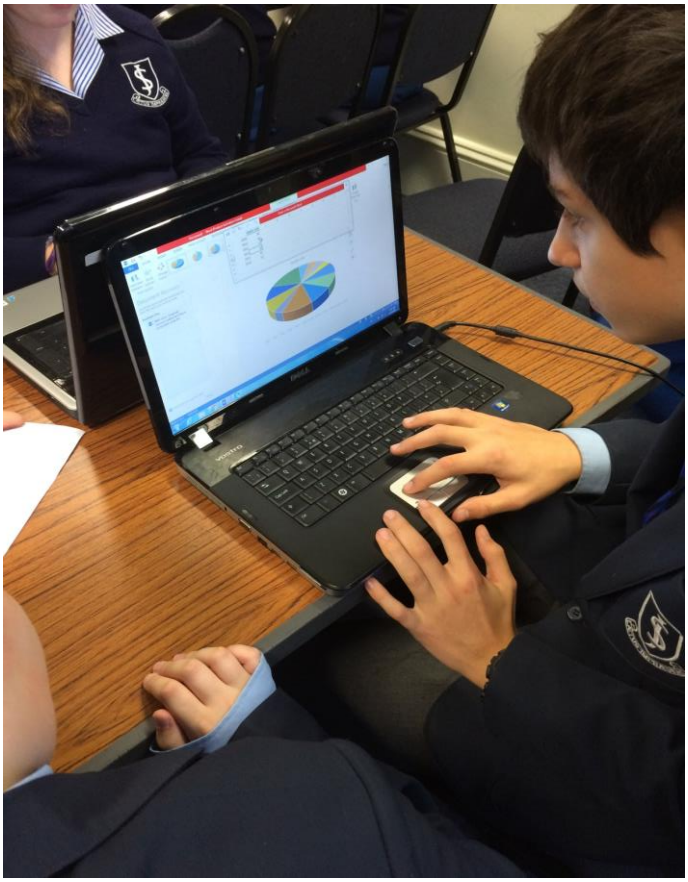
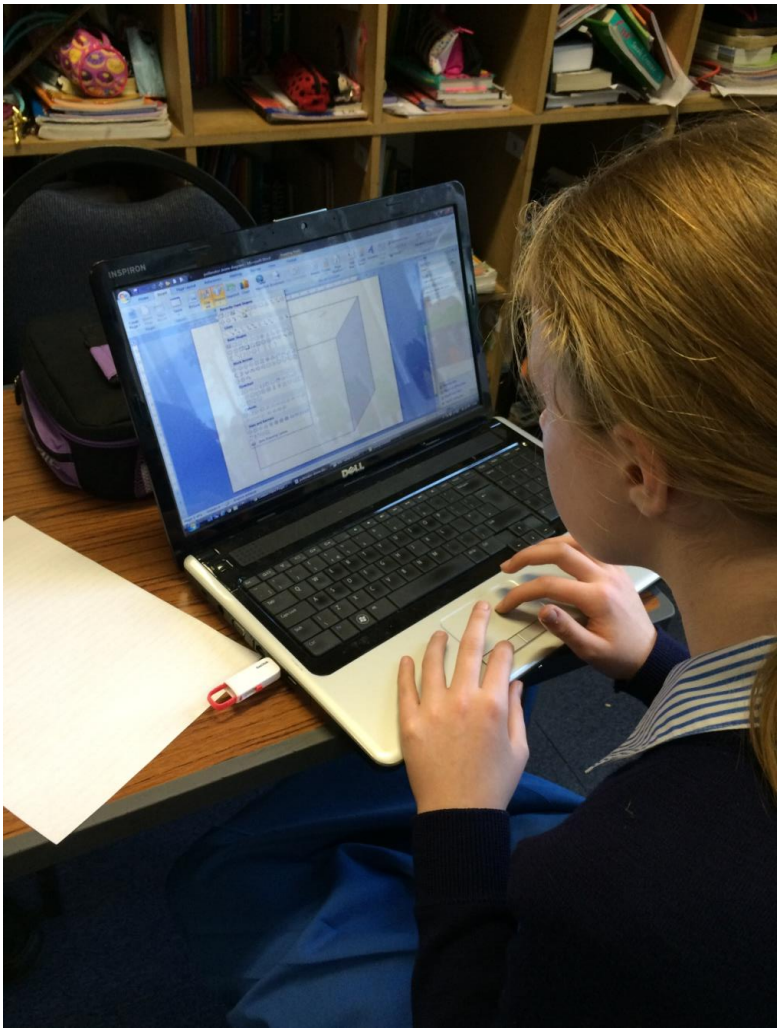


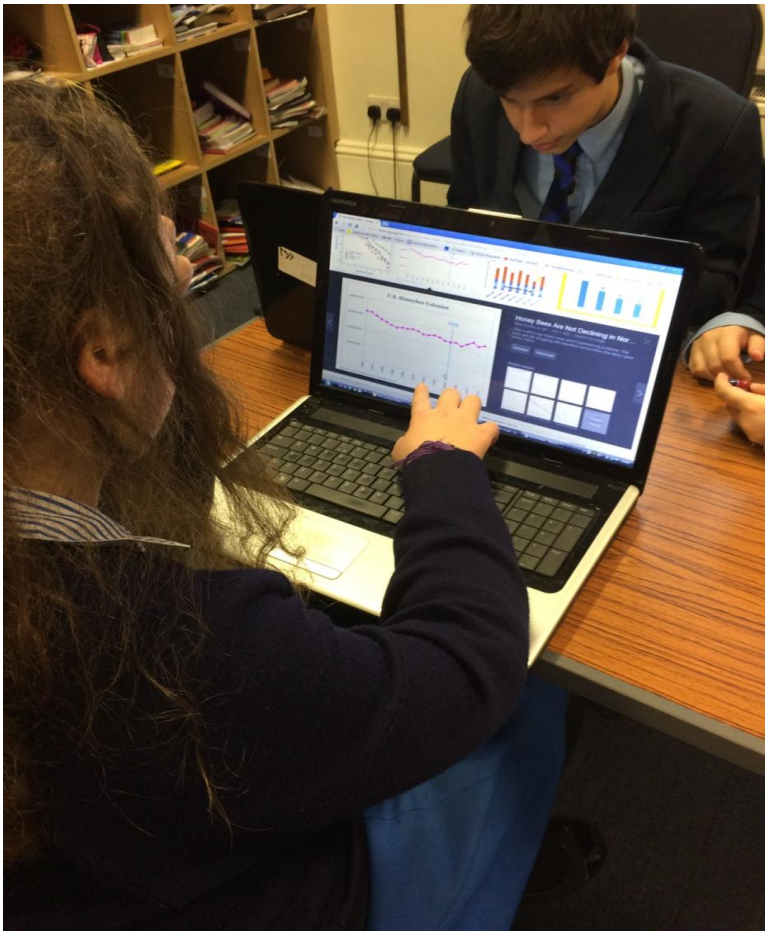
Step 2 – Technology

Using ICT to access material, record and analyse data

Sixth class boys and girls spent significant amounts of time researching and collating data to present at the Primary Science Fair in the RDS. Their project investigated causes and effects of the global colony collapse disorder of the honey bee. As part of their project, a number of students designed a game using a basic computer programme, to raise awareness of the depleting bee colony population.

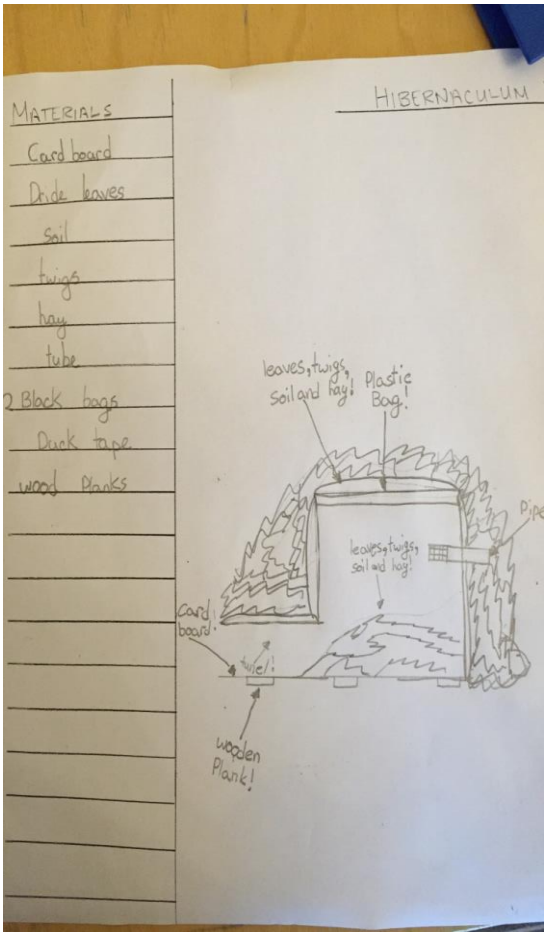


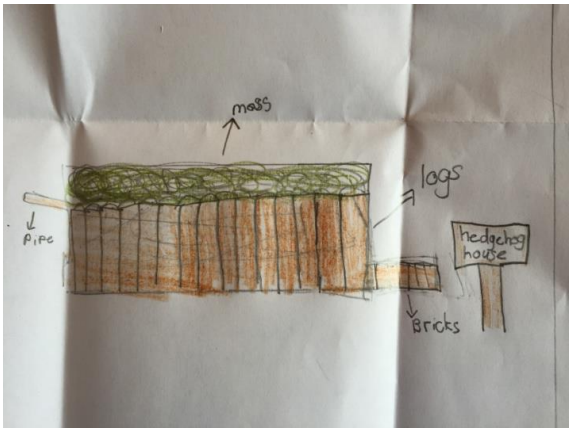

INSPIRON
DELL

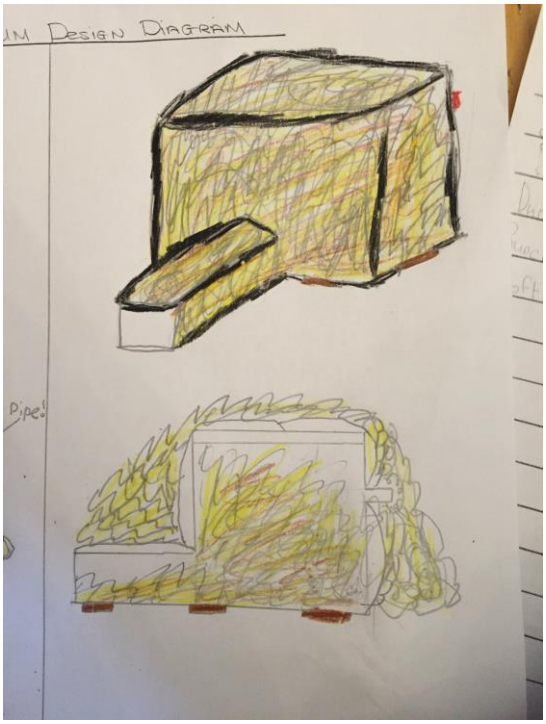


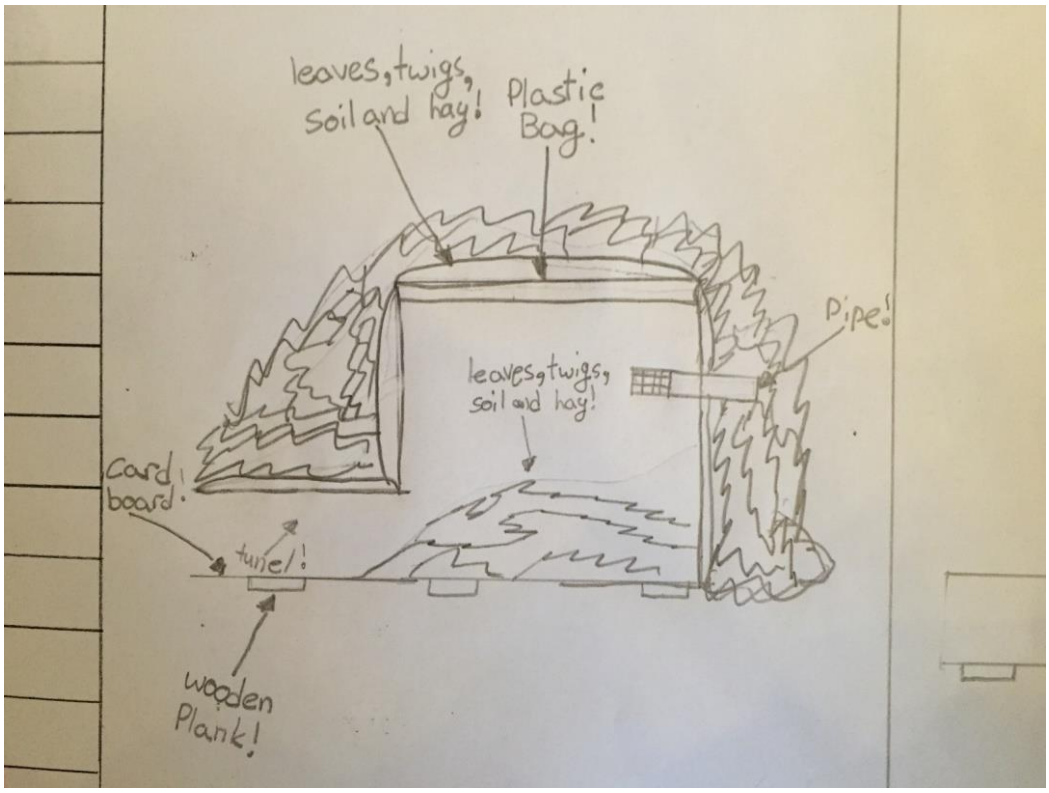
Step 3 – Engineering

All classes participated in design and make activities for Science week. Each class was responsible for designing a different aspect of the school garden. Below are some examples from different classes on their design and make work (see Science Week School Plan on Design your future in section 1 for details on what each class had to do).








leaves, twigs, soil and hay!
Plastic Bag!
Pipe!
leaves, twigs, soil and hay!
card board!
tunel!
wooden Plank!

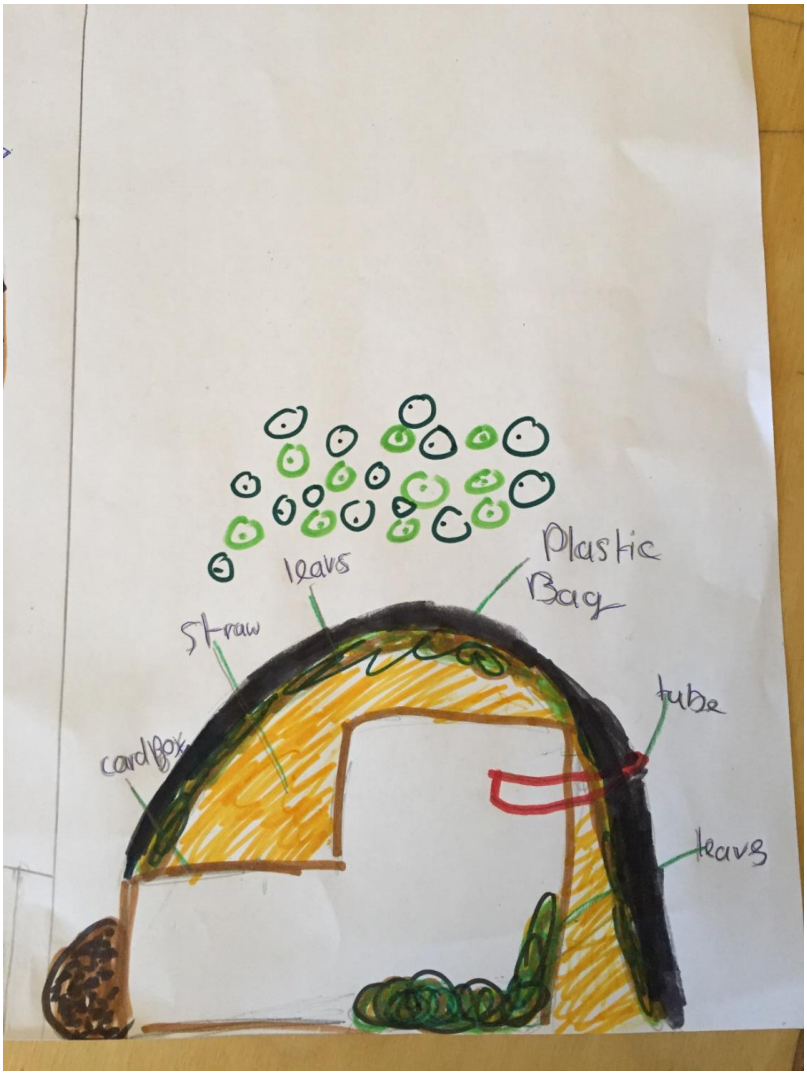

leavs
Plastic Bag
straw
tube
cardbox
leavs

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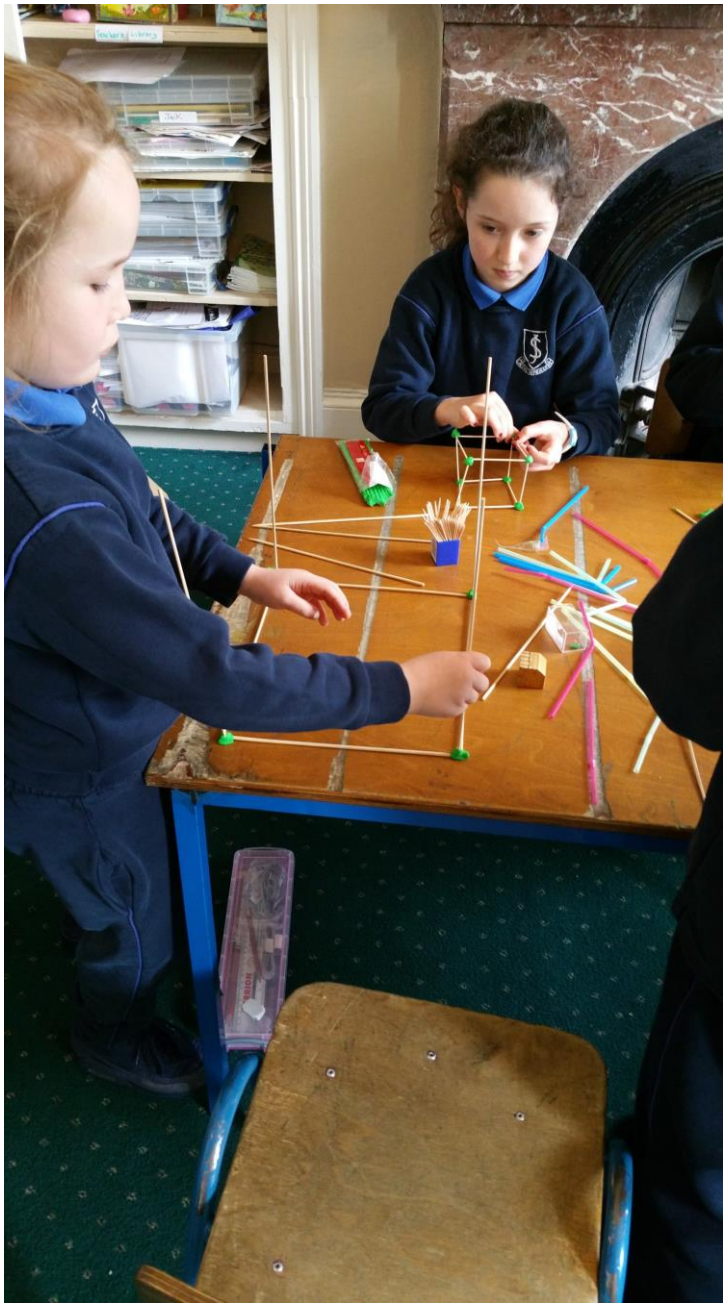
table
Dictionary

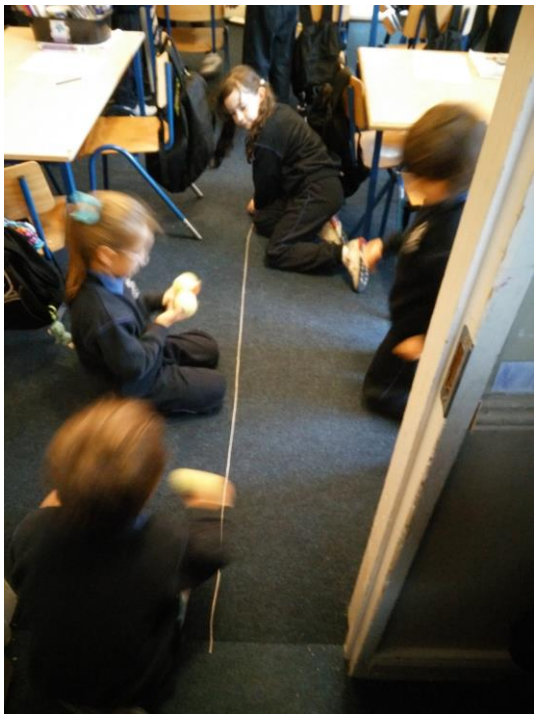


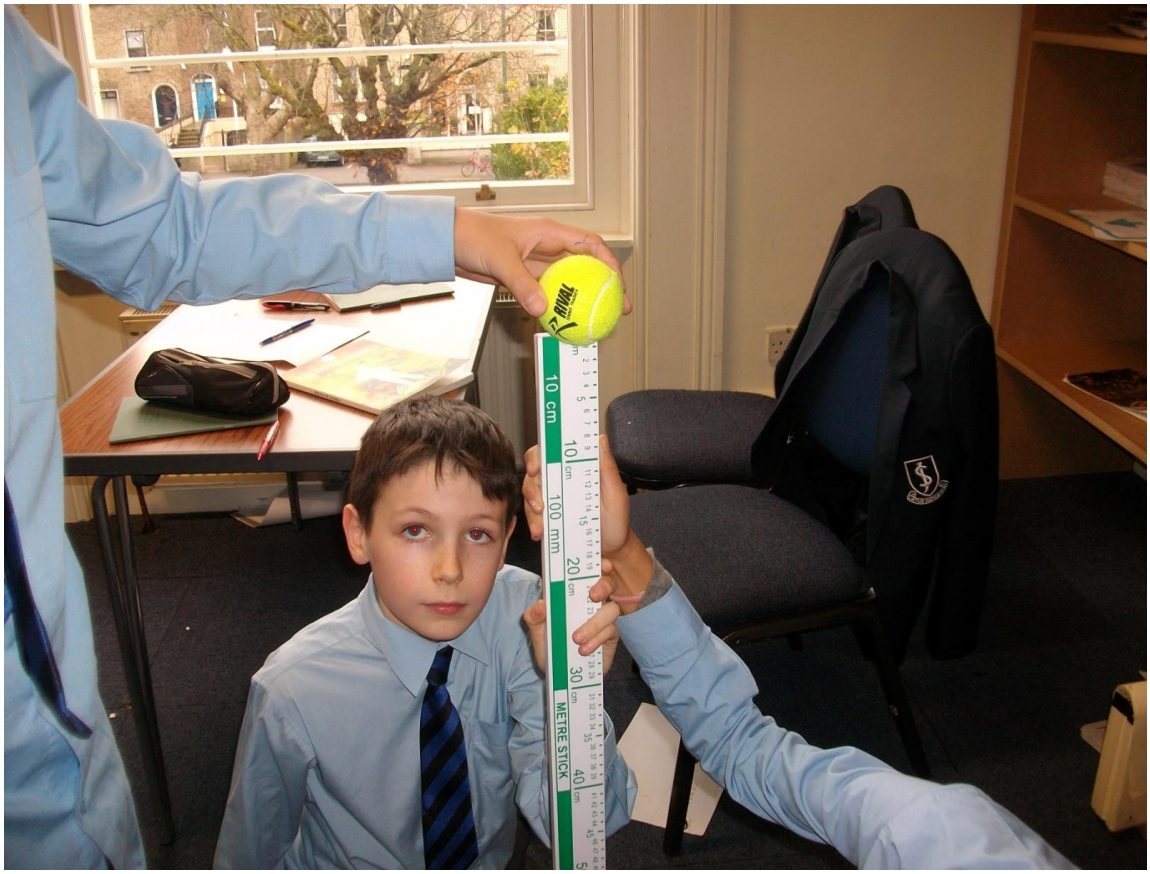
Step 4 – Maths

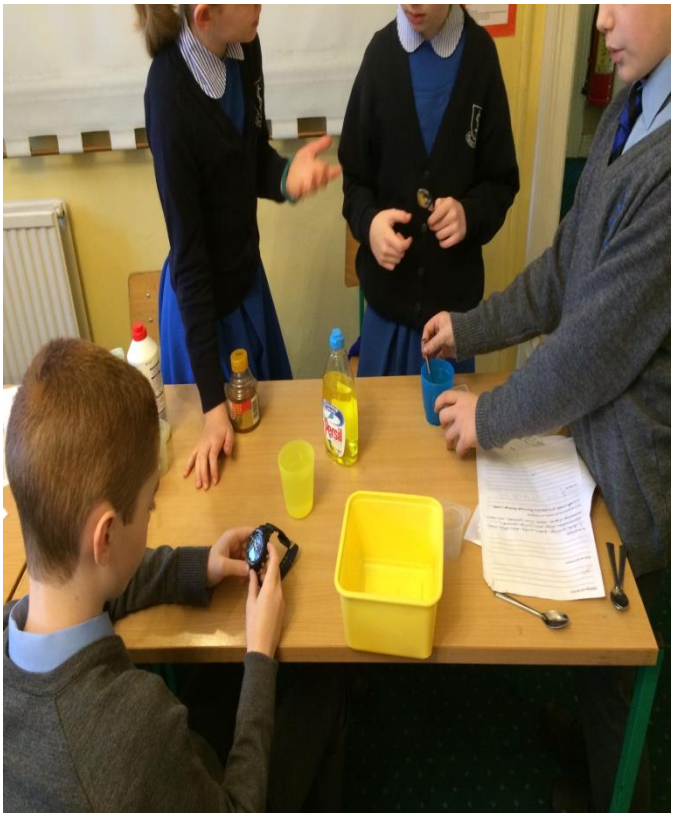
Students from all class levels used their maths skills to investigate a variety of open ended questions.

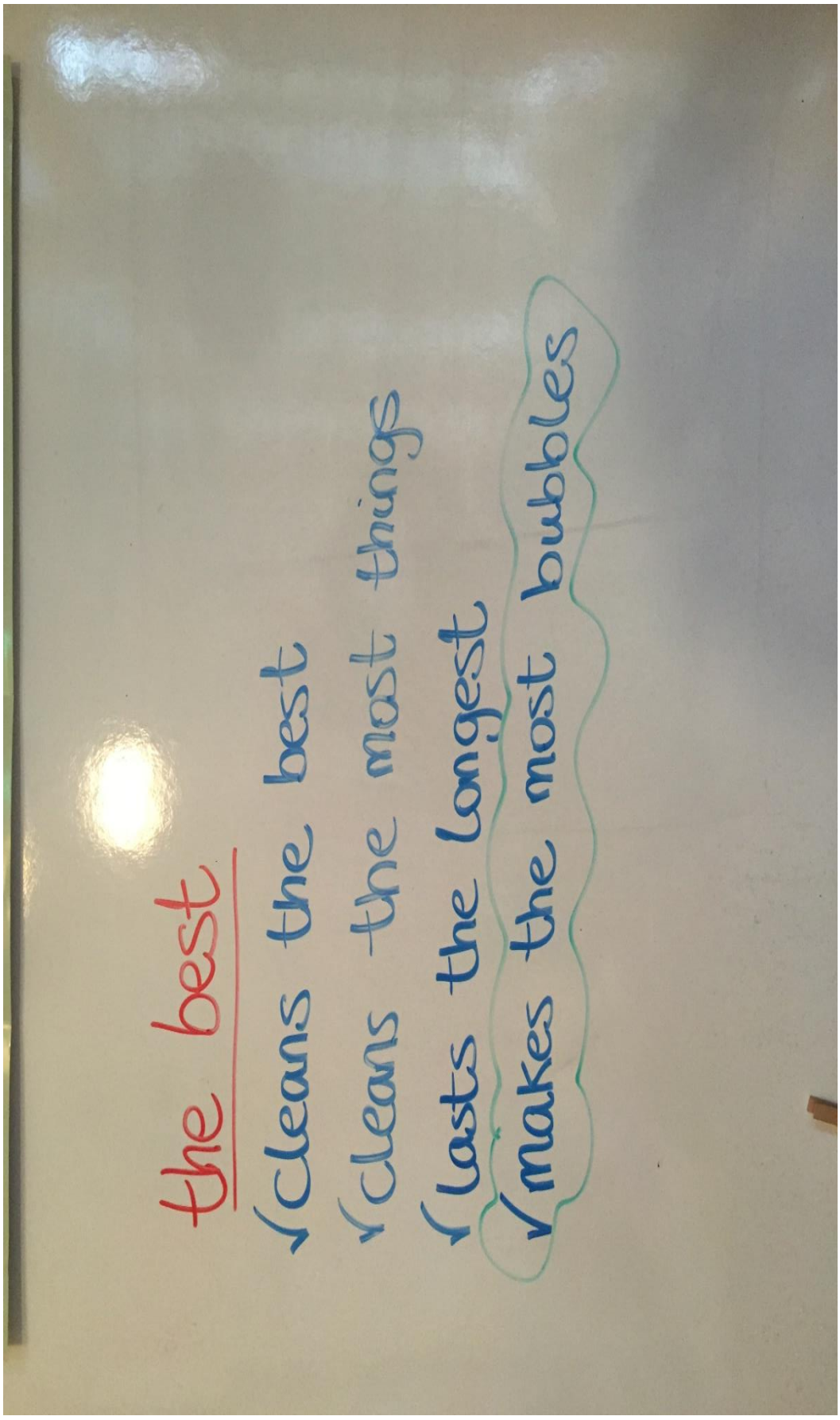
1. How does temperature affect a tennis ball?
2. What is the best washing up liquid?
3. What is the best paper towel?

All children were allowed to devise their own investigation method and measured results using length, weight, time and number.



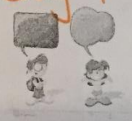

10 cm
100 mm
METRE STICK




the best
✓cleans the best
✓cleans the most things
✓lasts the longest
✓makes the most bubbles

What did we observe?

- Very quickly the water in the cup disappeared and we had a full cup of bubbles.
- The more we blew the more bubbles came out!
- The bubbles went up a bit but then they came down + spread out on the tray + table!



What did we find out?

- ★ The Orange and Yellow Washing Up Liquids were the BEST at making bubbles
- ★ The bubbles made by the Orange lasted the longest!

Investigation Sheet

What do we want to find out?

Which washing up liquid makes the most bubbles?

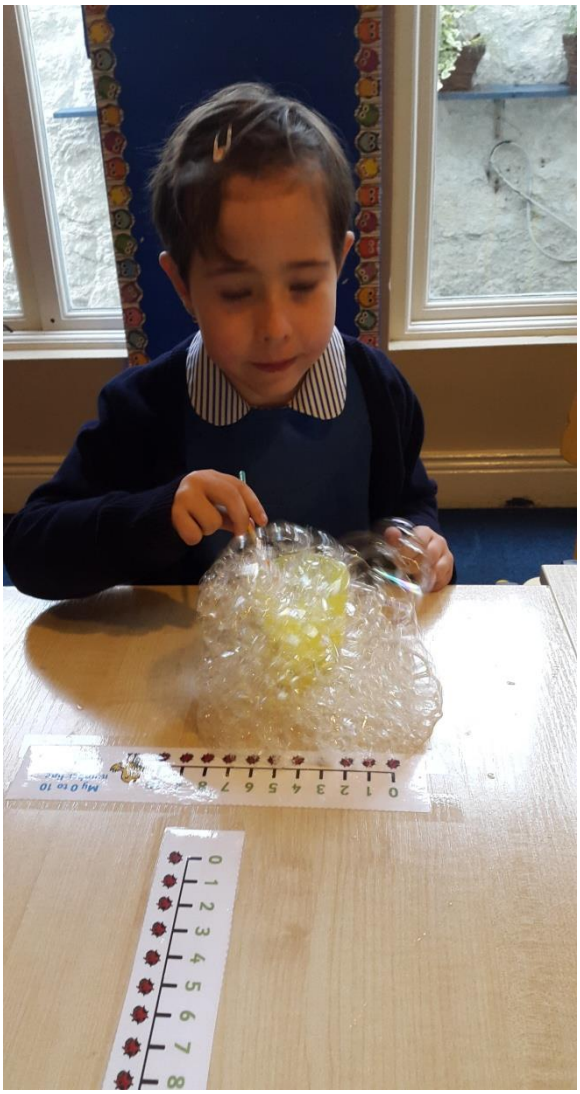
What are we going to do?

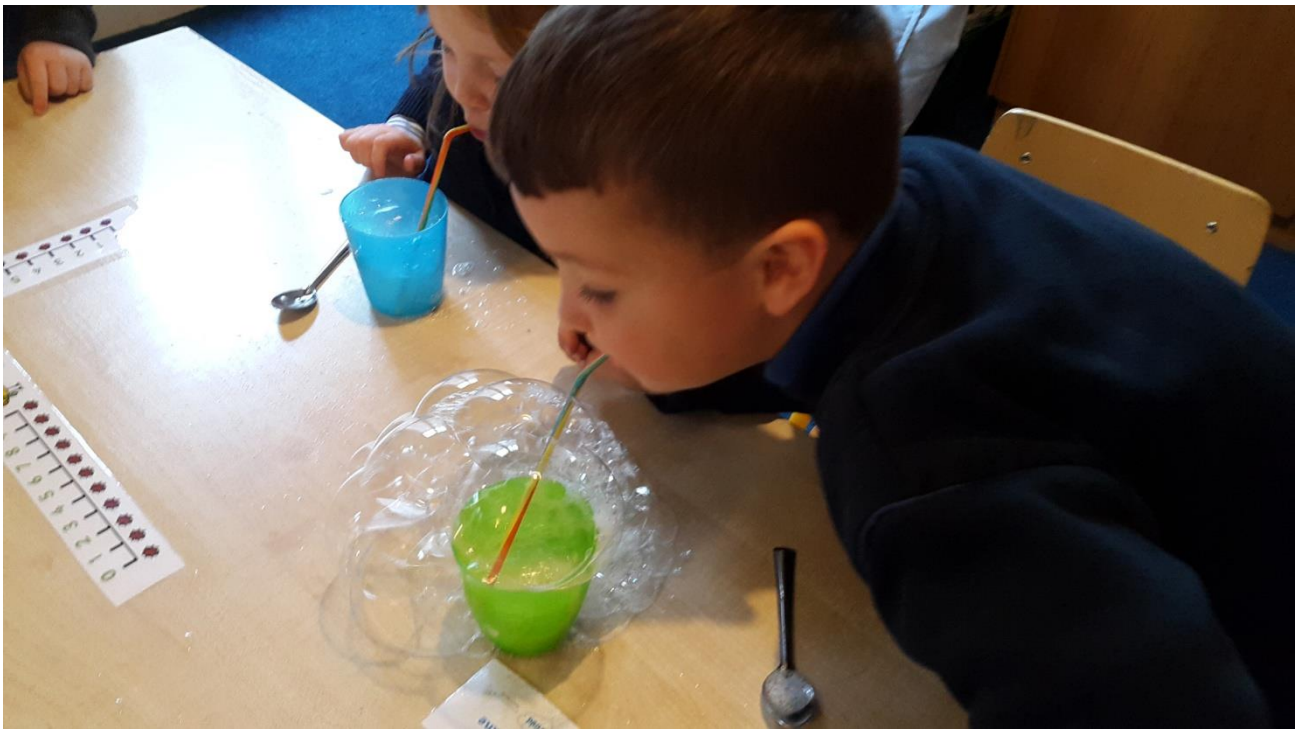
Test it out by blowing bubbles through a straw into a cup of water and washing up liquid. (For the same amount of time)

What do we think will happen?

- The bubbles will go up and up like a tower and then fall like a volcano.
- The bubbles will POP!
- We are going to get wet! ☺


FAIRY





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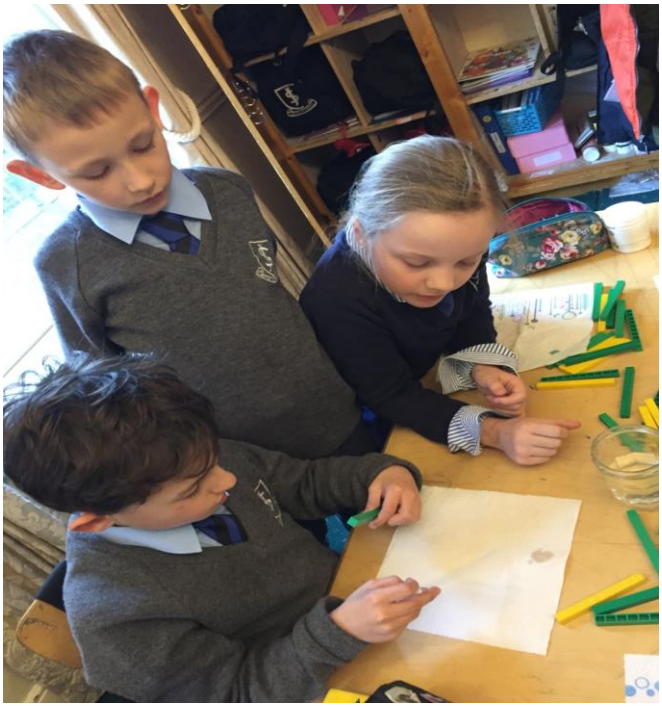
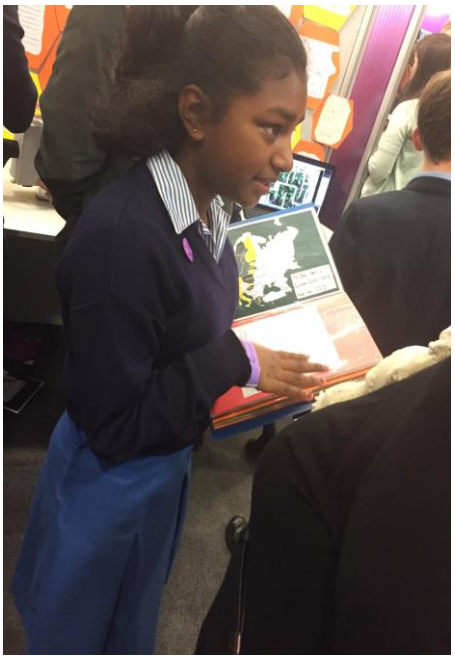
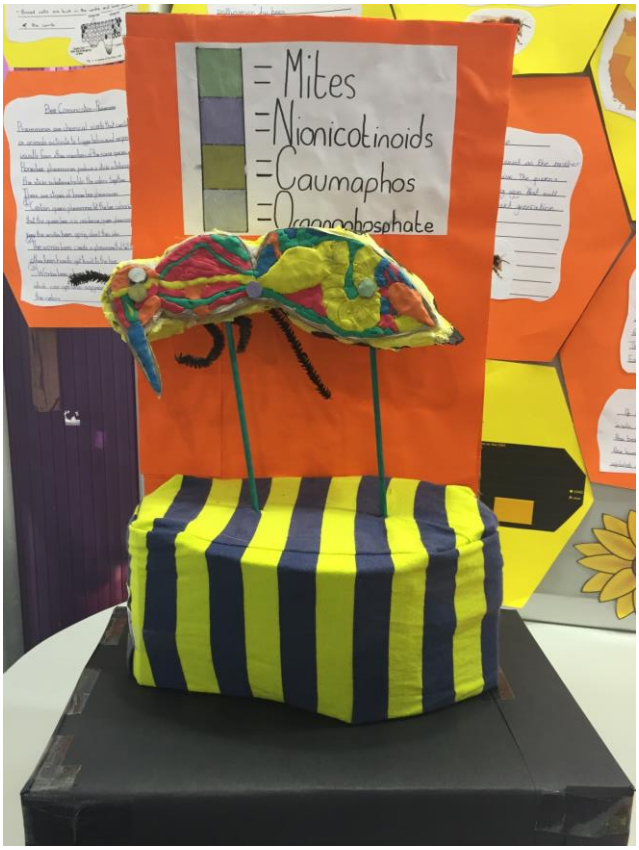


Step 5 STEM Showcase

Students participated in the RDS Primary Science Fair in January 2016. They also presented their project at school assembly to all classes from Junior Infants to 5th class.

6th Class girls and boys undertook the mammoth task of trying to solve the mysterious case of the vanishing honey bee. The phenomenon known as CCD or Colony Collapse Disorder affects Europe, USA and Asia. Bees are crucial for the growth of almost all farmed crops and as a result, their diminishing numbers are causing severe problems in the agriculture industry. The children researched, planned and built their project over the course of four months and displayed their findings in the RDS Young Scientist Exhibition with posters, laptops and physical models. The children felt great pride in their achievements in presenting to both the judges and the public in general. Well done 6th Class!




=Mites
=Nionicotinoids
=Caumaphos


PRIMARY SCIENCE FAIR
DISORDER (CCD)


DISORDER (CCD) AND HOW CAN WE OVERCOME IT?
17