

Strand: Living things

Strand unit: Plants and animals

An experiment to try to establish the most effective natural slug repellent

Trigger: the slugs have been nibbling on our lettuce and other salad leaves that we have been growing in our school tunnel.

In this investigation, the Senior Room have planted lettuce seeds in each hoop.

- The hoop at the back left has coffee granules around it.
- The back right is a hoop made out of copper.
- The hoop on the left in the middle has seaweed around it.
- The hoop on the right in the middle has oranges around it which serve as slug traps.
- The hoop on the left at the front has Vaseline on it.
- The hoop on the right at the front has egg shells around it.



The Results: So far, our lettuce has been a bit too slow to grow but we will review it again during our last week of school.



Strand: Energy and Forces

Strand unit: Forces

Investigating Which Items Float

An investigation carried out by the Junior Room

In this investigation, the Junior Room decided to test out eight different items to see if they would float or sink. These included an orange, a feather, a coin, a tennis ball, a pencil, a key, a plastic bottle and a metal teaspoon.

Here's how we did our experiment:

Teacher gave us a basin of water and the different items. We talked about how whether an item floats or sinks depends on its density. We took the example of a boat. We discussed how a boat is heavy but hollow so it can float.



First, teacher asked us to guess which items we thought would float and which items we thought would sink. We looked at each item carefully and we stood up if we thought it would float and we sat down if we thought it would sink.

In our turn, we put each item in the water and then observed what happened next.

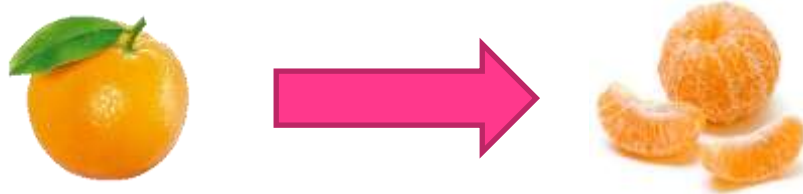


We came to the conclusion that things made of metal usually sink and things made of wood usually float.



Making an Object Sink

We took the orange from the previous experiment and discussed how we could make it sink to the bottom. One suggestion was that you could tie something heavy to it. We eventually got the idea to peel the orange and put it in the basin of water.



...And here are our results! The orange peel floats but the orange segments sink. We also tried it with a banana and the peeled banana sank but the banana skin floated.





Strand: Materials

Strand unit: Properties and Characteristics of Materials

By: the Junior Classes

Experiment: To determine if materials are waterproof

In this experiment, the Junior Room decided to test six different materials to see if they were waterproof. These included a plastic bag, a newspaper, tinfoil, cotton wool, a plastic glove and a cloth.

Here's how we did our experiment:

Teacher gave us a basin of water and the different materials.

First, teacher asked us to guess which items we thought would be waterproof. We did this item by item and we stood up if we thought it would be waterproof and we sat down if we thought it wouldn't be waterproof.

In our turn, we tested each item by wrapping it around our hands and holding it in the water for a count of 20 seconds. We then examined our hands to see if they were wet or dry.



The Results!!

If the item was **waterproof**, we placed it on one side of the basin of water and if it wasn't, we put it on the other side. It was so much fun!!



We discovered the following: the newspaper, cotton wool and the cloth were not waterproof (they absorbed the water) and the plastic bag, tinfoil and the plastic glove were **waterproof**.

Finally, we discussed our results and compared them to our predictions.



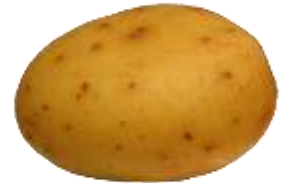
Strand: Environmental awareness and care

Caring for my locality

Experiment: To find the best soil for growing potatoes

In this experiment, the Senior Room are investigating which is the best potato growing medium.

What's happened so far...



- In the first bag, they have soil, sand and multipurpose compost.
- In the second bag, they have soil, sand and dung.
- In the third bag, they have soil, sand and homemade compost from the school grass cuttings.
- The fourth bag is the control and it has soil and sand in it.



So far, the homemade compost is looking the most productive. During the last week of school, the Senior Room will harvest the potatoes and weigh them to see which soil yielded the best crop.

CODING : Hour of Code

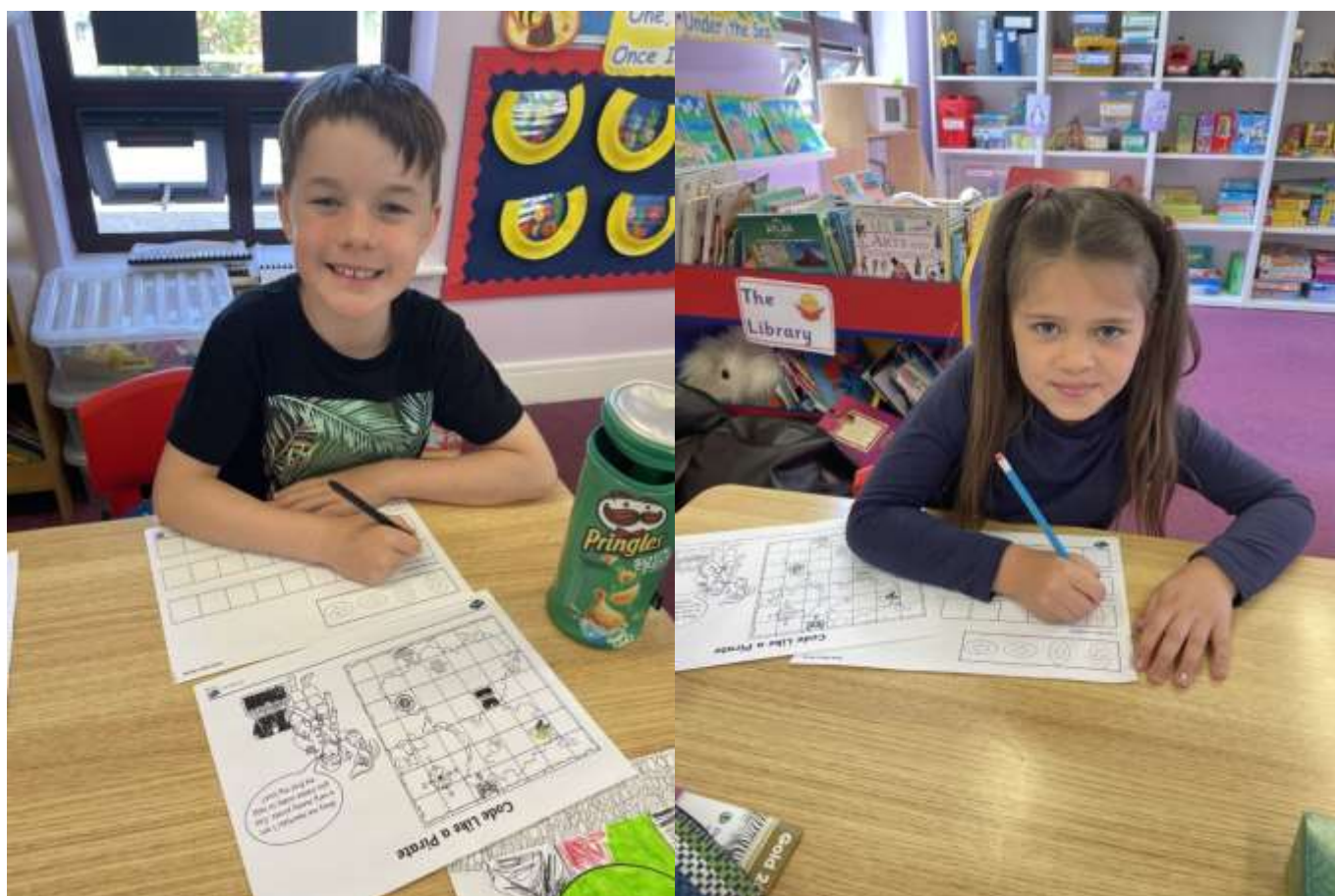
The Junior Room have been busy coding on the school laptops and iPads. Some of their favourite coding activities on the **Hour of Code** website included *Beaver Achiever*, *Beach Cleanup with Kodable* and of course, *Minecraft*.





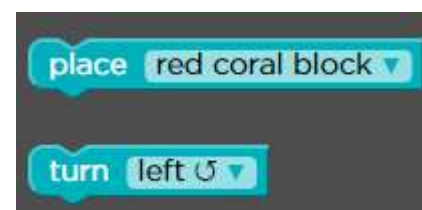
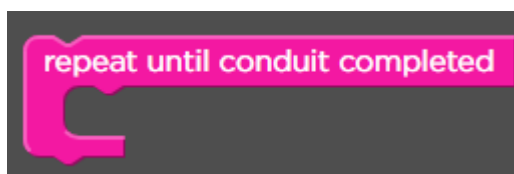
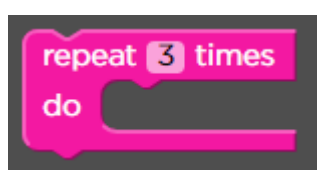
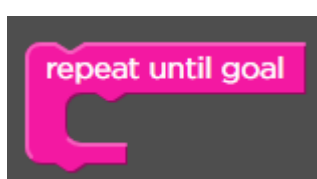
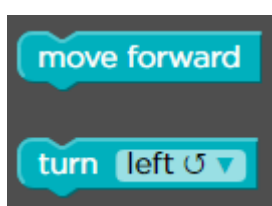
Here are some of the pupils practising their coding skills on paper...





The pupils have enjoyed solving coding puzzles presented to them. They have encountered many coding commands and used these to control their movements.

Here are some of the commands the pupils have worked with on *Minecraft*.

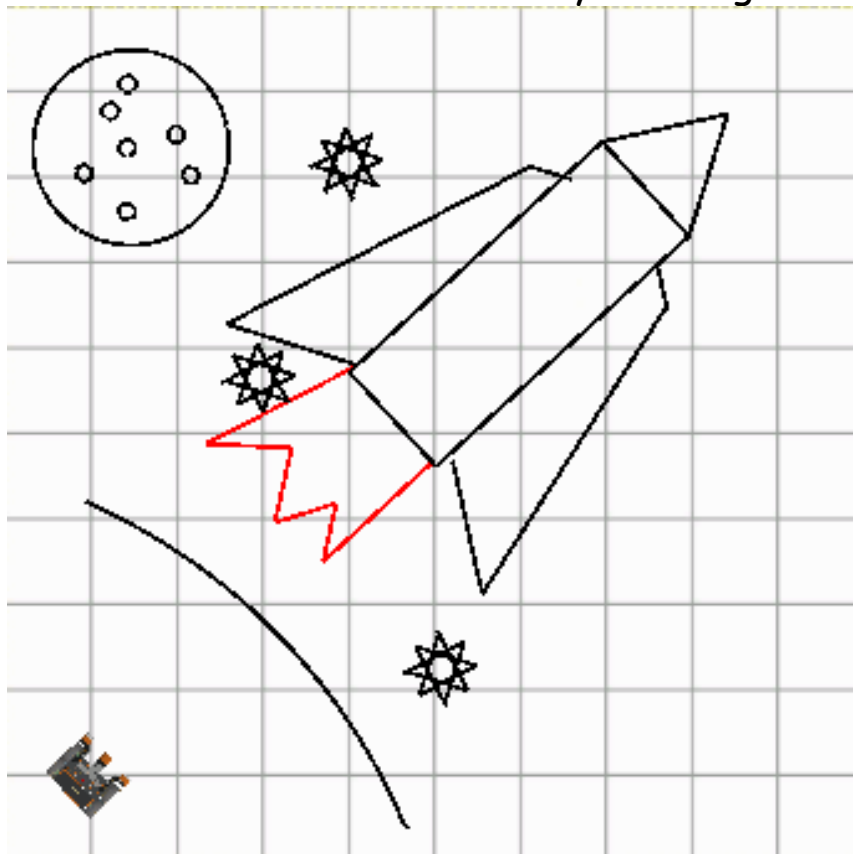


VEX ROBOT ART CHALLENGE FOR SCHOOLS



Two pupils in the Junior Room entered the VEX Robotics art competition where they had to code a piece of art by using a virtual robot with VEX VR. This was a national competition for primary and secondary students between the ages of 7 and 17 years and was run by Munster Technological University, Dundalk IT, Letterkenny IT, Waterford IT, Galway Mayo IT and Offaly County Council.

The good news is that our two pupils won a prize for their entry and here it is below. I think you'll agree that it's a pretty impressive piece of work. We watched the Winners Ceremony live on YouTube and we all cheered when their names were called out. It was very exciting!





**Robot
Art
Challenge
2021**

Winner
Jonah Canty
Davin Quin
Ballymoney NS

**Robot
Art
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2021**

Winner
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Design and Make

The pupils in the Senior Room have been very busy designing and making various projects.



Here, the pupils are using **LEGO WeDo** to build *Milo, the Science Rover*.

They went on to add a Motion Sensor to *Milo*. This allows *Milo* to move forward until it meets a sample object. It will then STOP! and make a sound.



One pupil designed and made her own **periscope**. She had to consider lines, angles and shapes when directing the path of light through the periscope.

Another pupil designed and made his very own musical instrument using glass jars and varying amounts of water.



This pupil designed and made her own anemometer for measuring wind speed.

Investigating...How... Everyday...Items...Work!

Tall Skyscrapers

The Junior Room took part in the 'tower challenge' and constructed a cube using marshmallows and half lengths of uncooked spaghetti. They worked out that they could make these cubes more stable by adding pieces of spaghetti as diagonals across each side of the cube.





Here, the Senior Room went looking around the playground through their maths eyes. Take a look at what they found.



2-D shapes



3-D shapes



Angles



Cone



Cylinder



Parallel lines



Pattern



Right angles



Sphere

Maths Trail in the Parish Hall

The Senior Room enjoyed a maths trail in the parish hall beside the school grounds. Usually, the two rooms would link up and do the trail together but that wasn't possible this year.

