Discover Primary Science Award

This year we were working towards our first primary science award. This was a whole school attempt and we really enjoyed taking part. We completed a wide range of experiments and we chose our favourites. We are very proud of our work.

Step 1 – Science

Experiment 1: Living Things

What effect does sugar have on your teeth (3rd-6th)

Materials

- 2 cups
- 2 hard boiled eggs
- Coke
- Water

Method

- 1. Put one egg in each cup.
- 2. Pour coke into one cup.
- 3. Pour water into the other cup. (Ensure you have equal amounts in each cup)
- 4. Leave for 2 days.

<u>Prediction:</u> I think that the egg shell in the coke will go brown and might crack and nothing will happen the one in the water.

Result: The egg in the coke went brown and the one in the water stayed the same.



Growing Broad beans (Junior and Senior Infants)

The Junior and Senior Infants planted broad beans. They learned all about what plants need to grow and are keeping a close eye on them every day.



Experiment 2: Materials – Making Play Dough (JI and SI)

The junior room were also experimenting with flour during their Aistear playtime and made some homemade play dough.







Experiment 3: Electricity – Circuits (3rd-6th)

In February we learned all about electricity. We learned about circuits and that electricity flows along a path called a circuit. We created simple circuits, parallel circuits and series circuits. The materials we used were batteries, battery holders, wires, small light bulbs, bulb holders, motors and switches. In addition we experimented with various switches. Afterwards we drew diagrams in our copies. While learning about circuits we found out that in the past fairy lights were wired with a series circuit which meant if one bulb broke all the lights went out. Nowadays they are wired using a parallel circuit.





Experiment 4: Environmental Awareness and care – Design and make a greenhouse (3rd-6th)

Design and make a greenhouse

Materials

- Straws
- Plastic bag
- Milk carton
- Scissors
- Glue

Method

- 1. Cut the milk carton to \(\frac{1}{4} \) of its size.
- 2. Stick straws to four corners of the carton using glue and wait for it to dry.
- 3. Put the plastic bag over the straws.
- 4. Wet some cotton wool and place in bottom of milk carton.
- 5. Place cress seeds on cotton wool and cover with plastic bag.
- 6. Place in sunlight

Result: Have a look at our greenhouses and the cress we have grown.





Participate in science events run by other organisations - Sea Shore Safari (in conjunction with the Marine Institute) (2nd -6th)

In October the 2nd to 6th class pupils went on a 'Seashore Safari' to Grattan Beach in Salthill.

In groups, we explored the seashore using nets and buckets to see what we could find. We found some amazing things including lots of different types of crabs, butter fish, shells, dogwhelk, sea snails, rockling fish and blenny fish.

We learned all about sea life and the effects of pollution on the beach. We also played some fun and interesting games to show us how long it takes for certain types of rubbish to decompose. Did you know that an apple takes two months to decompose while glass bottles never decompose and remain in our sea for ever?

We had a great day out.







Science Week 2018 – Design a bridge challenge (4th-6th)

As part of Science Week 2018, 4th, 5th and 6th class participated in the Mayo School Design Challenge held in Westport in conjunction with the Mayo Science and Technology festival.

The challenge was to build a bridge out of straws and masking tape that would stay upright while holding a bag of rice. The time allowed for the challenge was 40 minutes. The bridge that held the most rice was the winner.

Although our designs didn't make the final two, both of our teams managed to make very successful bridges. We had a great day out and really enjoyed the competition.



Step 2: Technology

Example 1: Recording videos using Green Screen App (3rd-6th class)

The children in the senior room have really enjoyed experimenting with the Green Screen App. They have recorded their oral reports using the app and it is really helping their oral language skills. The pupils plan to record some of their experiments using it also.



Example 2: Khan Academy (2nd-6th class)

Children from 2nd to 6th class have created accounts on the maths website Khan Academy. They use this in maths class and at home. The children really enjoy using Khan Academy and a learning a lot while reinforcing topics learned in class. The Junior and Senior Infants also play maths games on the ipads on a Friday.



Step 3: Engineering

Example 1: Engineers week – Use resource pack – design a bridge (3rd-6th)

As part of 'Engineers Week 2019', the senior room learned all about the role of an engineer. They were also given an engineering challenge which was to design and make a bridge using sellotape and spaghetti, the most successful bridge was the one that held the most weight.

We really enjoyed the week and we definitely think we have a few budding engineers among us!







Example 2: Design and make a structure out of spaghetti that can hold a marshmallow (3rd-4th)

We had to design and make the tallest structure using spaghetti and masking tape that was able to hold a marshmallow. It was a difficult challenge but we had great fun.





Step 4: Maths

Example 1: Maths Week (Junior Infants-6th class)

As part of this initiative, both the junior and senior room took part in lots of different maths activities.

The senior class went on a maths trail around our school which included measuring trees, counting fence posts, finding different shapes and looking for the prime numbers in our playground snakes and ladders.

The student council organised a maths trail for our junior and senior infants. They had to measure their tables with pencils, count the windows in their classroom and count the number of cars in the carpark.

The senior room also completed some lovely tessellating fish pictures for art.







Example 2:

We have used maths in lots of our experiments and activities e.g. measuring ingredients when making playdough, rice krispie buns and pancakes. In addition we used maths when measuring distances e.g. the tallest structure.







Step 5: Stem Showcase

On the 10th April the senior room invited the junior room to our science fair. We were split into groups of 2 and we demonstrated different experiments such as the vinegar volcano, lava lamps, slime/oobleck and the bubble show. In groups the junior room went round to all the different stations and really enjoyed seeing the amazing experiments as well as learning lots too. It was a great day.







