Step 1 – Science

Living Things

Class: 2nd Class

Investigation 1: The Senses

Investigation of the senses smell, taste and hearing.

The Nose 16/9/14	The Nose 16/a
We smell with our nose	a flatt and form an included of
Our Smell Test Guess What it is. A lemon Apple B orenj orenj C Sope perfume D Lemon Lemon Rost Chiden, fish, meet and	
Pizza. My least for our ite smells are Fresh pees, row fish, Crisps. and Garbage.	V.C.

Our Taste Test Our tongues can recognize 4 distinct tastes: Salty, sweet, bitter, sour.			est ecognize 5: er, sour.	The Tongue
Our Taste Experiment		iment	Bitter	
Sweet	Guess	Answer	What it is	
A B C D	sweet Salty bitter sour de have our tong to taste	sweet salty sour bitter taste b uesthat	sugar salt Natural Yoghurt Lemopjuice uds on help us	salty salty

Inner Ear My Sound Walk. Today I walked around the school to hear what sounds were around. Eustachian Tube 1. In the half I heard Teechers. Middle Ear Q1 and children speeking. 2. In the yard I heard form ones. origing and screeming. Eardrum Outer Ear 3. In the kitchen I heard cettle Ear Canal Boiling 4. In the pront garden I heard trafik and fut steps. 5. In the classroom | heard class-room work.

Energy and Forces

Class: 1st Class

Investigation 2: Dancing Raisins

Equipment: A jar of water, A jar of clear fizzy drink, A handful of raisin.

Background Information: The raisins are heavier than the drink so they sink to the bottom. At the bottom of the fizzy drink they collect bubbles of carbon dioxide and now the 'raisins + bubbles' are lighter than the drink so they rise to the surface. When they reach the surface the gas bubbles burst and the raisins sink; then they collect more gas bubbles. This will continue as long as the drink is quite fizzy.



5th Class

In a Spin

An Investigation into how the centrifugal force is formed and an understanding of G-Force.

Ina Spin 20/11/14 Q Why does the water not fall out of th I predicted the water would fall on Mr Callaghan. Fr 171 Mater bucket with a handle water / Met Get the Bucket and put water in it ·Spin the water at speed. Be carefu when stopping not to get wet Res When we swring the water argund, the stayed in the bucket due to centrifugal force Con I least that the faster the Bucket swing the water is forced away from yo at centritua keeps people in their sea Vercostorand Vormt 8 the is what & gravity crea spirning things around v





<u>Materials</u>

Class: Junior Infants

Investigation 3: "The 3 Little Pigs"

Strand Unit: Properties & Characteristics of Materials.

Students investigate the best material for building a house. Which was the best? Straw, sticks or rough bricks (represented by sand paper!)













Environmental Awareness and Care

Class: Junior Infants

Investigation 4: Theme: "Pitching a Tent"

The children investigated the appropriate way to light a campfire and spend time in the countryside

Were given stones to make a campfire, lollipop sticks, a folded piece of card and some Blu Tac. They were working in pairs to design a tent!

Children have been learning to keep the food area separate to the sleeping area so as not to attract creatures into their tent.

They have also learnt how to **leave no trace** of themselves in the woods.

Once they leave they need to know how to leave nature undisturbed by putting out their camp fire, bringing all remains of the camp fire with them to dispose of properly

Students also investigated appropriate fire safety by keeping the barbecue a safe distance away from the tent and overhanging branches in the nearby wooded area.







Extra Investigations

Environmental Awareness and Care

Investigation 5: The School Garden

Class: 5th and 6th

Students planned prepared the school garden by helping to build raised beds and add topsoil and organic farmyard manure to the soil.

We investigated the most appropriate crop to plant first. We decided on potatoes as it was easy to grow and maintain. It was also a good crop to break up soil and add nutrients to the soil for future crops.

Students have also planned ahead after they harvest the potatoes in June. Students have made their own biodegradable flower pots to plant sunflower seeds. These are placed in our homemade light boxes to help them grow faster. The sunflowers will be planted after the potato harvest in June and will help add nutrients to the soil that were taken out by the potatoes therefore learning about the natural method of crop rotation.

When the students return in the September we will save the seeds and cut the stalks of the sunflowers and mix them in with the soil. This is also an organic way of adding nutrients to the soil and taking care of the environment when growing crops.

Energy and Forces

Class: 3rd Class

Investigation 6: Heat

Objective: When air is heated, it rises.

Third class girls carried out two experiments to test if hot air rises.

Experiment 1: To test if rising hot air rises

We first test to see if warm air rises by simply checking the radiators.

Children put their hands near the top of the radiator to feel the heat.

Children then compared this to the side of the radiator and noticed that there wasn't the same amount of heat coming from the side.

Result: The top of the radiator was warmer than the side showing that hot air rises.

Experiment 2: To test if rising hot air can make things move.

We cut a spiral shape from a piece of paper and put a thread through the top.

We decided that the best place to hang the spiral shapes to see if they would move would be above the radiator.

We also hung some mobile from the white board and the one beside the radiator to compare.

<u>Result:</u> The spiral above the radiator moved the most.

The spiral beside the radiator moved slightly and the spiral shape hanging from the white board remained still.

(See picture of children's copies for reason why)

nedar 4th April 2015 Experiment: To see if hot air can make light things move. What do you notice? I noticed that the spinning mobiles hung on the top of the raditor moved quicker, than the side of the radite This the spinning mobiles on the projector and the light only moved a inches bet Why do you think, does this happen? this happens because the heat of the alt rises and then the spire

Add additional info on science speaker or science event!!!!

Step 2 – Technology

Class: 4th Class

Developed PowerPoint Presentation

Boys and girls from 4th class completed presentations in relevant to energy and forces and materials on the curriculum. Three sample presentations are included. The topics covered were Electricity, Gravity and Nuclear Fusion – The Future of Clean Energy.

Please see uploaded PowerPoints along with school code

https://superchache49.wix.com/space-and-nasa

Khan Academy and Mangahigh

Class: 6th Class

Used ICT to access science/engineering/maths information

As part of the Primary Science Fair, 6th class students decided to design and make a model space station. Before constructing the model, students used the computer programme **SketchUp**. This enabled them to create a scale drawing of their desired model design so they would have a plan prior to construction stage. The computer programme also allowed students to rotate their design to relevant elevation, plan and end views for more detailed discussion.

PRINT SKETCHUP PLANS, SCAN AND ADD AS PICTURES

Step 3 – Engineering

Class: 5th and 6th Class

Design and Make Activity (Grand Designs and team tasks)

Invited Engineer to school to speak to the children about his work (Noel Brady – Powerpoint/Pictures)

Hosted an Engineers Week event in February 2015

BRICKS4KIDZ WORKSHOP

Under the guidance of Niamh Reilly from Bricks4Kidz, the children were split into 3 groups and were tasked with creating theme parks made from Lego. This was no ordinary Lego project. The students had to:

- 1. Work in pairs, follow a plan and build a particular structure that could be used at a Fairground
- 2. They then came together in 3 separate large groups and combined all their pieces to design to make a complete Fairground
- **3.** Add their own extras structures to their Fairground to make it more appealing to visitors

Team Tasks

Observation, Inference, Plan/Design and Make

Step 4 – Maths

Problem of the week

Conall Maths Week 2014

2nd class area

2nd class

Maths

Shape and space

Area

Using non standard units (cards) to measure the surface area of a table.

Step 5 STEM Showcase

Display of NASA work on noticeboards/presenting to younger assembly

Young Scientist

