

## Rolls Royce Science Prize- October Diary

*Kate Carter P7 Class Teacher*

Castleview is delighted to be a finalist in the incredible Rolls Royce Prize Science Prize! Our project will last all year and involve everyone in our school and lots of our community. We have got off to a busy start.

### **1 Committee**

Firstly we have formed our Teacher Committee consisting of Ms Langley, Miss McGrory, Miss Maxwell, Mrs Bootland, Miss Morrison and myself. We also have Dr Cathy on our team!

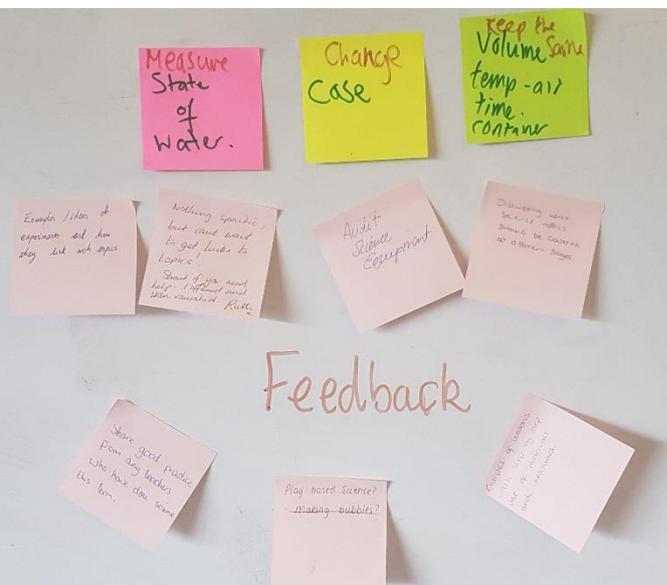
### Events

The teachers have contacted several Science Partners to arrange exciting events and projects for the classes.

### Clubs

We have also been planning and organising our Science clubs- details to follow after the October break. However, we can reveal that there will be P5-7 clubs starting soon and, additionally, the P2-4 Clubs will begin after Christmas. Science Club members will be working towards gaining prestigious CREST Awards from the British Science Association. As a school we are looking to increase opportunities for success and achievement (DOC ref) so this will support one of our whole school goals. Due to pupil requests we will also be starting a P5-7 Lunchtime Coding Club with a visiting expert.

### Teacher Expertise



I have led our first teacher led CPD (training) of the session. This session looked at the concept of Measure, Change, Keep the Same as a framework for scientific thought. The idea is that all classes use this, so we are all speaking the same language when investigating a concept. Almost every teacher made it and we had some great discussion afterwards.

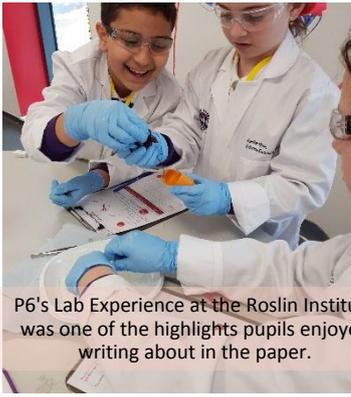
***(the CPD) 'was incredibly well focussed on something really practical and useful' P6 Class Teacher***

We have already started to create a document, which links the Science Curriculum Es and Os to our Class Topics, and then design engaging, related activities. From the CPD discussion and feedback, it became clear

that this is what teachers feel they need the most so we will be prioritising creating this.

### **2 Newspaper**

We have formed a Pupil Science Newspaper, which will publish quarterly. The paper will go out not just to our families but will also be distributed around the community. The level of enthusiasm and commitment from our P4-7 pupils has been outstanding,



P6's Lab Experience at the Roslin Institute was one of the highlights pupils enjoyed writing about in the paper.

with many giving up free time to work on the paper. The pupil editorial team has been established and the articles written by our Reporters. They have reported on science events and learning in our school community that interests them. All of the team worked very hard to write their articles! We will go to press soon and distribute it at the end of October.

***'I am excited to be interviewing people' Pupil Newspaper Editor***

***'The things we are writing about are so interesting' Pupil Newspaper Reporter***

### **3 Science Around the School**

All around the school we have been engaging in STEM activities and keeping scientific thought at the front of our minds. Here are some examples:

- World Habitat Day. I supported to resource and organise a brilliant hands on STEM task with collaborative learning and Higher Order Thinking. Both P3 and P7 learned about how globally flooding is increasing. They then used their STEM skills to test materials scientifically and then build flood proof houses, which we tested! Everyone was so engaged and had a great time. P7s used their tech and literacy skills to interview P2s and find out their opinions on this event!

***'My class were completely engaged with the STEM challenge today. They worked so cooperatively together and there was a real buzz in the classroom!...Happy to do more with them after the success of today' P3 Class Teacher***



P3 ready to test their floodproof houses

- World's Largest Lesson. As a school, we watched the World's Largest Lesson and considered our own 'teaspoon of change' challenges. This is highly relevant to STEM as we are particularly thinking about 'science' issues of how to tackle climate change and waste in our community. This often includes using STEM solutions.
- ROTA kids: Our ROTA kids club are trying to improve our local environment for humans and other animals. They are looking at how plastics and other litter pollutes our environment and have decided to organise a community litter pick in our local woodland.

- Rainbow Class: Our Rainbow class have been getting involved in science too, including learning about heat and how it changes the properties of materials. This was based on an activity from SSERC training completed by teachers.



The Rainbow Class busy with their materials investigation

- Nurture Group: have been building their STEM skills in a practical outdoor setting when completing Survival Skills in the woods.
- In P7 we are learning about our maths topics through Science Investigation. We are learning to measure area and calculate mean as part of our investigation into the rate of leaf fall throughout Autumn.
- P1 made dinosaur eggs by filling balloons with water and freezing them. The children used paint brushes dipped in cold water and warm water to brush the ice to see which melted the ice faster to hatch the dinosaur.

#### 4. Community

I attended the initial meeting for organising the Community Science Festival. This will be the third year that we have had such an event. It was agreed that we should build on the success of this event and make it larger. As part of the expansion, we have agreed that it will be, in part, a celebration of all the work we have done in our Rolls Royce Project. This was decided as it will embody the community focus, which is key to our project- 'science does not end at the gate'. The Science Festival has been very well attended and had a very good atmosphere, therefore it seemed logical to build on this rather than create a new event which may not be well attended.

At the meeting we also discussed other very exciting collaborative opportunities. This includes the possibility for activities during the February Break, organised in partnership between Castleview and The Centre for Regenerative Medicine. As well as opportunities for our pupils to work on a project with the scientists at the Centre for Regenerative Medicine in the world class facilities.

*'(I)found the session and the people very inspiring' Centre for Regenerative Medicine employee*



Outdoor science learning - the kind of work we will build on with our new classroom!

#### 5 Outdoor Classroom

We will soon be ordering a wonderful outdoor classroom for our school. This will enable us to build on our outdoor learning, which is already embedded in many aspects of our curriculum. It will allow us to have more meaningful learning outdoors and provide a wider range of opportunities for our pupils to learn in real life settings. Ms Langley and other staff have visited another primary school and, based on this visit, have decided what we will order for our Outdoor Classroom.