

**Saint Vincent’s Primary School**

**October Diary Entry**

**Our Starting Point:**

At the end of August, we met as a team to discuss the project and decide how best to use the £6000 for the benefit of the pupils in the school and wider school community. We decided to start with a 2 day Space and Astronomy Launch in the school where every class had the opportunity to attend a session in a mobile planetarium we had booked to come into the school. Teachers across all stages then provided a space/astronomy follow up task and homework research task to kick-start our ‘Year of Space’. As a team we then decided to create an ‘Information for Parents’ booklet letting parents know what our Year of Space would consist of and how they could get involved. (This is available to view if required).

**Planning the Project**:

The main idea of our project is to involve every pupil in the school in developing their learning and understanding of Earth in Space. We have therefore planned for a number of Space themed events throughout the year and arranged for every class in the school to have the opportunity to attend their very own 4 week after school club, tailor made to suit the age and stage of the pupils with a focus on space and astronomy. As well as this, we have also planned stargazing events for every class throughout the year at Whitelee Windfarm (our best and most local area for stargazing) so that the pupils can actually put what they are learning at their after school club into action. To plan this, we met as a team on a number of occasions from August to organise our diaries for the coming year, planning when we would meet to plan, organise and evaluate our progress. We also agreed our timetable for the project as a whole. In preparation for our first visit to the Windfarm with Primary 7, all team members made a visit to the Windfarm in advance to test conditions, work with the Rangers and practice using the technology. Following our staff visit we were confident that the experience would be worthwhile for both the pupils and their parents.

**Progress so far:**

Following our whole school ‘Year of Space’ launch, we have carried out the first of our 4 week block of Space and Astronomy Club for Primary 7 pupils and held our first Stargazing event. We had 30 pupils in total at each of the 4 week sessions and groups of 6 pupils were taken as focus groups after each session to provide feedback and evaluate what the impact on their learning had been. All team members have been present at every after school session, taking shared responsibility for filming, helping pupils and running sessions.

**Week 1:**

Team member Fiona Cleland (Science and Technology Development Officer for South Lanarkshire Council) had organised a specialist from Cosmos Planetarium to deliver a Rocket Launch Workshop. The company delivered a presentation about the science behind rocket launching and the pupils worked with team members to design and create their own rockets which we then launched in the playground. As a follow up to this, Danielle Timmons (Project Lead) continued this work in class with the primary 7 pupils looking at the distance travelled from each of their rockets and evaluating possible reasons why some rockets travelled further than others.

**Week 2:**

We set up a carousel type session where the pupils visited a different workshop based on the solar system and astronauts.

***Carousel Station 1: Organised and run by team member Liz Blake – Train like and Astronaut***

Children trained like astronauts learning about fitness levels and exercises that astronauts carry out before beginning a mission in space.

***Carousel Station 2: Organised and run by team member Yvonne Boyle – Crew Assembly***

Children worked in teams to do carry out seemingly simple tasks but with the added difficulty of wearing large astronaut style gloves. Children developed an understanding of how work in space can become much more difficult than on earth.

***Carousel Station 3: Organised and run by team member Danielle Timmons – How big are the planets?***

Children developed an understanding of the size of the planets based on a scale. They had to work together to identify the sizes of the planet based on the given size of the sun.

***Carousel Station 3: Organised and run by team member Graham Kerr – Solar System Metre Stick***

Children worked in teams to use a metre stick and scale to identify the distance between each of the planets from the sun and from each other.

***Filming and support provided by team member Lorena Ziolo and Fiona Cleland***

**Week 3:**

Team member Graham Kerr delivered a session on ‘The Colours of Space’. He delivered a presentation to the pupils of the science behind light, and how astronomers use spectrometers to observe the Universe - why they are used and why they are useful. Pupils then made their own spectrometers to take home using CDs and cereal boxes. They also had the opportunity to work with real spectrometers and plasma discharge lamps to identify different gases, making their learning more realistic, on loan to us from the University of Glasgow.

**Week 4:** Team member Danielle Timmons delivered a session on the night sky and constellations that were specific to the date of the session. That evening, children were taken by bus at 7.30pm to Whitelee Windfarm accompanied by all team members. The children used our new technology of telescopes and stargazing binoculars to do stargazing with their parents and supported by each of the team members and the park rangers. A number of other members of staff who are not part of the Rolls-Royce Team attended the Windfarm with us on this occasion to take part in the experience and learn more about the night sky in order to deliver this in their own classes.

At this point, we are ready to begin our next block of 4 weeks for Primary 6 pupils. Before we begin, we have two team meeting sessions to evaluate our first block of 4 weeks and decide what went well that we will keep and anything we would like to change or add for our block with Primary 6 pupils. Parent involvement has been very encouraging and they are most enthusiastic about taking part in our Stargazing evenings which is something we will certainly continue to encourage in the coming block. Three members of the team (Lorena Ziolo, Yvonne Boyle and Danielle Timmons) have also signed up to attend a twilight course on 4th November entitled Space for Learning to further develop our own ideas for taking Space and Astronomy in our classrooms. One member of our school staff who is not on the space team but wishes to develop her own knowledge of Space and Astronomy as also attended all Space and Astronomy after school clubs to this point as part of her own CPD.



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The Rolls-Royce Space Team Members prepare for the Primary 7 visit to the Windfarm. We build our new telescope and make our way to Whitelee Windfarm to meet the Rangers and test the conditions for Stargazing with the pupils.

Week 3 of space week saw Primary 7 making their very own Spectrometers. Team member Graham Kerr provided students with the science knowledge behind the technology and all pupils were given the chance to identify different gases using spectrometers on loan from Glasgow University.

Week 1 of Space and Astronomy Club for P.7. included a Rocket Launch Workshop from Cosmos Planetarium team. The pupils worked together to create the most effective Rocket designs to measure the best flight during the launch in the school yard.

Week 4 of Space and Astronomy club saw the primary 7 pupils looking at constellations and the night sky in preparation for Stargazing that night at Whitelee Windfarm. Pupils made star charts to bring with them to their Stargazing.