

Primary School Outreach Programme

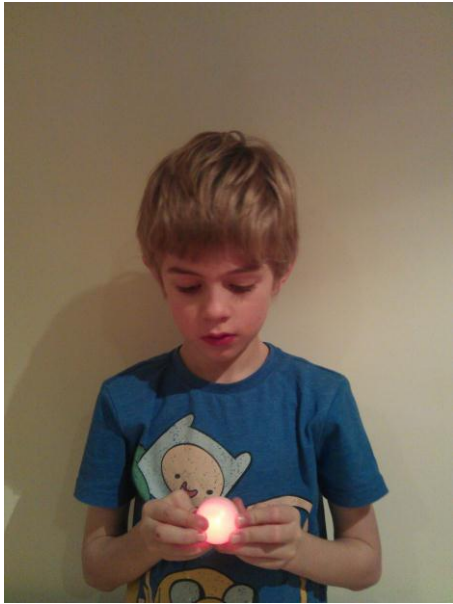
Space – The Final Frontier

The second class pupils of Belmayne Educate Together National School were learning all about Outer Space. From their project based studies the children became very interested in the solar system. To re-enforce and enhance the pupils learning experience, Dr Hedderman-Bowe from the DIT FOCAS Research Institute designed a fun and interactive Outer Space themed science exhibition.

The day started out with the pupils discussing the solar system and the celestial body at the centre of it, the Sun. The importance of the Sun for planet Earth was considered. The pupils appreciated how the energy provided by the Sun is necessary for life on Earth. To explore the Sun's energy a series of experiments were set up to help the pupils learn about the different types of energy that come from the Sun. Experiments involving prisms to split visible energy were employed along with heat sensitive squares to detect infra red energy. Boards and beads that reacted only to ultra violet energy were also used.



Orbiting the Sun are eight planets. The pupils could cite some unique characteristics of the different planets like Saturn with its large rings and Earth which supports human life. When it came to looking at similarities between the planets, the pupils were fascinated to learn that certain weather conditions experienced on Earth, like lightning storms, also occur on planets Jupiter, Venus, and Saturn. The pupils were eager to find out how lightening storms work. To illustrate this, experiments were devised so that the pupils could learn about electricity and in particular static electricity, responsible for such storms. Energy balls, plasma balls, balloons, and magic wands were all part of the discovery process.



Outer Space has always fascinated mankind and in 1969, man went into Outer Space and walked on the moon. This was a huge event and televised worldwide. People all over the world got to see the astronauts in their special suits and the rocket that took them into Outer Space. Why do we need so much expensive equipment to go into Outer Space? To be more specific what would happen to an astronaut if they went into Outer Space without their space suit? To answer this question an experiment was conducted. The pupils placed a small inflated balloon (our unsuited astronaut) into a bell jar and created a vacuum by pumping all the air out. As we found out, our astronaut was not the better of the new environment. He expanded so much in the vacuum he was ready to pop at any second.



A good way to learn about Outer Space is to study materials from it. We don't always have to go into Outer Space to collect samples. Rocks from Outer Space often find their way to Earth via meteor showers. The Space rocks that land on the Earth's surface are called meteorites. Some meteorites were brought along to the exhibition for the pupils to view. As can be seen under normal viewing conditions the meteorites look similar to rocks found here on Earth. When the rocks are viewed using ultra violet light the rocks turn a beautiful blue and red.



To finish off the day the pupils got the opportunity to make their own stars and planets which they could take home as a memento of the exhibition.

