Celebrating Antarctica

Last Friday, we had an 'ICE' day taking part in the national STEM Polar Explorer Project. Dr. Simon Sheridan, our Polar Ambassador from The Open University, came in and worked with pupils across the school during the day. Pupils dressed in grey, black and white to represent the 15,000 penguins that live at the South Pole. We began with an assembly where the children learnt about the importance of the Antarctic Treaty System which was created in 1956. The children were suitably wowed by the fine example of international cooperation and peaceful endeavour it represents. This year we based our gorgeous Christmas hoops on all the features of Antarctica, that the treaty sets out to protect.

Earlier this half term we took part in a worldwide competition. Schools in more than 40 countries worked with their pupils to design flags for this unique international space. Our pupils found out about the science that takes place and took inspiration from the spectacular landscape to design their flags…. and now 35 flags from Cedars Primary School are on their way with Polar explorers to Antarctica! We used all the other flags to decorate our hall for Christmas.

In assembly the pupils of the winning designs all received a prize and were excited to learn that they will each get a certificate and a photograph of their flag when it reaches the South Pole!

Lois (age 4) from Foundation 2 won the outright prize of the competition and received a beautifully illustrated book about Antarctica.

During the day, pupils took part in a multitude of scientific investigations and exploration. The following are just *some* of the terrific science work that took place across the school.

In Foundation 1 pupils explored the textures of ice. They experienced the non-Newtonian properties of cornflour and water. Pupils played with penguins at the set up North and South Pole role plays. They watched extracts of 'Frozen' and discussed how water changed when it was frozen and made paper snowflakes. They used 'Melting Snowmen Kits' to make snowmen and then delighted in making observations as they slowly changed state.

In Foundation 2 pupils explored frozen ice with concealed gems. They investigated how the different size of ice effected the rates of melting and discussed changes in state. Pupils developed their fine motor and collaborations skills playing the penguin balance game. Using construction materials, they created their own Polar scenes complete with huge icebergs. They researched how penguins made nests and delighted in watching a penguin chick venture onto the ice for the first time.

In Years 1 and 2 the children investigated the insulating properties of materials and considered how the adaptations of Arctic organisms help develop these.

They also found out what people eat in the Arctic and how they make sure they have a balanced diet. They made their own Arctic snacks and using creativity and scientific research skills they created a menu suitable for an Arctic expedition.

In the Hut, pupils examined the relationship between the shape of a boat and the amount of passengers it held. They investigated different shaped boats to discover the best design and made and tested their own using playdough and newspaper. Some of their designs were unsinkable!

In Years 3 and 4 pupils investigated the insulating properties of blubber and considered how the adaptations of Arctic organisms help develop these. Pupils imagined what it would be like to live in a really cold place like the Arctic and investigated how they would keep themselves warm using butter. They also found out about why scientists are engaged in research at the bottom of the Antarctic and Arctic Oceans. They found out about the importance of using grabbers to collect samples of organisms that make the sea floor their home and what these can tell us about global concerns. Then they designed robots with a grabbing tool based on their knowledge of existing grabbing tools.

In Years 5 and 6, pupils worked together to use their mathematical skills and scientific knowledge to help plan for an expedition to the Antarctic.

They had to consider the appropriate clothing, food and other essential equipment they would need to take with them. The pupils had to consider the calorie intake needed to survive in extreme conditions and planned their expedition whilst working to a strict budget!

Both pupils and staff thoroughly enjoyed the day celebrating Antarctica. The scientific exploration, research and resulting understanding was superb! Throughout, it was very clear that Cedars Primary School has many budding Polar scientists in the making! Well done and thank you everyone, science at Cedars is 'ICE-standing'!

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