

## Dustanburgh Class Overview - Spring Term (2) 2019

### Topic: Scientists and Inventors

Subject	This 'Scientists and Inventors' unit will teach the class about famous scientists and inventors. They will learn about the men and women who risked their lives to find new plants, and will design their own new plant, thinking about its requirements for life. The children will learn about Marie Curie and her work on radiation. They will find out how she developed the medical use of x rays and create their own x ray model. They will find out about William Smith and how he learnt that the fossils found inside rocks can be used to tell the age of the rocks. They will use his ideas to design their own island. Furthermore, they will learn about Inge Lehmann, the woman who discovered that the Earth's core is solid. The children will have chance to investigate how images change in convex and concave mirrors, and will hear about the inventions and devices that use convex and concave mirrors. Finally, children will complete a time line of the first electromagnets, create their own electromagnet and test its strength.
English	<p>Language and Literacy Fiction. Key writing purpose: To write a poem about an invention, and participate in a class poetry performance. The poem:</p> <ul style="list-style-type: none"> <li>•uses at least two of the special poetic techniques we have studied, e.g. rhyme, rhythm, alliteration, repetition, onomatopoeia</li> <li>•uses some unusual combinations of two words to build interesting descriptions of an invention</li> <li>•is presented in an interesting shape that helps the reader imagine what I am describing.</li> </ul> <p>Grammar:</p> <ul style="list-style-type: none"> <li>•uses punctuation and line breaks to show how my poem should be read.</li> </ul>
Maths	<ul style="list-style-type: none"> <li>• Fractions and Decimals</li> </ul>
Science	<ul style="list-style-type: none"> <li>• Year 3: This 'Light' unit will teach the class about light, reflections and shadows. They will learn about different sources of light, and that we need light to see. The children will work scientifically and collaboratively to investigate reflective materials, in the context of designing a new book bag. They will work in a hands-on way to play a range of mirror games, finding out more about reflective surfaces. Furthermore, they will learn that the sun's light can be dangerous, and will create an advert for a pair of sunglasses or a sun hat that they have designed. The children will have chance to test which objects are opaque in an exciting investigation to design the most effective curtains, and will find out how shadows change when the distance between the object and light source changes. They will develop their scientific enquiry skills, making observations, predictions and conclusions.</li> <li>• Year 4: (please see Ford Topic Overview 'Science' for more detail)</li> </ul>
Geography	<ul style="list-style-type: none"> <li>• Identify countries where inventors were born. Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</li> </ul>
History	<ul style="list-style-type: none"> <li>• Key inventions over the last 100 years. Develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time and develop the appropriate use of</li> </ul>

	historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance.
Design technology	<ul style="list-style-type: none"> <li>Mechanical Posters: children will have opportunities to develop their understanding of mechanical systems. Following instructions on how to make different types of lever and linkage mechanisms gives children experience and information to draw on when developing their own ideas. They sketch a design based on their ideas, make a prototype, and then create their 'Lever and Linkage Poster' using the context of recycling. Finally, children will evaluate their finished product.</li> </ul>
Languages	<ul style="list-style-type: none"> <li>Develop practical communication in the French language</li> </ul>
Religious education	<ul style="list-style-type: none"> <li>Christianity: The Easter Story</li> </ul>
Computing	<ul style="list-style-type: none"> <li>Drawing and Desktop Publishing: aimed at developing children's graphic and presentation skills by introducing drawing as opposed to painting. It also goes on to further children's understanding of layouts using a desktop publishing application. Children will learn to draw, order, group and manipulate objects to make a picture. They will also learn to evaluate and create effective layouts, combining text and images.</li> </ul>
Physical education	<p>Games: Hockey, played outdoors in all weather</p> <p>Invasion Games: Quicksticks</p>
Music	<ul style="list-style-type: none"> <li>Charanga Music programme: Three Little Birds</li> </ul>
Art and design	<ul style="list-style-type: none"> <li>Easter inspired arts from around the world</li> </ul>

Homework, including spellings, goes home on Fridays. Please return homework folders to school on Thursdays. A copy of our Homework Policy is on the school website

<http://www.hipsburn.northumberland.sch.uk/website>

Spelling and multiplication tests are every Friday.

Useful Links

KS2 Maths <http://www.bbc.co.uk/bitesize/ks2/maths/> <http://www.topmarks.co.uk/maths-games/7-11-years/times-tables>

National Curriculum <http://www.educationengland.org.uk/documents/pdfs/2013-nc-framework.pdf>