

Year 2 SCIENCE Topic 2: Let's Go Engineering! (4 Weeks)

Assessment Questions:

1. Out of the following materials, which ones can change shape? Plastic, glass, brick, paper.
2. If I was building a house, which material should I use and why?
3. Which material was best at insulating your ice cube?
4. How did you present your data and why?

Values: Service and Friendship

KNOW	DO	UNDERSTAND
<p>NC Content: S: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. S: Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Vocabulary: materials, suitability, particular, solid, insulation, waterproof, sturdy, robust, wood, metal, plastic, glass, brick, rock, paper, cardboard, opaque, transparent and translucent, reflective, non-reflective, flexible, rigid, push/pushing, pull/puling, twist/twisting, squash/squashing, bend/bending, stretch/stretching.</p> <p>Children know how to evaluate different materials for different tasks. Children can describe the material and explain which object would be best for each use. Children can identify what a solid object is. Children can manipulate solid objects by squashing, bending and twisting. They can use this knowledge to suggest the material for different uses.</p>	<p>WS: asking simple questions and recognising that they can be answered in different ways WS: observing closely, using simple equipment WS: performing simple tests WS: identifying and classifying WS: gathering and recording data to help in answering questions.</p> <p>Children use their understanding of different materials to make a shelter for a penguin – insulating, waterproof, sturdy etc.</p> <p>Children use materials to create a place to keep an ice cube – insulating etc. Children record how long their ice cube stays frozen. Having observed this, they then have another go and record their results again.</p> <p>Children can record data and create graphs on the computer.</p>	<p><i>PRIOR LEARNING: From Year 1, children will have a good understanding of different materials. They will be able to distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. Describe the simple physical properties of a variety of everyday materials and compare and group together a variety of everyday materials on the basis of their simple physical properties. In Year 2, they will continue to develop this, by applying the materials to different situations.</i></p> <p>They will understand that some solids are really helpful when they are squashy, whereas you need some solids to be really hard.</p>

Year 2 Geography

Let's Go Engineering!

Assessment Questions		
<p>- Where in the world is the North Pole and the South Pole? Show me on a world map and globe.</p> <p>- Where is the equator? Where are the hottest countries in the world? Where are the coldest countries in the world?</p> <p>- How is Antarctica different from where we live? What lives there? Can anything grow there? What does climate mean?</p>		
Know	Do	Understand
<p><u>Locational Knowledge</u> I know that the world is a sphere and that the North and South Poles can be found at the top and bottom of a globe.</p> <p><u>Human and Physical Geography</u> I know that weather conditions are much colder at the poles as they are areas which are furthest away from the sun.</p> <p>I know that weather and climate vary depending on where you live in the world.</p> <p><u>Geographical Skills and Fieldwork</u> I know that compass points tell us the position of places in relation to one another and I can label North, South, East and West.</p> <p><u>Vocabulary</u> North, South, East, West North Pole, South Pole, equator, biome, Antarctica, continents, weather, climate, temperature</p> <p>Geography Core Concepts: Climate Environment Land-use (Antarctica is desert).</p>	<p><u>Locational knowledge</u></p> <ul style="list-style-type: none"> name and locate the world's 7 continents and 5 oceans <p><u>Geographical skills and fieldwork</u></p> <ul style="list-style-type: none"> use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage <p>Use a globe and map of the world to locate the North and South Pole and Antarctica, naming continents and some oceans.</p> <p><u>Human and physical geography</u></p> <ul style="list-style-type: none"> identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles use basic geographical vocabulary to refer to: key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather <p>Find cold areas of the world on a map (North and South Poles) and label the equator.</p> <p>Use basic geographical vocabulary to describe the physical features of Antarctica compared to the UK (desert biome, types of animal, lack of plant life).</p> <p><u>Geographical skills and fieldwork</u></p> <ul style="list-style-type: none"> use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage use simple compass directions (north, south, east and west) and locational and directional language [for example, near and far, left and right], to describe the location of features and routes on a map <p>Find a country that is North, South, East and West of the UK on a globe or a World map. (Relate to the NORTH and SOUTH pole)</p>	<p>Although this is a predominantly science-based topic, the children discover some geography objectives when studying Antarctica. The children will find out where Antarctica is in the world and think about how you could get there. By looking at photos, videos and maps of the continent, the children will consider the weather there and explain how it differs to the UK. They will observe how the landscape differs from our own country and what wildlife and plants survive in its extreme environment.</p>

Year 2 ART Topic 2: Let's Go Engineering!

Assessment Questions

What is special about Abstract Art?
 What does Jackson Pollock's work look like? What is a sculpture?
 How did you create your sculpture?

KNOW	DO	UNDERSTAND
<p>Knows how to explain features of Abstract Art.</p> <p>Knows how to explain the features of Jackson Pollock and how he created his work.</p> <p>Can use a range of natural materials to create a 3D sculpture.</p> <p>Can explain what a sculpture is and how it is different to other art forms.</p> <p>Can use a weaving technique.</p> <p>Key vocabulary: Abstract Art Features Technique Painting Period Sculpture 3D Weaving</p>	<p><u>Abstract Expressionism/ Abstraction</u></p> <p>This unit gives children a chance to experiment with different painting techniques and to make informed choices about which ones to use in their own work. It begins by exploring Jackson Pollock who took abstract art to a new limit. The other artists that follow, are from an earlier period. Their work has recognisable shapes in them and have more symbolism to them than Pollock's work that centres on the action and creation of art.</p> <p>Children also explore weaving with a range of natural materials (eg raffia) and man-made materials (eg plastic bags) to communicate ideas in weaving, describe how they feel about their work. Exploration of fabrics and textures, creating simple looms and basic weaving techniques.</p> <p>NC Aims:</p> <ul style="list-style-type: none"> - produce creative work, exploring their ideas and recording their experiences - become proficient in painting and sculpture - evaluate and analyse creative works using the language of art, craft and design - know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms. <p>NC Content:</p> <ul style="list-style-type: none"> - to use a range of materials creatively to design and make products - to use painting and sculpture to develop and share their ideas, experiences and imagination - to develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space - about the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work. 	<p>This unit explores different materials and their properties, with children focusing on Antarctica. The natural materials aspect of the art develops children's understanding of different materials in the world.</p> <p>Children have explored the idea of sculpture using found/recycled materials in Year 1 for their art week, and should consider applying and developing these skills in this unit.</p>

Year 2 MUSIC Topic 2: Let's Go Engineering!

KNOW	DO	UNDERSTAND
<p>I know that:</p> <ul style="list-style-type: none"> • there is a difference between a beat and a rhythm • you can make simple rhythms using movement, percussion and body percussion. <p>Vocabulary: beat/ pulse tempo rhythm rhythm pattern ostinato</p>	<p>Music express: Number (3) The children will listen to <i>Schiazarula marazula</i> and use body percussion to explore keeping to the steady beat. They will then listen to the rap 'Wake! Shake!' and see how the numbers in it are clapped at different speeds.</p> <p>This will help them understand that this is a rhythm. The children will then learn, and perform using movements 'sing me one'. This song increases the number of notes to a beat in each verse and has a really steady beat, to secure understanding of rhythm. They will then explore these songs further, using instruments.</p> <p>They will listen to a piece called 'Snowball waltz' which has a steady beat throughout. They will hone their listening skills by listening for the snowballs which are irregular and often played on the 2, 3 or 4th beat. They will listen to <i>Boom shakalaka</i> and the teacher will lead the children with action patterns. The children will listen to find the 4/8 beat pattern and use the structure to use a sequence of movements to match the beat. When the children have secured their beat/ rhythm knowledge, they will revisit <i>Schiazarula marazula</i> and use it to explore different ostinatos which can be played along to the beat.</p>	<p><i>This follows on from Year 1 where children practised holding a steady beat, and using body percussion and instruments to play along to a steady beat. They also looked at how a beat could change if the tempo got faster/ slower. In year 2, this develops onto an understanding of how a beat and a rhythm are different things (children often confuse the two when clapping along or moving to music).</i></p> <p>NC Areas covered:</p> <ul style="list-style-type: none"> • Pupils learn to sing and play a musical instrument • Pupils listen to, review, and evaluate music from a range of styles and historical periods • Pupils explore structure, tempo, and duration • Pupils understand and explore how music is created