

**Year 3 SCIENCE Topic 6: Brilliant Botanists (5 Weeks)**

**Assessment Questions**

In the world, there are droughts. What would happen to the plants in these areas?  
Why does a plant need roots? How do seeds travel (disperse)?

How does the sun affect our shadows throughout the day?  
What does pollination mean? Name 3 types of light source.

Values: Forgiveness

KNOW	DO	UNDERSTAND
<p><b>NC Content: PLANTS:</b> S: identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers S: explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant S: investigate the way in which water is transported within plants S: explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal</p> <p><b>Vocabulary:</b> <i>Life, growth, nutrients, transported, life cycle, pollination, seed dispersal, seed formation, photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal)</i></p> <p>Children know the different parts of a flowering plant: roots, stem/ trunk, leaves and flowers. Children know the different functions for these different parts. Children know that plants need light, water, room to grow and nutrients from the soil. Children know that different plants need different amounts of the list above – e.g. cactus compared to tomatoes etc. Children know that water is transported through the roots, to the stem to the rest of the plant. Children know the definitions of pollination, seed formation and seed dispersal. They can talk about how flowers disperse their seeds – bees, wind, animals etc.</p>	<p><b>NC Content:</b> WS: making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers WS: setting up simple practical enquiries, comparative and fair tests WS: using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions WS: identifying differences, similarities or changes related to simple scientific ideas and processes</p> <p>Children will ask questions about how plants transport water – do experiment with carnations and food colouring. This experiment will help them to answer this question.</p> <p>Children will set up practical enquires about what plants need to survive – they can investigate different plants, different amounts of water, sunlight etc. Using what they have found, they can draw conclusions and make predictions about similar experiments.</p> <p>Children will set up a practical investigation about shadows and how the sun and the time of day affects their shadows.</p> <p><b>Health for Life: Growing</b></p> <ul style="list-style-type: none"> <li>• <i>Grow fast growing seedlings in pots – radishes and cress. Controlled investigations can be set up with these seedlings to see how they grow in different conditions (e.g. changing the amount of water, amount of sunlight, air, soil, plant food etc.) <u>Plant in April</u></i></li> <li>• <i>Grow <b>petunia</b> to show it needs light to grow v <b>bluebells woodlands</b> mix (seeds that don't need light to grow).</i></li> <li>• <i>Grow <b>marigolds</b> to explore pollination. <u>Plan in March</u></i></li> <li>• <i>Grow <b>basil</b> to use in cooking (pizza) <u>Plant in March</u></i></li> </ul>	<p><i>PRIOR KNOWLEDGE: Children will build on their knowledge from Year 2, where they investigated what plants need. In Year 2, they have looked at how much water plants need to grow and how much sun they need too. In Year 3, there is a focus on different plants, nutrients and how much room they need to grow.</i></p> <p>Children will make the links between what humans need and what plants need – what is similar and different?</p> <p>Children have been exposed to the word opaque before, but this is the first time they will have heard it in regards to shadows.</p> <p>Children will understand how everything has to be 'right' for plants to thrive – how does this link to the environment?</p>

**LIGHT:**

S: recognise that they need light in order to see things and that dark is the absence of light

S: notice that light is reflected from surfaces

S: recognise that light from the sun can be dangerous and that there are ways to protect their eyes

S: recognise that shadows are formed when the light from a light source is blocked by a solid object

S: find patterns in the way that the size of shadows change

**Vocabulary:**

*Light, dark, sun, dangerous, protection, shadows, opaque, light source, reflection, absence of light, transparent, translucent, opaque, shiny, matt, surface,*

*shadow, reflect, mirror, sunlight, dangerous.*

Children know that dark is the absence of light.

Children can give different examples of light sources.

Children know what reflection means and they can talk about different surfaces that might reflect light.

Children know that the light from the sun can be dangerous and they know different ways to protect themselves – hat, suncream, shade etc.

Children know that shadows are formed when light is blocked by a solid object.

Children know that shadow size changes throughout the day.

**Year 3 ART Topic 6: Brilliant Botanists**

**Assessment Questions**

What is a self-portrait?  
 Explain the features of Picasso and Braque's portraits.  
 How have you been inspired by this style of art in your own work?

**Forgiveness**

KNOW	DO	UNDERSTAND
<p>Can explain the features of the work of Pablo Picasso and Georges Braque.</p> <p>Know how to select and use different media for a purposeful effect.</p> <p>Know how to create a self-portrait inspired by the work of Picasso and Braque.</p> <p>Know how to discuss and use non-standard colour in my portrait.</p> <p>Know how to use a computer programme to create a digital self-portrait.</p> <p><b>Key vocabulary:</b></p> <p>Features</p> <p>Self-portrait</p> <p>Media</p> <p>Purpose</p> <p>Inspire</p> <p>Non-standard colour</p> <p>Digital art</p> <p>Manipulate</p> <p>Edit</p> <p>Layer</p>	<p>Abstract portraits. Draw a portrait of themselves to scale focussing on the artist Pablo Picasso, George Braque. Use a range of mediums (eg oil pastel, crayon, cut up sections of coloured paper, paint).</p> <p>Children use the computers to create digital versions of their artwork, in the style of Picasso and Braque.</p> <p><b>NC Aims:</b></p> <ul style="list-style-type: none"> <li>- produce creative work, exploring their ideas and recording their experiences</li> <li>- become proficient in drawing, painting, sculpture and other art, craft and design techniques</li> <li>- evaluate and analyse creative works using the language of art, craft and design</li> <li>- know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.</li> </ul> <p><b>NC Content:</b></p> <p>Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.</p> <ul style="list-style-type: none"> <li>- to create sketch books to record their observations and use them to review and revisit ideas</li> <li>- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]</li> <li>- about great artists, architects and designers in history.</li> </ul>	<p>This unit of work builds upon the children's knowledge of abstraction developed from the Autumn term.</p> <p>In this unit they learn how to draw a portrait of themselves to scale and then by exploring the work of Pablo Picasso and George Braque, they develop abstract pictures of themselves. They use a range of mediums and ICT in this unit of work.</p>

**Year 3 MUSIC Topic 6: Brilliant Botanists**

KNOW	DO	UNDERSTAND
<p>I know that:</p> <ul style="list-style-type: none"> <li>• Sounds are produced in different ways and that instruments can be classified by these criteria.</li> <li>• One way of structuring music is through a 'musical conversation' (call/response)</li> </ul> <p><b>Vocabulary:</b></p> <p>Pitch            Timbre            Lyrics            Rhythm            Phrase            structure  <b>Aerophone</b>  <b>Chordophone</b>  <b>Idiophone</b>  <b>Membranophone</b></p>	<p><b>Music express: Sounds (3)</b> The children will watch a movie of different instruments which are categorised into different groups (Aerophone, Chordophone, Idiophone, Membranophone) and discuss the different sounds and how they are made. Using boomwhackers (an aerophone) , children will explore the different pitch and how to change the timbre by playing in a different way. Pairs of children/ groups will improvise a musical conversation. They will then listen to different sections of 'stamping tubes' to identify the different conversations. Using a graphic of the conversation, they will see how this is achieved using different pitches. They will move onto explore idiophones by listening to steel pans and looking at how the size can change the pitch.</p> <p>They will then learn the song 'dis long time gal', a call and response song, which uses steel pans as an accompaniment. They will then watch the accompaniments movie to see if they can play along using chime bars for steel pan part and maracas for the repeated word rhythm. The children will review the performance. The children will move onto looking at chordophones by listening to Raga piloo which uses a violin and a sitar. They will listen to the structure of the phrases and the mood it creates and look at how it is built like a conversation. They will listen to 'patterns in the night' and make comparisons. They will see how the lyrics in the chorus match the changing pitch of the melody. They will sing the chorus in groups. They will perform the song moving between using instruments and voices to create a musical conversation.</p>	<p><i>This follows on from the last unit where children began to sing call and response songs. This moves onto understanding how this can be done through instrumental music as well. Children have thought about timbre, and how instruments can be played differently to change the sound but this is developed further by looking more closely at how the sound is produced and how instruments can be classified by the way they make their sound.</i></p> <p><b>NC Areas covered:</b></p> <ul style="list-style-type: none"> <li>• Pupils understand and explore how music is created, produced, and communicated</li> <li>• Pupils appreciate and understand a wide range of recorded music drawn from different traditions, including the works of the great musicians</li> <li>• Pupils learn to sing and play a musical instrument</li> <li>• Pupils perform in an ensemble context</li> </ul>