

**Year 4 SCIENCE Topic 2: Junior Medics(4 Weeks)**

**Assessment Questions:**

1. How can you classify animals by looking at their teeth?
2. What is the effect on the food chain if one part is damaged?
3. How can you look after your teeth?
4. What are the different types of teeth?
5. If an animal is herbivore, which teeth would they have?
6. Can you describe a food chain – starting with a mouse?

Values: Perseverance and Respect

KNOW	DO	UNDERSTAND
<p>S: describe the simple functions of the basic parts of the digestive system in humans                      S: identify the different types of teeth in humans and their simple functions                      S: construct and interpret a variety of food chains, identifying producers, predators and prey</p> <p><b>Vocabulary:</b> <i>function, digestive system, mouth, tongue, teeth, oesophagus, stomach, the small and large intestine, teeth, molars, canines, incisors, carnivore, omnivore, herbivore, prey, predator, producer.</i></p> <p>Children know the main body parts associated with the digestive system (mouth, tongue, teeth, esophagus, stomach and the small and large intestine)</p> <p>Children know the role that each body part plays in digesting food.</p> <p>Children know the names of incisors, canines and molars and can describe the function of the different teeth.</p> <p>Children know that different animals will have different sets of teeth, dependent on whether they are a carnivore, herbivore or omnivore.</p> <p>Children know the definitions of prey, predators and producers.</p> <p>Children know how to draw a food chain and can explain one, using producer, prey and predator.</p>	<p>WS: asking relevant questions and using different types of scientific enquiries to answer them                      WS: setting up simple practical enquiries, comparative and fair tests</p> <p>Children ask questions about the different functions of the digestive system and will conduct scientific enquires to answer their questions.</p> <p>Children set up fair tests (having been exposed to this concept in year 3). They will discuss the idea that only one variable can be changed, e.g. vinegar and a boiled egg, looking at how the acid erodes the shell.</p> <p>Children sort animals into groups by looking at their teeth.</p>	<p><i>PRIOR KNOWLEDGE: children can identify omnivores, carnivores and herbivores. They can describe the basic needs of animals, including humans, for survival. Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.</i></p> <p>Children understand why it is important to look after our teeth and how you do that – links to PSHE.</p> <p>Children understand how our diet impacts our teeth. Children also revisit the different food groups, studied in year 3.</p> <p>Link food chain to plastic contamination. If plastic particles are in the sea, then they enter fish, then they can enter us.</p>

**Year 4 ART Topic 2: Junior Medics**

**Assessment Questions**

What are the features of Op Art?  
 How were you inspired? How did you create your own design?  
 What colours have you chosen and why?

**Perseverance and respect**

KNOW	DO	UNDERSTAND
<p>Know the features of Op Art.</p> <p>Can use Op Art as inspiration to create own design.</p> <p>Know how to take inspiration from the work of Bridget Riley/Victor Vasareley.</p> <p>Know how to choose complimentary or contrasting colours for effect.</p> <p>Key vocabulary:                      Optical Illusion Art (Op Art)                      Abstract                      Colour                      Movement                      Shape                      Form                      Line                      Swell/Warp                      Geometric                      Pattern                      Optical effects                      Complimentary colour                      Tertiary colour                      Contrasting colour</p>	<p>Optical illusion art.</p> <p>Op art works are abstract, with many better known pieces created in black and white. Typically, they give the viewer the impression of movement, hidden images, flashing and vibrating patterns, or of swelling or warping. Op art was a major development of painting in the 1960s that used geometric forms to create optical effects.</p> <p>Children will use mathematical concepts of space and measurement to create their own Op Art, developing their colour (complimentary or tertiary colours) or applying a black and white finish.</p> <p><a href="https://www.youtube.com/watch?v=9DW4wg2DdwU">https://www.youtube.com/watch?v=9DW4wg2DdwU</a></p> <p><a href="https://www.youtube.com/watch?v=-EEJSCloSs8">https://www.youtube.com/watch?v=-EEJSCloSs8</a></p> <p><a href="https://www.youtube.com/watch?v=B8K4HXdHREA">https://www.youtube.com/watch?v=B8K4HXdHREA</a></p> <p><a href="https://www.youtube.com/watch?v=rM2K5xvcSGQ">https://www.youtube.com/watch?v=rM2K5xvcSGQ</a></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 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, collage and painting</li> <li>- about great artists, architects and designers in history</li> </ul>	<p>This unit teaches children about the links between teeth and digestion. It gives them an opportunity to explore different body parts, with a large Science focus, investigating food chains, and human digestion. This art content gives children the opportunity to explore optical illusion art, as popularised by Victor Vasareley and British artist Bridget Riley in the 1960s.</p> <p>Children have previously explored coloured in-depth in Year 3, and will build upon these skills, and will apply their mathematical skills to create their optical illusion works.</p>