







 Children's prior learning in this area	 Cultural Capital Opportunities	 Key vocabulary and glossary
<p>In Year 1, children learnt about the external body parts of animals including humans and the body parts associated with each sense. In Year 3, children began to extend their knowledge of the body by learning about how skeletons provide support and protection for the body as well as how it enables movement by working with the muscles. This readies the children for this unit as they begin to look at internal systems that the skeleton protects.</p> <p>In Year 2, children learn about the importance of eating well, good hygiene and exercise. This is built on in Year 3, when children learn in more detail about the importance of nutrition, the uses of different nutrients and how nutritional diets vary from animal to animal. This readies the children for this unit as the children learn how the body breaks down food into smaller substances so that the nutrients can be absorbed and used by the body for energy, growth and repair.</p>	<p>Visit from dental therapist to discuss how science is used in her job, her day to day tasks and how to look after your teeth.</p>  A photograph showing a dental therapist in a clinical setting, wearing a blue scrub top, a face mask, and gloves, performing a procedure on a patient. A dental professional with blonde hair, also wearing a face mask and glasses, is assisting. The background shows dental equipment and a clean clinical environment.	<p>digest</p> <p>digestive system</p> <p>tongue</p> <p>teeth</p> <p>incisor</p> <p>canine</p> <p>pre-molar</p> <p>molar</p> <p>wisdom tooth</p> <p>mouth</p> <p>salivary glands</p> <p>oesophagus</p> <p>stomach</p> <p>small intestine</p> <p>large intestine</p> <p>rectum</p> <p>anus</p>

<p><b>Enquiry Question</b> What is a digestive system? Do all animals have the same digestive system?</p>	<p><b>Enquiry Question</b> Does saliva help to digest food?</p>	<p><b>Enquiry Question</b> Why do we have different teeth?</p>
<p><b>Working scientifically skill</b> observe closely; interpret results – answer the question</p>	<p><b>Working scientifically skill</b> draw conclusions</p>	<p><b>Working scientifically skill</b> observe closely; present and report findings</p>
<p><b>Enquiry type</b> identify, group and classify</p>	<p><b>Enquiry type</b> comparative and fair testing</p>	<p><b>Enquiry type</b> identify, group and classify</p>
<p><b>Children will know:</b>  digest: to break down food into small substances so that nutrients can be absorbed by the body  the digestive system: the body parts that take in foods and liquids and break them down into smaller substances so that the nutrients can be absorbed and used by the body for energy, growth and repair  They will know the names of the basic parts of the digestive system and be able to identify them on a diagram. These parts are: tongue, teeth, mouth, salivary glands, oesophagus, stomach, small intestine, large intestine, rectum, anus.  <b>Children will know how to:</b> identify differences, similarities or changes related to simple scientific ideas or processes and more complex groups of objects, living things and events.  <b>Children will know how to:</b> make systematic and careful observations  Children will use a wider range of scientific vocabulary and refer to scientific facts when describing processes and observations.  <i>Practise:</i> cloze procedure and label diagram of digestive system.  <i>Apply:</i> Explain why animals cannot survive without a digestive system.  <i>Deepen:</i> Do all animals have the same digestive system? Compare the digestive system of a human to that of another animal(s).</p> 	<p><b>Children will know:</b>  The digestive process begins before you even take a bite of food. Your sense of sight and smell send signals to your brain, which sends a message to your mouth that food is coming. The salivary glands produce saliva which will begin to digest the food. Saliva contains enzymes which helps to break down food. Saliva is wet and slippery which helps us swallow more easily and travel to the stomach.  <b>Children will know how to:</b> draw conclusions – with reduced scaffolding, pupils should look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions. Use results of enquiries to consider whether they meet predictions and explain why. Recognise the connection between the original question, enquiry results and whether they answer the question  <i>Practise:</i> Select the statements that are true.  <i>Apply:</i> Carry out enquiry – chew cracker and place in cup. Put cracker in water. Iodine test for presence of amylase.  <i>Deepen:</i> Share-write a conclusion for iodine enquiry. Children write own version. (This will follow viewing modelled conclusion by teacher for does saliva help food to travel to the stomach?)</p> 	<p><b>Children will know:</b>  Humans have four types of teeth and each type has a different function for breaking down food.  Incisor: to bite and cut off pieces of food  Canine: to rip and tear food  Pre-molar: to grip food, crush it and guide it backwards  Molar: to grind food down  Wisdom tooth: no function now. In Stone Age times, needed to further grind down tough plant leaves.  <b>Children will know how to:</b> make careful observations; present and report findings for a particular purpose and audience  <i>Practise:</i> Label teeth on a diagram.  <i>Apply:</i> Why do we have different teeth? Eat an apple and identify the functions of each type of tooth during the process of eating an apple. Share thoughts and draw conclusions through guided discussion.  <i>Deepen:</i> Present findings about the function of a tooth in a small group – create a rap that will help the class to remember the function of that tooth.</p> 

<p><b>Enquiry Question</b> What effect do different liquids have on teeth?</p>	<p><b>Enquiry Question</b> Can you plan, set up and perform an enquiry?</p>	<p><b>Enquiry Question</b> What happens to our food as it travels through the digestive system?</p>
<p><b>Working scientifically skill</b> plan, set up and perform an enquiry; observe closely, gather and record results; draw conclusions; ask questions; make predictions</p> <p><b>Enquiry type</b> observing over time</p>	<p><b>Working scientifically skill</b> plan, set up and perform an enquiry; observe closely, gather and record results; draw conclusions;</p>	<p><b>Working scientifically skill</b> present and report findings</p>
<p><b>Children will know:</b> it is important to look after your teeth or they will decay and fall out. Tooth decay is damage to the tooth's enamel which occurs when bacteria mixes with sugars and produces acids that weaken and wear away the enamel.</p> <p><b>Children will know how to:</b> plan, set up and perform an enquiry identify one or more control variables when conducting a fair test. Choose an appropriate line of enquiry through discussion.</p> <p><i>Practise: cloze procedure.</i></p> <p><i>Apply: Guided application of planning, setting up enquiry. Gather systematic, careful observations.</i></p> <p><i>Deepen: Use success criteria to write conclusion following a discussion of the results. <b>Independent assessment opportunity.</b></i></p> 	<p><b>Children will know how to:</b> plan, set up and perform an enquiry identify one or more control variables when conducting a fair test. Choose an appropriate line of enquiry through discussion. Children will be able to identify the enquiry type.</p> <p><i>Practise: Identify control variables, what will change and what will be measured in an example enquiry.</i></p> <p><i>Apply: In a group, plan, set up and perform an enquiry.</i></p> <p><i>Deepen: Use success criteria to write conclusion following a discussion of the results. Target children who need further support as identified in assessment last lesson.</i></p> 	<p><b>Children will know:</b> the functions of the basic parts of the digestive system.</p> <p>Tongue: Helps mix the food and saliva. Helps to form the food into a ball.</p> <p>Teeth: Tear, cut and grind food into smaller pieces.</p> <p>Salivary glands: Produces a substance that contains enzymes which begin to break down the food. Helps us to swallow more easily.</p> <p>oesophagus: Connects the mouth to the stomach. Muscles here pass the food downwards.</p> <p>stomach: Where the muscles, acid and enzymes break the food down further.</p> <p>Small intestine: Absorbs nutrients from the food.</p> <p>Large intestine: Absorbs water from waste food. Forms stools from waste food.</p> <p>Rectum: Where stools are stored. Makes brain aware of need to go to the toilet.</p> <p>Anus: Where the stool is released.</p> <p><b>Children will know how to:</b> present and report findings in an appropriate way for the purpose and the audience.</p> <p><i>Practise: Match the description of a function with name of body part and image.</i></p> <p><i>Deepen: Present and report findings about the digestive system.</i></p> 