

# Science

## Animals, including humans Year 4 (digestion system/teeth)

### Remember when

Named parts of the human body and what they do. (Y1)  
 Animals need water, air and food to survive. (Y2)  
 Animals get nutrition from what they eat. (Y2/Y3)  
 Humans and some animals have skeletons and muscles for support, protection and movement. (Y3)  
 Grouped animals by type: carnivores, omnivores and herbivores. (Y1/Y2)  
 Excretion is one of the seven living processes. (Y3)

### Sticky knowledge

- Humans have 5 types of teeth: incisors, canines, premolars, molars and wisdom teeth.
- Canines are for ripping and tearing, incisors and for biting and molars are for grinding and chewing.
- Sugary drinks and food can damage our teeth
- Food enters the body through the mouth and leaves through the anus.
- The digestive system breaks down the food to give our bodies what they need to move and grow.

### Key vocabulary

biting  
 canine  
 chewing  
 digestive system  
 excretion  
 faeces  
 grinding  
 incisors  
 ingest/ ingestion/  
 ingested  
 intestine  
 intestines

nutrients  
 organ  
 oesophagus  
 pancreas  
 plaque  
 premolars  
 saliva  
 salivary gland  
 stomach  
 teeth  
 tooth decay  
 molar  
 mouth  
 muscles

### National Curriculum:

Describe the simple functions of the basic parts of the digestive system in humans  
 Identify the different types of teeth in humans and their simple functions.

### Common Misconceptions

- your stomach is where your belly button is
- food is digested only in the stomach
- when you have a meal, your food goes down one tube and your drink down another
- the food you eat becomes "poo" and the drink becomes "wee".

	LO	Lesson outline
<p><b>Lesson 1</b></p> <p><b>LO:</b> To identify the different types of teeth.</p> <p><b>Enquiry Type</b> Observation</p>	<p><b>Sticky Knowledge:</b> Humans have 5 types of teeth: incisors, canines, premolars, molars and wisdom teeth</p> <p><b>Skill:</b> Making systematic and careful observations</p>	<p>use mirrors to look at their own teeth, make a set of teeth from plasticine to identify the different shapes and learn and be confident on the different names. Name the different types of teeth.</p> <p>All to label teeth on diagram.</p> <p>Key facts about my teeth. How many molars? How many altogether?</p> <p>Pictures of teeth to find according to description.</p> <p><a href="https://www.bbc.co.uk/bitesize/topics/z7x78xs/articles/zsp76yc">https://www.bbc.co.uk/bitesize/topics/z7x78xs/articles/zsp76yc</a></p> <p>Research facts about teeth as an extension such as how many we have when we are a child and an adult, when we start getting milk teeth, which order they fall out in etc children could also pose questions they would like to find out about</p> <p>This tooth is found at the back of the mouth because _____</p>
<p><b>Lesson 2</b></p> <p><b>LO:</b> To know the different functions of teeth in humans.</p> <p><b>Enquiry Type</b> Research</p>	<p><b>Sticky Knowledge:</b> Canines are for ripping and tearing, incisors and for biting and molars are for grinding and chewing.</p> <p><b>Skill :</b> Record findings using simple scientific language</p>	<p><a href="https://www.bbc.co.uk/bitesize/topics/z7x78xs/articles/z2rx82">https://www.bbc.co.uk/bitesize/topics/z7x78xs/articles/z2rx82</a></p> <p>Recap on previous learning and children identify they have 2 sets of teeth and different teeth types including their functions.</p> <p>Children bite into pieces of apple and other food that is hard or soft to embed teeth roles/ functioning.</p> <p>Complete table for each role.</p> <p>GD- Explain how the roles are involved in mastication/chewing, the tooth structure parts and functioning.</p> <p>LA/EXS, use key words to describe properties (group activity)</p>

<p><b>Lesson 3</b></p> <p><b>LO:</b> To understand the importance of keeping teeth healthy</p> <p><b>Enquiry Type</b> Comparative test</p>	<p><b>Sticky Knowledge:</b> Sugary drinks and food can damage our teeth</p> <p><b>Skill:</b> Set up simple practical enquiries, comparative and fair tests</p>	<p>How liquids affect our teeth. STEM science clip</p> <p>BBC Bitesize clip</p> <p>Practical investigation.- whole class over the week.</p> <p>Boiled eggs to represent teeth enamel. Soak in milk, coffee, fresh orange, pepsi, water and cordial.</p> <p>What do you think will happen? Which will damage your health the most? Why?</p> <p>Record findings each day. Conclusion with reasons. Were they surprised by the results?</p> <p>What will they do differently after the findings?</p> <p>Mixed ability groupings</p>
<p><b>Lesson 4</b></p> <p><b>LO:</b> To know the parts of the digestive system in humans</p> <p><b>Enquiry Type</b> Research</p>	<p><b>Sticky Knowledge:</b> Food enters the body through the mouth and leaves through the anus.</p> <p><b>Skill :</b> Record findings using drawings and labelled diagrams</p>	<p><a href="https://www.bbc.co.uk/bitesize/topics/zv9qhyc/articles/zby2xyc">https://www.bbc.co.uk/bitesize/topics/zv9qhyc/articles/zby2xyc</a></p> <p>Piece digestive system organs together activity (on flip chart paper-outline of body provided – draw around a child).</p> <p>Use apron digestive system resources. Each group to place organs on a child wearing the apron.</p> <p>Label diagram all parts of digestive system LA- draw round a child. Place the digestive system in where they think. Check when complete. Adult support – Twitter to record. ARE/GD – outline of a body. Draw and label the parts of the digestive system.</p>
<p><b>Lesson 5</b></p> <p><b>LO:</b> To know the functions of the digestive system in humans.</p> <p><b>Enquiry Type</b> Research</p>	<p><b>Sticky Knowledge:</b> The digestive system breaks down the food to give our bodies what they need to move and grow.</p> <p><b>Skill</b> Record findings using drawings and labelled diagrams</p>	<p>Recap on the parts of the digestive system.</p> <p><a href="https://www.youtube.com/watch?v=VwrsL-ICZYo">https://www.youtube.com/watch?v=VwrsL-ICZYo</a></p> <p>Discuss what each part does. Refer to the video watched.</p> <p>LA- Use sentence template. Match the definitions given. ARE- Complete the sentences with the functions. Key vocabulary given. The stomach _____. GD- Explain digestive system and functions. Key vocabulary given</p>
<p><b>Lesson 6</b></p> <p><b>LO:</b> To know the parts of the digestive system and the function of the different parts.</p> <p><b>Enquiry Type</b> N/A</p>	<p><b>Sticky Knowledge:</b> Food enters the body through the mouth and leaves through the anus.</p> <p>The digestive system breaks down the food to give our bodies what they need to move and grow.</p> <p><b>Skill</b> Report on findings from enquiries including oral and written explanations, displays or presentations of results and conclusions</p> <p>Record findings using simple scientific language</p>	<p><a href="https://www.bbc.co.uk/bitesize/topics/zf339j6/articles/zv8m7yc">https://www.bbc.co.uk/bitesize/topics/zf339j6/articles/zv8m7yc</a></p> <p>Recap on names of digestive system and uses. Length of time for digestive system to work</p> <p>Making poo – investigation STEM- ‘Digestive system experiment’</p> <p>Follow set instructions modelling how digestive system works. Mixed ability grouping</p> <p>Record on Twitter</p>
		<b>End of unit assessment</b>

Working towards	Working at Age related expectations	Working at a greater depth
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