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| **Parklands Primary School – Science** | | | | | | |
| **Topic: Animals including humans** | | | | | **Year 4** | |
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| **What do we already know?** | |  | **Investigate**   * Investigate the amount of sugar in drinks and learn how sugar leads to an increase in **plaque** and how this destroys tooth **enamel**. * Compare the teeth of **carnivores, omnivores** and **herbivores.** What do you notice? * Match animals to their teeth and explain your reasons for this. * Identify the parts of the **digestive** system and explain their functions * Make a model of the digestive system to show how each stage works. |  | | **Vocabulary**   |  |  | | --- | --- | | absorb | soak up or take in | | canine | pointed teeth near the front of the mouth of humans and of some animals | | carnivore | an animal that eats meat | | decay | gradually destroyed by a natural **process** | | digestion | breaking down **ingested** food material | | enamel | the hard white substance that forms the outer part of a tooth | | excretion | the process of eliminating **faeces**, urine, or sweat from the body | | faeces | the solid waste substance that people and animals get rid of from their body  by passing it through the anus | | herbivore | an animal that only [eats](https://www.collinsdictionary.com/dictionary/english/eat) plants | | incisor | the teeth at the front of your mouth which you use for biting into food | | ingested | When animals or plants **ingest** a substance, they take it into themselves, for  example by eating or **absorbing** it | | intestines | the tubes in your body through which food passes when it has left your  **stomach** | | molar | the large, flat teeth towards the back of your mouth that you use for chewing  food | | muscles | something [inside](https://www.collinsdictionary.com/dictionary/english/inside) your body which [connects](https://www.collinsdictionary.com/dictionary/english/connect) two [**bones**](https://www.collinsdictionary.com/dictionary/english/bone) and which you use  when you make a movement | | nutrition | the process of [taking](https://www.collinsdictionary.com/dictionary/english/taking) food into the body and [**absorbing**](https://www.collinsdictionary.com/dictionary/english/absorb) the **nutrients** in those  foods | | oesophagus | the part of your body that carries the food from the throat to the **stomach** | | omnivore | person or animal eats all [kinds](https://www.collinsdictionary.com/dictionary/english/kind) of food, including both [meat](https://www.collinsdictionary.com/dictionary/english/meat) and plants | | organ | a part of your body that has a particular [purpose](https://www.collinsdictionary.com/dictionary/english/purpose) | | plaque | a substance containing bacteria that forms on the surface of your **teeth** | | premolar | two situated on each side of both **jaws** between the first **molar** and the  **canine** | | process | a series of actions used to produce something or reach a goal. | | Saliva | the watery liquid that forms in your mouth and helps you to chew and digest  food | | Stomach | the **organ** [inside](https://www.collinsdictionary.com/dictionary/english/inside) your body where food is **digested** before it moves into the  [**intestines**](https://www.collinsdictionary.com/dictionary/english/intestine) | |
| * The parts of the human body and what they do. * All animals need water, air and food to survive. * The different ways in which humans are healthy. * Animals get **nutrition** from what they eat. * Humans and some animals have skeletons and   **muscles** for support, protection and movement.   * What **carnivores, omnivores** and **herbivores** are.   **Excretion** is one of the seven living processes | |
| What will I know by the end of the unit | |
| What is the role of our **teeth** and how do we look after them? | * Teeth are used for cutting and chewing food. * They start the **digestive process** which gives us the energy we need to live. * Humans look after their teeth by brushing and flossing and   ensuring that they do not eat foods high in sugar.  Not looking after teeth can lead to an increase in **plaque** and **tooth decay.** |
| What are the  different names and functions of human **teeth?** | * **Canines** are pointed for tearing and ripping food - these are usually used when chewing meat. * **Incisors** are shovel shaped and help bite lumps out of and cut food. * **Premolars** and **molars** are flat and they grind and crush food |
| * **Saliva** is mixed with the food which helps to break it up. * When the food is small enough to be swallowed, it is pushed down the   **oesophagus** by **muscles** to the **stomach.**   * In the **stomach,** food is mixed further. * The mixed food is then sent to the small **intestine** which **absorbs nutrients** from the food. * Any leftover broken down food then moves on to the large **intestine**. * The food minus the nutrients arrives in the rectum where **muscles** turn it into **faeces.** It is stored here until it is pushed out by the anus. This is   called **excretion.**  Oesophagus   * The smell of food triggers **saliva** to be produced. * The **digestive** system begins with the mouth and teeth where food is **ingested** and chewed.   **The Digestive System** | | | | | | |

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| Question 1:  Place these in order of what happens in the digestive system. | Start of unit: | End of unit: |  | Question 2:  Which of these life processes takes place when  waste is pushed out? | | Start of unit: | | End of unit: | |  | Question 3:  The substance that contains bacteria on the surface of your teeth is called… | Start of unit: | End of unit: | |  | Question 4:  The substance that helps break down food in the mouth is… | | Start of unit: | End of unit: |
| Teeth chew food and saliva helps the food to break down. |  |  | respiration | |  | |  | | plaque |  |  | | oesophagus | |  |  |
| Any final nutrients are absorbed before waste is pushed out by the anus. |  |  | reproduction | |  | |  | | canines |  |  | | saliva | |  |  |
| In the stomach the food is mixed further and then sent to the intestines |  |  | excretion | |  | |  | | molars |  |  | | nutrients | |  |  |
| The food is pushed down the oesophagus to the stomach. |  |  |  | |  | |  | | incisors |  |  | | stomach | |  |  |
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| Question 5:  What carries food from the mouth to the stomach? | Start of  unit: | End of  unit: | Question 6: Tooth decay is when.. | | Start of  unit: | | End of  unit: | |  |  |  | |  | |  |  |
| blood |  |  | teeth are used to chew | |  | |  | |  |  |  | |  | |  |  |
| oesophagus |  |  | teeth are kept healthy | |  | |  | |  |  |  | |  | |  |  |
| tongue |  |  | teeth are destroyed and damaged | |  | |  | |  |  |  | |  | |  |  |
| teeth |  |  | teeth are brushed twice a day | |  | |  | |  |  |  | |  | |  |  |
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| Question 7: Label the types of teeth: incisors, molars, premolars, canines | | | | |  | |  | | Question 8: Name two ways in which we can look after our teeth. | | | | | Start of unit: | | | End of unit: | | |
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| Question 9: Is this the skull of a carnivore, omnivore or herbivore? Explain how you know.  Carnivore skull | Royal Ontario Museum, ROM, Toronto, 2017 ... | Start of unit: | End of unit: |
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| Question 10: Is this the skull of a carnivore, omnivore or herbivore? Explain how you know.  Serina Brady | Start of unit: | End of unit: |
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