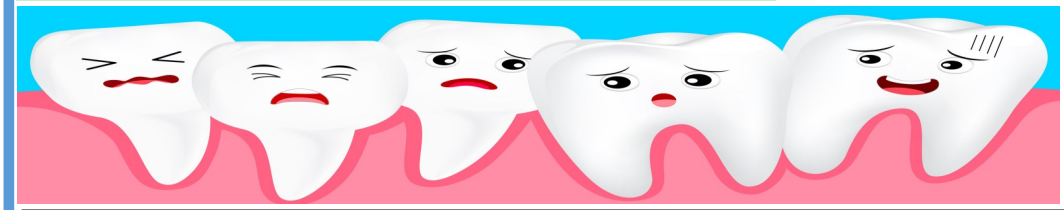
Respect the Bod! What Happens To The Food We Eat?

(Animals including humans)



Overview and rationale:

Having acquired some knowledge about our bodies throughout KS1 and in Year 3, our pupils further enhance their understanding of how our physical forms work and how we survive in our world. We've come a long way from the animalistic human beings that our children studied in their pre-historic topic in Year 3 but we still have some of the same instincts and certainly many of the physical characteristics, some of which we share with other animals. Here, the children take a look at the digestive system – knowledge of which is furthered in Year 6 – as well as taking a closer look at our gnashers and how important they are to animals, whether carnivore or herbivore. Importantly, the children also build on their prior knowledge of the importance of healthy living and how essential it is to look after our teeth!

SCIENCE LEARNING STATEMENTS

Area of Learning	Knowledge and Skills
Scientific Enquiry and applying knowledge in context	I can raise my own relevant questions about the world around me and begin to look for answers.
	I am given a range of scientific experiences including different types of scientific enquiry to answer questions.
	I can start to make my own decisions about the most appropriate type of scientific enquiry I might use to answer questions and give justifications.
	I can set up simple practical enquiries, comparative and fair tests. I can recognise when a simple fair test is necessary and help decide how to set it up.
	I can talk about criteria for grouping, sorting and classifying; use simple keys and explain how they should be used.
	I can recognise when and how secondary sources might help me to answer questions that cannot be answered through practical investigations. I can use a selection of resources.
	I can make systematic and careful observations. I can make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used.
	I can look for naturally occurring patterns and relationships; decide what data to collect to identify them.
	I can take accurate measurements using standard units, learn how to use a range of equipment, such as data loggers and thermometers, appropriately.
	I can collect and record data from their own observations and measurements in a variety of ways: notes, bar charts, tables. I can select and use the most appropriate standard units, drawings, labelled diagrams, keys and help to make decisions about how to analyse the data.
	I can look for changes, patterns, similarities and differences in their data in order to draw accurate conclusions and answer further questions
	I can confidently use relevant scientific language to discuss their ideas and communicate their findings, in ways that are appropriate for different audiences, including oral and written explanations, displays or presentations of results and conclusions.
	I can identify new questions arising from my data, making predictions for new values within or beyond the data I have already collected and finding ways of improving what I have already done.

KEY VOCABULARY

digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor, canine, molar, premolars, carbohydrates, protein, fats, fibre

NATIONAL CURRICULUM OBJECTIVES

1. describe the simple functions of the basic parts of the digestive system in humans
2. identify the different types of teeth in humans and their simple functions

Possible Enrichment activities (including trips/visitors, etc)	Food travelling through the digestive system - practical session.

'CORE' KNOWLEDGE	'ADDITIONAL' KNOWLEDGE
1) I know that the digestive system is made up of different parts of our body which all help to break down, process and get rid of the food we eat.	a) I know where the mouth, oesophagus, Liver, small intestine, large intestine and pancreas are located in the human body.
	b) I know the main functions of the mouth (bite, chew and swallow), oesophagus (moves the food down to the stomach), Liver (produces bile and helps get rid of waste), small intestine (breaks down food and absorbs nutrients, large intestine (absorbs water and salts and gets rid of any waste) and pancreas (makes enzymes to break down sugars, fats and starches) and why they are important.
	c) I know that saliva glands produce saliva and the enzymes in this help to break down food in the mouth.
2) I know that there are different types of teeth in my mouth and that they are designed to do specific jobs. **REVIEW: Evaluate: TEETH (EGGS) IN LIQUIDS**	a) I know what incisors, canines, pre-molars and molar teeth look like and can locate them in the mouth.
	b) I know the specific jobs of the incisors (bite food), canines (sharpest – tear food), pre-molars and molar (grind, tear and crush food) teeth.
	c) I know how our teeth differ from those of different animals and can give examples of carnivores, herbivores and omnivores.
3) I know that it is important to maintain healthy teeth and understand how to do this.	a) I know teeth are made up of many layers and that fluoride keeps teeth healthy and strong and prevents cavities and decay.
	b) I know what a good hygiene routine is and why this is important.
	c) I know that sugary foods are bad for teeth and can explain why using words like acid, cavity and plaque.
4) I know what a healthy, balanced diet is and why it's so important.	a) I know a balanced diet is a combination of carbohydrates, protein, fats and fibre.
	b) I know carbohydrates give us energy, protein help repair, fats store energy and fibre helps with digestion.
	c) I know that too much of any of these food types is bad for our health.

Possible 'higher order' questioning	
Remember	What is the teeth's job?
Understand	How does food travel around the body? How is it broken down? Can all food be broken down?
Apply	Why do we need to eat a healthy and balanced diet? What would happen if we didn't?
Analyse	Can you order foods from healthiest to most unhealthy? How does toothpaste help our teeth?
Evaluate	What would happen if we didn't eat a balanced diet? What effect would it have on us on the inside…and on the outside?
Create	Can you create a healthy menu that is exciting, tasty and combines all the necessary food groups?

School Value	Topic relevance: How/when/where/why is it needed?
Resilience	Eating healthily and maintaining good oral hygiene isn't always easy, we need resilience to achieve this…especially when there's chocolate around!
Respect	How can we respect our bodies? What do we need to provide it to make sure it is working at its best?
Responsibility	It is our responsibility to look after our teeth and consider our oral hygiene…how do we do this?
Happiness	The digestive system likes to be happy too…how can we feed its happiness?
Kindness	Our digestive system is vital to our health – let's be kind to it…but how?
Pride	Having pride in our appearance is great – how can we have a healthy body and mouth to show off to the world?