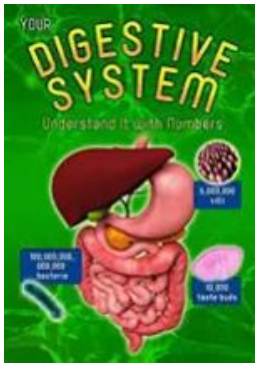
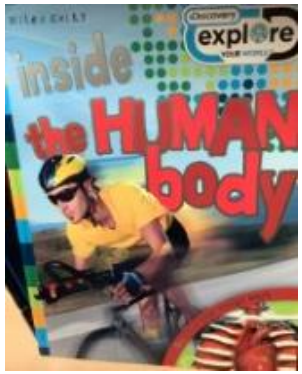
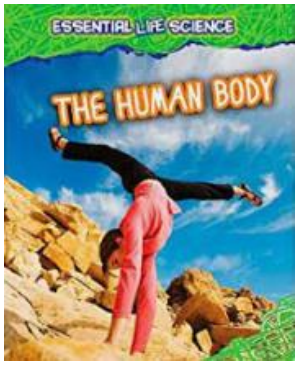
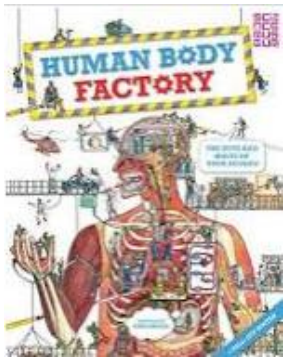
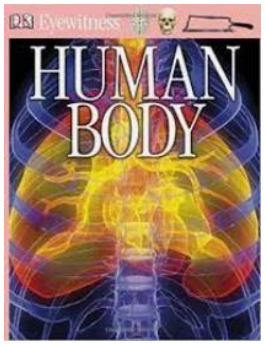
BILSTON CHURCH OF ENGLAND PRIMARY

MEDIUM TERM PLANNING

Subject	Topic/Key Question	Year Group	Term	Time Allocation
Science	Where does all that food go? Digestion and teeth	4	Spring 1	11 hours
 Science resource cupboard	 Library	 Science resource cupboard	 Science resource cupboard	 Science resource cupboard
End of lower Key stage 2 Outcomes	Asking relevant questions and using different types of scientific enquiries to answer them. Setting up simple practical enquiries, comparative and fair tests. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.			

	Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identifying differences, similarities or changes related to simple scientific ideas and processes. Using straightforward scientific evidence to answer questions or to support their findings.
End of Unit Outcomes	I can describe the simple functions of the basic parts of the digestive system in humans. I can identify the different types of teeth in humans and their simple functions I can construct and interpret a variety of food chains, identifying producers, predators and prey.
Vocabulary	Human, digestive system, mouth, tongue, mixes, moistens, saliva, teeth, incisor, cutting, slicing, canines, ripping, tearing, molars, chewing, grinding, oesophagus, transports, stomach, acid, enzymes, small intestine, vitamins, large intestines, compacts, carnivore, herbivore, brush, floss, food chain, sun producer, prey predator.

Lesson Sequence	Time Allocation	Key Question/WALT	Teaching Activities E-Learning activities	Resources

Lesson 1 What do we know about food?	2 hours	**WALT:** share what we know about food and nutrition and to ask questions about what happens to food after it has been eaten. WILF: I can name the main food groups and give examples of foods that belong to each group. I can explain why each food group is important. I can explain the term 'balanced diet'. .	**Working Scientifically:** Asking relevant questions. To share what we know about food and nutrition and to ask questions about what happens to food after it has been eaten • Discuss where animals inc. humans get their nutrients from. • Identify the different food groups with the children – what do they know? • Play food group speed dating (Twinkl) to give the children an overview of what the different food groups do to support the body. • Link with the ICT lesson on food packaging looking at the salt, fat, sugar and carbohydrate levels in different chocolate bars – children will create a data base for this. • Discuss with the children what happens after you have ingested the food. • Talk about the function of the digestive system. (Twinkl presentation – Digestive system functions.) • Label the digestive system.	Collins connect lesson 1 Twinkl
Lesson 2 Where does the food go inside your body?	2 hours	**WALT:** investigate where our food goes after it has been eaten. WILF: I can name the basic parts of the digestive system.	**Working Scientifically:** Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. To investigate where our food goes after it has been eaten • Show the children an image of the labelled digestive system. Can children recall the functions of the different organs.	Collins connect lesson 2 links Making Poo slides. Bowls, piping, old socks, vinegar, coffee

		I can sequence the parts of the digestive system.	• Share with the children the 'Making Poo' slides. Explain that they are going to be carrying out a practical investigation, making poo. So they will be following the journey of food from their 'Gums to their Bums.' • Children follow the Making poo slides in table groups. • Record the stages of the investigation with photographs.	
Lesson 3 How does the digestive system work?	1 hour	**WALT:** investigate where our food goes after it has been eaten. WILF: I can name the basic parts of the digestive system. I can sequence the parts of the digestive system.	**Working Scientifically:** Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. To recount where our food goes after it has been eaten • Review the photos that were taken of the 'Making poo' experiment. • Children recount the story of the digestive system as if they were a piece of food. • Make reference to the essential organs and use anatomical language. • LA children to create a flick book for the stages of the digestive system.	Making Poo slides. Paper for a flick book.
Lesson 4 What sort of teeth do we have?	1 hour	**WALT:** identify the different teeth that humans have. WILF: I can name the types of teeth. I can recognise the types of teeth in my mouth.	**Working Scientifically:** making systematic and careful observations. To identify the different teeth that humans have and their functions. • Review the function of the teeth in the making poo experiment. • Ask the children to count how many teeth they have (may vary as they are at milk teeth loss stage).	Collins connect lesson 3 Twinkl Models of teeth.

		I can explain the difference between the teeth of a child and an adult.	• Ask them to count the different types of teeth they can feel in their mouth. • Talk to the children about the different types of teeth and the function of those teeth. • Give children models to explore. • Children to label and record the different types of teeth and their function.	
Lesson 5 How can we look after our teeth?	2 hours	**WALT:** recognise how to look after our teeth and explain its importance. WILF: I can describe different ways to look after our teeth. I can explain why it is important to look after our teeth. I can give some consequences of not looking after our teeth. I can prepare a PowerPoint presentation suitable for younger children.	**Working Scientifically:** Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. To recognise how to look after our teeth and explain its importance. **(NB before this lesson you will need parental consent for using disclosing tablets)** • Review tooth function and ask why it is important for good oral hygiene. • Look at tooth decay – what is it? **How plaque causes tooth decay** • Your mouth is full of bacteria that form a film over the teeth called dental plaque. • When you consume food and drink high in carbohydrates – particularly sugary foods and drinks – the bacteria in plaque turn the carbohydrates into energy they need, producing acid at the same time. • If the plaque is allowed to build up, the acid can begin to break down (dissolve) the surface of your tooth, causing holes known as cavities. • Once cavities have formed in the enamel, the plaque and bacteria can reach the dentine (the softer, bone-	Collins connect lesson 5 Toothbrushes x30 Toothpaste Disclosing tablets x30 and consent from parents.

			like material underneath the enamel). As the dentine is softer than the enamel, the process of tooth decay speeds up. • Without treatment, bacteria will enter the pulp (the soft centre of the tooth that contains nerves and blood vessels). At this stage, your nerves will be exposed to bacteria, usually making your tooth painful. • The bacteria can cause a dental abscess in the pulp and the infection could spread into the bone, causing another type of abscess. • Children complete an experiment using the disclosing tablets. Follow the instructions on the packet. • Ask the children what they observe with their own teeth during the experiment. • Children produce a poster on oral hygiene. Could be using a desktop publishing programme.	
Lesson 6 What do animals' teeth tell us?	1 hour	**WALT:** construct food chains for some animals living in the African grasslands. **WILF:** I can use correctly the terms consumer, producer, predator and prey. I can sort some animals according to what they eat by looking at their	**Working Scientifically:** making systematic and careful observations. To identify the different teeth that animals have and their functions. • Explain to the children that different animals have different teeth depending on their diet. If they have a carnivorous diet they are going to have carnassial teeth – something that we haven't identified in humans. • Show the children a series of images of animals jaw lines. Can the children identify the types of diets they will eat based on the types of teeth they have.	Collins connect lesson 7 Twinkl – Comparing animal teeth

		skulls, and in particular their teeth. I can order the animals in a food chain.	• Complete the Comparing animal teeth work from Twinkl.	
Lesson 7 What do animals eat?	2 hours.	WALT: construct food chains and webs for a particular habitat. WILF: I can state whether a living thing is a consumer or producer. I can create food chains/webs from information given. I can use the food chains/webs to decide whether or not animals are predators or prey or both.	**Working Scientifically:** Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. To construct food chains and webs for a particular habitat • Share with the children the concept of a food chain. • Look at food chains for the ocean, temperate forest, rainforest. • Give the children some food chain cards, can they follow the food chains to see if they can make a chain. • Use specific vocabulary; producer, primary consumer, secondary consumer, tertiary consumer, predator, prey. • Children draw a selection of their own food chains that they have made in their books and label with specific vocabulary. • Look at temperate forest food web. • Look at features of a food web and discuss that a chain isn't always the best to illustrate how food is consumed. Many creatures are prey to more than one animal.	Collins connect lesson 6 links

			• Answer some questions with the children regarding the food web. • Challenge the children to come up with their own questions about the food web and ask a friend to answer them.	