L Asghar

Subject –Science Spring **1 Year 4 Animals including Humans**

TAPS Assessment: Teeth in liquid

Key vocabulary: Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor, canine, molar, premolars,

National Curriculum	Week	NC - Coverage	Disciplinary Knowledge	Factual Knowledge	Activity Outline
The national curriculum for Science aims to ensure that all pupils: **Working Scientifically Lower KS2** pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: § 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	1	Describe the simple functions of the basic parts of the digestive system in humans	Label the different parts of the digestive system including the mouth, stomach, small intestine, large intestine, rectum and anus.	I know how parts of the model can represent the organs in the digestive system including the mouth, teeth, stomach, small intestine, large intestine, rectum and anus.	Ask children to think about what they already know about the human body/ parts of the body related to the digestive system. Collate their ideas using KWL grids. Children to participate in their BBI & meet the scientist. Children to make models of the stages of the digestive system in groups using household items, following instructions from the teacher. At each stage ensure the correct vocabulary is used to describe the function.
	2	Describe the simple functions of the basic parts of the digestive system in humans	I can use diagrams to describe the journey of food through the body.	I know the functions of the different organs in the digestive system e.g., in the mouth the saliva moistens food and starts to break down starches.	Ask children to complete a storyboard retelling 'the journey of an item of food'. It should identify the functions of the different organs in the digestive system. Ensure children are using the key vocabulary independently.
	3	Identify the different types of teeth in humans and their simple functions.	Make careful observations of the similarities and differences between types of teeth.	I can name the different teeth (incisors, canines and molars) where they are in the mouth and explain their function. e.g., the molars are at the back of the mouth and are used	Explain the role of different types of teeth. Children to then explore eating different types of food to identify which teeth are being used for cutting, tearing and grinding (chewing). Working in pairs children to make videos naming teeth, position and their function. Assess children's oral evidence.

§ identifying differences, similarities or changes related to simple scientific ideas and processes § using straightforward scientific evidence to answer questions or to support their findings **Subject Content** Pupils should be taught to: • 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 **Note:** Construct and interpret a variety of food chains, identifying producers, predators and prey to be taught in their teaching of the **Living things and their habitats.** Common Misconceptions Some children may think: • there is always plenty of food for wild animals • 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"				to grind food as we eat.	
	4	Identify the different types of teeth in humans and their simple functions	To use knowledge about tooth decay to ask relevant questions and make a prediction.	To know that teeth are made from enamel and they needed to be protected from tooth decay.	This is an enrichment activity to be carried out by the children once they have demonstrated they are secure with the types and function of the teeth. It provides opportunities for working scientifically. The children are to receive a 'letter from a toothpaste company' asking them to investigate tooth decay and different toothpastes to give advice about the design of a new toothpaste.
	5	Identify the different types of teeth in humans and their simple functions	TAPs Assessment To use results to draw simple conclusions, suggest improvements and raise further questions e.g . Is orange juice a 'healthy' drink? I wonder whether it contain a lot of sugar.	To be able to order liquids according to damage done to eggs and suggest reasons why.	Leave for one week, although children can check on the experiment daily to see if they can notice any changes. After one week, unveil the eggs by tipping into a white bowl and photograph. Children to record their observations (look, feel, smell, etc.) and rate the eggs in order of damage to shell observed. Children to consider how they could improve the test and what further questions arise that they could investigate.
	6		To set up comparative tests using a stopwatch to measure time. To create their own table to record the results of their tests .	To know how to set up tests to independently e.g., deciding on observations and on categories for their table of results.	This is an additional enrichment activity Ask children to work in groups to set up a number of tests to compare toothpastes. They can discuss the colour and smell, testing how long it takes to clean permanent pen off an enamel tile, and how long it takes to shake the toothpaste off the toothbrush. Children to compare their results with other groups.