



Dore Primary School

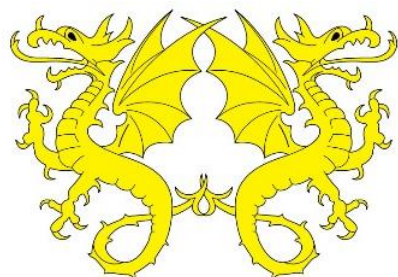
Y4 Learning Journey 2

Food for Thought



ENDPOINTS Substantive knowledge children will know: Disciplinary knowledge children will know how to / be able to:	<u>Science</u> Animals, Including Humans: <ul style="list-style-type: none"> 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 States of Matter: <ul style="list-style-type: none"> compare and group materials together, according to whether they are solids, liquids or gases observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature Working Scientifically (through teeth investigation, digestive system re-enactment, states of matter investigations): <ul style="list-style-type: none"> 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
Links to Prior Knowledge:	Science – changing states, healthy bodies; Outdoor Learning – fire
Links for Relevance and Currency:	Healthy eating habits
Immersion Event / Activity:	Dance (PE) Change of State theme
Celebration of Learning:	OL & Science – campfire cooking to test out knowledge of changing states; OL & D&T – reindeer decorations; English – Story Scrolls (stand-alone English unit)
English Links:	Writing scientifically
Maths Links:	Graphs to show scientific data

Subject	Lesson	Milestone (Key Knowledge or Skill)	Knowledge and Skills embedded through:	Outcomes	Links to Curriculum Drivers				
					Values	Outdoor Learning	P4C	Global / Rights	TASC
Outdoor Learning and Science	5	Water cycle Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Recreate water cycle visually using found resources.	Understand water cycle Develop creativity, resourcefulness and kindness	✓	✓			✓
	1, 2	To identify the different types of teeth in humans. To describe the functions of the different types of teeth To identify the different types of teeth in animals.	Look at model of human teeth Label and describe different teeth on a diagram Research	TASC-based poster showing knowledge about teeth	✓				✓



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		To describe the functions of the different types of teeth in animals.	Compare diagrams of different animal's teeth. Compare and contrast herbivores, carnivores and omnivores.					
	3, 4	Scientific thinking: To carry out an investigation	Investigate the effects on tooth enamel of different drinks. Using egg shells to replicate tooth enamel. Set up a fair test. Carry out daily observations Record observations in a table Discuss results Write recommendations	Completed investigation with method, diagram, observations/ results, conclusion and recommendation	✓			✓
	5	To describe the functions of the digestive system	Observe a demonstration of the human digestive system Children create a model of the digestive system in response, labelling the parts and discussing	Model of human digestive system				
	6	To compare animal's digestive systems	Watch video and show slides to show different animals' digestive systems.	Labelled diagrams of cow and bird digestive systems	✓			
	7	Compare and group materials together, according to whether they are solids, liquids or gases.	Sorting and grouping items or pictures of materials					
	8	Observe that some materials change state when they are heated or cooled.	Set up a fair test to compare how fast an ice cube melts when wrapped in different materials. Observed ice cubes melting and compared how quickly they melted when wrapped in different insulating materials.	Method written Results recorded Conclusion agreed				
Outdoor Learning and Science	1	Can safely cook items on a stick over the fire Can cook a simple dish on the fire Can collect, grade and safely add sticks to the fire Can light cotton wool pads with a fire steel Can use silver birch and other tinder extenders Can build and maintain a fire for 10 minutes Can safely use a knife to whittle a point at the end of a stick Observe that some materials change state when they are heated or cooled, and measure the temperature at which this happens in degrees Celsius (°C), building on their teaching in mathematics.	Thinking about fire and how things burn (fire triangle recap). Testing materials to burn using the scientific language of 'changing states'. Testing out different materials to maintain fire. Thinking about scientific understanding whilst toasting marshmallows – why are they melting? Understanding what is happening to the chocolate when making the rice crispy cakes?	Recall prior learning about fire, fire triangle and changing states Children can start and maintain a fire. Children know materials which are good for starting fires, and why they are good. Made own stick for marshmallow toasting	✓	✓	✓	✓
Outdoor Learning and D&T	5, 6, 7	Can safely use a palm drill Can safely use a tenon saw D&T – plaiting and dip dyeing wool	Designing, cutting, drilling and sticking pieces.	Reindeer Christmas decoration	✓	✓		