

# Year 4 Science Programme of Study 2019 - 2020



	Working Scientifically									Living things and their habitats			Animals including humans			States of matter			Sound					Electricity				
Science Topics	1	2	3	4	5	6	7	8	9	1	2	3	1	2	3	1	2	3	1	2	3	4	5	1	2	3	4	5
What happens to the																												
food we eat?	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓													
Why is the sound made																												
by Little Mix enjoyed by so many?	✓	✓	✓	✓	✓	✓	✓	✓	✓										✓	✓	✓	✓	✓					
Have we always looked																												
like this?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																
		Add	itiona	al Scie	nce l	Jnits:	These	e ae t	⊥ aught	discr	etely	to en	sure	full co	vera	ge of	the So	ience	Nati	onal (	Curric	ulum						<u> </u>
How would we cope											-																	
without water for a day?																✓	✓	✓										
How would we cope																												
without electricity for a																								1	<b>√</b>	<b>√</b>	<b>✓</b>	/
day?																										•		

# **Working Scientifically**

- 1. asking relevant questions and using different types of scientific enquiries to answer them
- 2. setting up simple practical enquiries, comparative and fair tests
- 3. making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- 4. gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- 5. recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- 6. reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- 7. using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- 8. identifying differences, similarities or changes related to simple scientific ideas and processes



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9. using straightforward scientific evidence to answer questions or to support their findings

### Living things and their habitats

- 1. recognise that living things can be grouped in a variety of ways
- 2. explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- 3. recognise that environments can change and that this can sometimes pose dangers to living things

### **Animals including humans**

- 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
- 3. construct and interpret a variety of food chains, identifying producers, predators and prey.

#### States of matter

- 1. compare and group materials together, according to whether they are solids, liquids or gases
- 2. 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)
- 3. identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

#### Sound

- 1. identify how sounds are made, associating some of them with something vibrating
- 2. recognise that vibrations from sounds travel through a medium to the ear
- 3. find patterns between the pitch of a sound and features of the object that produced it
- 4. find patterns between the volume of a sound and the strength of the vibrations that produced it
- 5. recognise that sounds get fainter as the distance from the sound source increases.

## **Electricity**

- 1. identify common appliances that run on electricity
- 2. construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- 3. identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- 4. recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- 5. recognise some common conductors and insulators, and associate metals with being good conductors.