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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| YEAR FOUR | **States of matter Chemistry**1) Compare and group materials together, according to whether they are solids, liquids or gases2) 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.**Key vocabulary**Solid, liquid, gas, state change, melting, freezing, melting point, boiling point, evaporation, temperature, water cycle**Working scientifically** Asking relevant questions and using different types of scientific enquiries to answer themSetting up simple practical enquiries, comparative and fair testsMaking systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. 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. Using straightforward scientific evidence to answer questions or to support their findings. | **Animals including humans Biology**1) Describe the simple functions of the basic parts of the digestive system in humans2) 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.**Key vocabulary**Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor, canine, molar, premolars, herbivore, carnivore, omnivore, producer, predator, prey, food chain**Working scientifically** Asking relevant questions and using different types of scientific enquiries to answer them.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 straightforward scientific evidence to answer questions or to support their findings. | **Sound Physics**1) Identify how sounds are made, associating some of them with something vibrating2) Recognise that vibrations from sounds travel through a medium to the ear3) Find patterns between the pitch of a sound and features of the object that produced it4) 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.**Key Vocabulary**sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation. **Working scientifically** Asking relevant questions and using different types of scientific enquiries to answer themSetting up simple practical enquiries, comparative and fair testsMaking systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. 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Identifying differences, similarities or changes related to simple scientific ideas and processesUsing straightforward scientific evidence to answer questions or to support their findings. | **Electricity Physics**1) Identify common appliances that run on electricity2) Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers3) 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 battery4) Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit5) Recognise some common conductors and insulators, and associate metals with being good conductors.**Key Vocabulary**Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol**Working scientifically** Asking relevant questions and using different types of scientific enquiries to answer themSetting up simple practical enquiries, comparative and fair testsMaking systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. 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Identifying differences, similarities or changes related to simple scientific ideas and processesUsing straightforward scientific evidence to answer questions or to support their findings. | **Living things and their habitats Biology**1) Recognise that living things can be grouped in a variety of ways2) Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment3) Recognise that environments can change and that this can sometimes pose dangers to living things**Key vocabulary**Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate**Working scientifically** Asking relevant questions and using different types of scientific enquiries to answer themSetting up simple practical enquiries, comparative and fair tests.Gathering, recording, classifying and presenting data in a variety of ways to help in answering questionsRecording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. 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**Working scientifically LKS2**

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

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