  SCIENCE Key Stage 2 Year 4

|  |  |  |  |
| --- | --- | --- | --- |
| **Key Stage** | **Strand** | **Objective** | **Science Topics used to deliver key skills and**  **term taught** |
| KS 2 Y4 | Working Scientifically | Asking relevant questions and using different types of scientific enquiries to answer them. | All topics |
| KS 2 Y4 | Working Scientifically | Setting up simple practical enquiries, comparative and fair tests. | All topics |
| KS 2 Y4 | Working Scientifically | Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. | Sound and states of matter |
| KS 2 Y4 | Working Scientifically | Gathering, recording, classifying and presenting data in a variety of ways to help in answering  questions. | Sound and states of matter |
| KS 2 Y4 | Working Scientifically | Recording findings using simple scientific language, drawings, labeled diagrams, keys, bar charts,  and tables. | Sound and states of matter |
| KS 2 Y4 | Working Scientifically | Reporting on findings from enquiries, including oral and written explanations, displays or  presentations of results and conclusions. | Animals |
| KS 2 Y4 | Working Scientifically | Using results to draw simple conclusions, make predictions for new values, suggest improvements  and raise further questions. | State of matter |
| KS 2 Y4 | Working Scientifically | Identifying differences, similarities or changes related to simple scientific ideas and processes. | All topics |
| KS 2 Y4 | Working Scientifically | Using straightforward scientific evidence to answer questions or to support their findings. | All topics |

|  |  |  |  |
| --- | --- | --- | --- |
| **Key Stage** | **Strand** | **Objective** | **Term Taught** |
| KS 2 Y4 | Living Things Habitats | Recognise that living things can be grouped in a variety of ways. | Autumn 2 |
| KS 2 Y4 | Living Things Habitats | Explore and use classification keys to help group, identify and name a variety of living things in  their local and wider environment. | Autumn 2 |
| KS 2 Y4 | Living Things Habitats | Recognise that environments can change and that this can sometimes pose dangers to living  things. | *.Autumn 2* |
| KS 2 Y4 | Animals | Describe the simple functions of the basic parts of the digestive system in humans. | Autumn 1 |
| KS 2 Y4 | Animals | Identify the different types of teeth in humans and their simple functions. | Autumn 1 |
| KS 2 Y4 | Animals | Construct and interpret a variety of food chains, identifying producers, predators and prey. | Autumn 1 |
| KS 2 Y4 | States of Matter | Compare and group materials together, according to whether they are solids, liquids or gases. | Spring 1 |
| KS 2 Y4 | States of Matter | 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). | Spring 1 |
| KS 2 Y4 | States of Matter | Identify the part played by evaporation and condensation in the water cycle and associate the rate  of evaporation with temperature. | Spring 1 |
| KS 2 Y4 | Sound | Identify how sounds are made, associating some of them with something vibrating. | Spring 2 |
| KS 2 Y4 | Sound | Recognise that vibrations from sounds travel through a medium to the ear. | Spring 2 |
| KS 2 Y4 | Sound | Find patterns between the pitch of a sound and features of the object that produced it. | Spring 2 |
| KS 2 Y4 | Sound | Find patterns between the volume of a sound and the strength of the vibrations that produced it. | Spring 2 |
| KS 2 Y4 | Sound | Recognise that sounds get fainter as the distance from the sound source increases. | Spring 2 |
| KS 2 Y4 | Electricity | Identify common appliances that run on electricity. | Summer |
| KS 2 Y4 | Electricity | Construct a simple series electrical circuit, identifying and naming its basic parts, including cells,  wires, bulbs, switches and buzzers. | Summer |
| KS 2 Y4 | Electricity | 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. | Summer |
| KS 2 Y4 | Electricity | Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp  lights in a simple series circuit. | Summer |
| KS 2 Y4 | Electricity | Recognise some common conductors and insulators, and associate metals with being good  conductors. | Summer |