

## Y4 - Living Things and their Habitats

| Objective   | Working towards expectation  | Working at expectation   | Working above expectation   |
|---|--|--|---|
| Recognise that living things can be grouped in a variety of ways.   | Suggest a way of grouping<br>living things, e.g. sort shells<br>by colour.                 | Suggest different ways of sorting the same group of living things, e.g. grouping birds according to where they live, what they eat and size of adults. | Suggest why some ways of grouping living things may be more useful than others, e.g. why grouping by number of legs is an easy aid to identification. |
| Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. | Use classification keys to group and identify members from a small group of living things. | Use classification keys to group and identify members from a range of familiar and less familiar living things.  | Devise own classification<br>keys to group living things.   |



#### Y4 - States of Matter

| Objective   | Working towards expectation                                 | Working at expectation  | Working above expectation   |
|---|---|---|---|
| Compare and group<br>materials together,<br>according to whether they<br>are solids, liquids or gases.  | Recognise the state of matter of different materials.       | Group materials according to their state of matter.   | Recognise that some<br>materials (e.g. toothpaste)<br>cannot be easily classified as<br>solid, liquid or gas. |
| 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). | Recognise that materials may change state.                  | Identify changes of state<br>and research values of<br>degrees Celsius at which<br>changes happen.            | Suggest patterns in which<br>kinds of materials change<br>state at higher or lower<br>temperatures.           |
| Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.                             | Relate the terms 'evaporation' and 'condensation' to water. | Describe how evaporation and condensation happen in the water cycle, and how temperature affects evaporation. | Apply the relationship between rate of evaporation with temperature to everyday contexts.                     |



# <u>Y4 - Teeth, Digestion and Food Chains</u>

| Objective  | Working towards expectation                             | Working at expectation   | Working above expectation  |
|--|---|--|--|
| Describe the simple functions of the basic parts of the digestive system in humans.          | Describe the purpose of the digestive system in humans. | Identify what each of the principal organs in the digestive system do. | Explain why the simple functions of the basic parts of the digestive system in humans are necessary. |
| Identify the different types of teeth in humans and their simple functions.                  | Recognise that humans have different types of teeth.    | Describe the function of each type of tooth in the human skull.        | Explain why humans have different types of teeth.  |
| Construct and interpret a variety of food chains, identifying producers, predators and prey. | Understand the roles of producers, predators and prey.  | Use a food chain to represent predator-prey relationships.             | Suggest what might happen in a food chain if the population of one of the organisms changes.         |



### Y4 - Sound

| Objective  | Working towards expectation                         | Working at expectation  | Working above expectation  |
|--|---|---|--|
| Identify how sounds are made, associating some of them with something vibrating.                 | Identify how an object may vibrate.                 | Explain, with reference to vibrations, how an object makes a sound.                       | Group sound-making objects in terms of how they make sounds.   |
| Recognise that vibrations from sounds travel through a medium to the ear.                        | Recognise that the ear detects vibrations.          | Describe the role of a medium in the transmission of sound.                               | Compare the effectiveness of different media in terms of their ability to transmit sound.            |
| Find patterns between the pitch of a sound and features of the object that produced it.          | Recognise that the pitch of a sound can be varied.  | Explain with reference to a particular object how the pitch of the sound can be changed.  | Identify generic features that cause the pitch of a note to be changed.                              |
| Find patterns between the volume of a sound and the strength of the vibrations that produced it. | Recognise that the volume of a sound can be varied. | Explain with reference to a particular object how the volume of the sound can be changed. | Identify generic features that cause the volume of a note to be changed.                             |
| Recognise that sounds get fainter as the distance from the sound source increases.               | Suggest why some sounds are louder than others.     | Describe the effect of moving further from the source of a sound.                         | Explain with reference to examples how sounds get fainter as the distance from the source increases. |



## Y4 - Electricity

| Objective   | Working towards expectation  | Working at expectation   | Working above expectation   |
|---|--|--|---|
| Identify common appliances that run on electricity.   | Recognise that some appliances run on electricity.                     | List examples of appliances that run on electricity.                                   | Compare and contrast appliances that run on mains electricity with those that run on batteries. |
| Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.        | Construct a simple circuit.  | Construct a simple circuit and name its components.                                    | Identify the functions of components within a circuit.  |
| Recognise some common conductors and insulators, and associate metals with being good conductors.   | Identify metal as a conductor.   | Sort materials into conductors and insulators, identifying metals as conductors.       | Investigate graphite as a conductor and relate to other materials.                              |
| 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. | Understand that a complete circuit is needed for a circuit to operate. | Predict whether a particular arrangement of components will result in a bulb lighting. | Explain why certain arrangements will not result in the bulb lighting.                          |
| Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.               | Describe the function of a switch.                                     | Predict how the operation of a switch will affect bulbs lighting.                      | Explain how altering the location of a switch affects the operation of the circuit.             |