

Y4 - Living Things and their Habitats

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| **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 living things, e.g. sort shells 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 keys to group living things. |



Y4 – States of Matter

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| **Objective** | **Working towards expectation** | **Working at expectation** | **Working above expectation** |
| Compare and group materials together, according to whether they are solids, liquids or gases. | Recognise the state of matter of different materials. | Group materials according to their state of matter. | Recognise that some materials (e.g. toothpaste) cannot be easily classified as 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 and research values of degrees Celsius at which changes happen. | Suggest patterns in which kinds of materials change state at higher or lower 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. |



Y4 – Teeth, Digestion and Food Chains

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| **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

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| **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

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| **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. |