

Y6 – Classifying Living Things

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| **Objective** | **Working towards expectation** | **Working at expectation** | **Working above expectation** |
| Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. | Identify the broad groups into which living things are classified, e.g. mammals. | Use similarities and differences in observable features to decide how living things should be grouped e.g. a cat is a mammal because it is warm blooded and gives birth to live young. | Explore why some living things, such as the duck billed platypus, don't neatly fit into one group. |
| Give reasons for classifying plants and animals based on specific characteristics. | State how plants and animals can be classified using specific characteristics. | Explain why certain features are useful in classifying living things, e.g. backbones in animals and flowers in plants. | Explain why other features are less useful as a basis for classification, such as size or colour. |



Y6 – The Heart and Lungs; Keeping healthy

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| **Objective** | **Working towards expectation** | **Working at expectation** | **Working above expectation** |
| Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. | Name the main parts of the human circulatory system, e.g. heart, arteries, veins. | Describe what heart, blood vessels and blood do, e.g. carry oxygen to all parts of the body. | Explain some characteristics of the heart, blood vessels and blood, e.g. explain that the arteries are thicker because they carry blood at a higher pressure. |
| Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. | Recognise that diet, exercise, drugs and lifestyle impact on the way the body functions, e.g. knowing that exercise changes the body. | Suggest how their bodies are affected by substances and actions, e.g. that a high fat diet coupled with little exercise is likely to lead to obesity. | Explain how decisions about lifestyle can affect the quality of life, e.g. recognise that making excessive use of convenience foods may introduce more additives into the diet. |
| Describe the ways in which nutrients and water are transported within animals, including humans. | Describe that nutrients and water are transported within humans. | Describe with aid of diagrams the route that water takes within animals, e.g. through the human body. | Compare the ways in which nutrients and water are transported in two animals that are quite different. |



Y6 – Evolution and Inheritance

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| **Objective** | **Working towards expectation** | **Working at expectation** | **Working above expectation** |
| Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. | Recognise that fossils provide information about living things from millions of years ago, e.g. understand that they are preserved remains of extinct living things. | Use fossils as evidence that living things have changed over time, e.g. explain that these have died out and others have taken their place. | Suggest possible reasons for changes to living things over time, e.g. why penguins can't fly but are good at swimming. |
| Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. | Recognise that living things produce offspring of the same kind, but normally offspring vary, e.g. that puppies have common features but are not identical. | Recognise that offspring normally vary from each other and from their parents, e.g. that puppies vary from each other and from their parents. | Recognise that selective breeding may result in offspring with certain features, e.g. pedigree dogs with a certain shape or colour. |
| Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. | Identify ways in which certain animals and plants are adapted to suit their environment in different ways. | Describe examples of a living thing that has adapted to live in a particular habitat and evolved as a result, e.g. a polar bear or cactus. | Give examples of living things that have evolved in different ways, e.g. different types of finch. |



Y6 – Light

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| **Objective** | **Working towards expectation** | **Working at expectation** | **Working above expectation** |
| Recognise that light appears to travel in straight lines. | Recognise that light travels from one point to another. | Represent light using straight line ray diagrams. | Recognise that even when light changes in direction, the path is still continuous. |
| Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. | Recognise that some objects reflect light. | Draw diagrams using straight lines showing light travelling to the eye. | Draw diagrams using straight lines showing light reflecting off objects and into the eye. |
| Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes. | Describe how light travels from light sources to our eyes. | Explain how we can see an object by referring to light travelling into the eye. | Refer to the idea that some objects may be better reflectors than others. |
| Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. | Relate the shape of shadows to the shape of the object that makes them. | Draw a diagram showing an object, shadow and light to relate object shape to shadow shape. | Use a diagram to explain that although a shadow is the same shape as the object, it may not be the same size. |



Y6 – Electricity

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| **Objective** | **Working towards expectation** | **Working at expectation** | **Working above expectation** |
| Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in a circuit | Recognise that changing the number and voltage of cells may alter the operation of a circuit. | Explain how number and voltage of cells affects the lamp or buzzer. | Relate the number or voltage of cells to the number and operation of bulbs or buzzers that can be run from them. |
| Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches | Identify the function and operation of different components. | Explain the use of switches, how bulbs can be made brighter and buzzers made louder. | Explain the effect of changing the order of the components in a circuit. |
| Use recognised symbols when representing a simple circuit in a diagram | Understand that components can be represented by symbols. | Represent a circuit that has been constructed using symbols. | Design circuits using symbols. |