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| Unit of study: States of Matter |
| Learning Objective | Science content | Learning Outcome | Key Knowledge/Skills |
| Can I sort and describe materials? | Can I compare and group materials together, according to whether they are solids, liquids or gases? | Can I sort materials into solids, liquids or gases?Can I describe the properties of solids, liquids and gases? Can I show the difference between the particles in solids, liquids and gases? | To compare and group materials together, according to whether they are solids, liquids or gases by sorting and describing materials into solids, liquids and gases.  |
| Can I investigate gases and explain their properties?  | Can I compare and group materials together, according to whether they are solids, liquids or gases? | Can I identify solids, liquids and gases? Can I explain some uses of gases? Can I investigate the weight of a gas? | To compare and group materials together, according to whether they are solids, liquids or gases byinvestigating gases and their uses.  |
| Can I investigate materials as they change state? | Can I explain what happens to materials when they are heated or cooled? | Can I understand how heat can cause solids to change to liquids and vice versa? Can I identify materials that melt at different temperatures? Can I investigate the melting and freezing temperature of a material? | To 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) by investigating how heating and cooling can change a material’s state.  |
| Can I investigate materials as they change state? | Can I associate the rate of evaporation with temperature? | Can I identify the different states water can be in?Can I identify the temperatures at which water changes state?Can I identify and observe the processes that cause water to change state? | To 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) by exploring how water can change its state to a solid, liquid or a gas.  |
| Can I explore how water changes states? | Can I use measurements to explain changes to the state of water? | Can I explain the effect of temperature on the process of evaporation?Can I plan and carry out a comparative test using equipment accurately and display my results? | To associate the rate of evaporation withtemperature by investigating the effect of temperature on drying washing. To make systematic, careful and accurate observations and measurements and report on findings from enquiries by displaying results and conclusions by investigating the effect of temperature on drying washing.  |
| Can I identify and describe the different stages of the water cycle? | Can I identify the part that evaporation and condensation has in the water cycle? | Can I describe the different stages of the water cycle?Can I explain the role of evaporation and condensation in the water cycle? | To identify the part played by evaporation and condensation in the water cycle by creating a model of the water cycle.  |
| Can I research and find out about a famous scientist? Lord Kelvin |  |  Can I describe Lord Kelvin’s life and work?Can I make a model to demonstrate how particles behave at absolute zero?Can I use a thermometer to read and show temperatures? | To 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) by exploring Kelvin’s discovery of absolute zero. To take accurate measurements using standard units and a range of equipment, including thermometers by comparing the Kelvin scale with Celsius.  |