

States of Matter (Year 4)

Prior Learning

Year 2: Materials

- Objects that are plastic, wooden, glass and metal are solids at room temperature.
- Water and juice are liquids
- Steam is a gas.
- Certain objects are made from certain materials for a reason. For example, a Coat is waterproof to stop the rain getting through.

Key Vocabulary

Organisation: The way in which the elements of a whole are arranged

Cause and Effect: Something happening because a different thing prompted it to happen

State of Matter: Solid, liquid or gas

Particles: A tiny portion of a thing

Evaporation: The process of turning liquid into gas

Condensation: The process of turning gas into liquid

Key Facts

- 1) Solids have a definite shape. All particles are close together
- 2) Liquids take the shape of the container they are in. Particles are not close together.
- 3) Gases can spread out continuously. Particles are very far apart and move freely.
- 4) Materials can change their state dependent on temperature. Materials may turn to a liquid or gas if heated and turn into solid or liquid form if cooled.
- 5) The water cycle is a continuous process – Water is evaporated from seas, lakes and rivers. It rises into the air and cools to form clouds. The clouds become heavy and the water is released as rain and falls to the ground. The rain water makes its way back to the sea, lakes and rivers and the process starts again.
- 6) Different materials are affected by temperature in different ways. Some materials need a higher temperature or a lower temperature to change state.

Images and Icons



