

Solids, liquids and gases

Outstanding Science Year 4 - States of matter - OS4C001



National Curriculum Statutory Requirements

4C1 - compare and group materials together, according to whether they are solids, liquids or gases

Learning Objective



I can group substances according to whether they are solids, liquids or gases.

Me:   

Teacher:   

Solids

Solids tend to keep their shape over time. Some solid materials are hard and rigid, while some are flexible. **Ice** is an example of a solid.

Liquids

Liquids tend to stick together, but they do not keep their shape the same way solids do. If they are placed in a container, they will take its shape. They will also tend to form a flat surface on the top. If a liquid is poured out over a flat surface it will spread out thinly. Some liquids are stickier and runnier than others. **Water** is an example of a liquid.

Gases

Gases spread out to fill the container that they are in. If a gas is released from a container (into the atmosphere), it will spread out and become weaker until it cannot be detected any more. Some, but not all, gases are invisible and have no smell. **Water vapour** is an example of a gas.

Activity

Group these substances according to whether they are solids, liquids or gases. Add your own in the remaining space.



Discussion

Which substances were the hardest to group? Why?
Do you agree with the other children in your class?
Does how **hot** or **cold** a substance is affect whether it is a solid, liquid or gas?



These substances are solids.

These substances are liquids.

These substances are gases.

