STATES OF MATTER

Vocabulary

Solid: Materials that keep their own shape. **Liquid:** Materials that take the shape of a container they are put in. **Gas:** materials that have no fixed shape and can move around freely. **Particles:** Tiny bits of matter that make up everything in the universe. **Temperature:** The degree or intensity of heat present in a substance or object. **Melting:** Process of changing a solid into a liquid. **Freezing:** Process of changing a liquid into a solid. **Evaporation:** Process of changing a liquid into a gas. **Condensation:** Process of changing a gas into a liquid. **Reversible:** Capable of being reversed so that the previous state is restored. **Irreversible:** Not capable of being reversed.

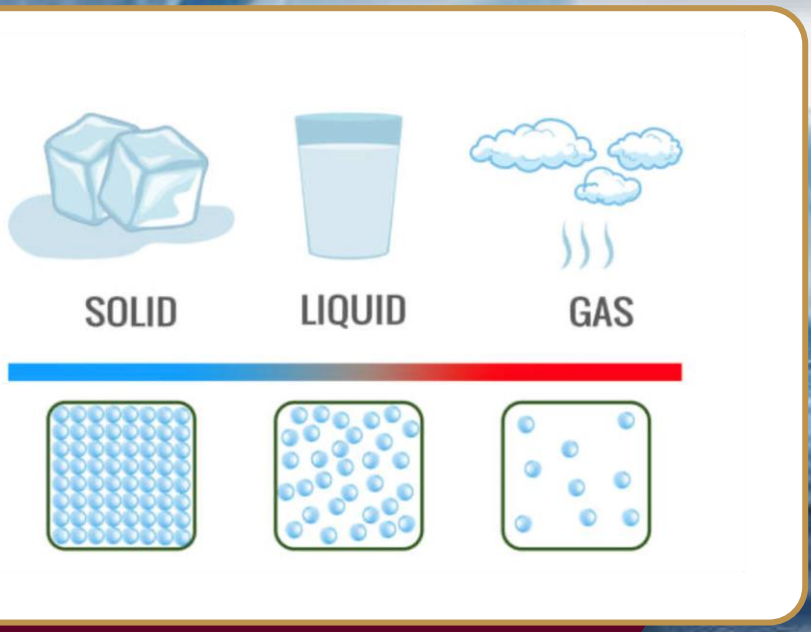
States of Matter

Matter makes up our planet and the whole universe. On Earth, mater exists in one of three states; solid, liquid or gas. Matter is made up of particles. Particles are so tiny we can't see them.

Solid: Solids are materials that keep their own shape.

Liquid: A liquid like water forms a pool and takes the shape of any container it is put in. It flows or runs but can't be stretched or squeezed.

Gas: A can flow, expand and be squeezed. If it is put in an unsealed container it will escape.



Changing State

Depending on its temperature, matter can change state. There are ways in which material can change state such by heating, cooling, evaporating and condensation.

This can happen because the particles in gases are spread out and have more energy than those in liquids and so can move around much more. The particles in liquids are less spred out and have less energy so move less. In a sold they a packed tightly and can barely move. We can give particle s more energy by heating them up.

Year 4 Science