### **Year 4 – States of Matter**

Gases



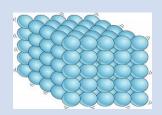
#### Solids

Solids keep their shape well and don't flow or spread out on their own.

Solids always take up the same amount of space.

Particles sit closely together.

They move a little but keep in the same position.



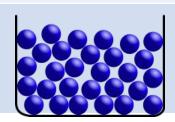
#### Liquids

Liquids are runny and they flow downwards

Liquids take up the shape of the container

The surface of a liquid in a container stays level.

Particles in liquids are not so tightly packed and move a little

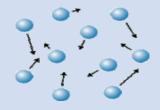


# A gas has no particular shape

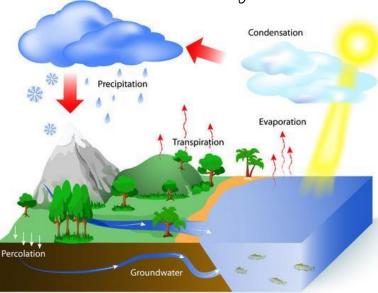
Gases move all over the place all of the time.

Most gases are invisible

Gas particles are all around us spreading into any empty space.



## The Water Cycle



|                    | learning to  |
|--------------------|--|
| Vocabulary         |  |
| solids             | Solids keep their shape well and don't flow or spread out on their own |
| liquids            | They aren't firm and they flow and can be poured easily                |
| gases              | Has no particular shape and can drift easily                           |
| evaporation        | The change that happens when a liquid turns into a gas                 |
| condensatio<br>n   | The change that happens when a gas turns into a liquid                 |
| Water<br>cycle     | The way water moves around the planet by changing state                |
| temperature        | Is a measure of how hot or cold something is                           |
| Degrees<br>Celsius | The unit by which temperature is measured                              |
| particles          | Tiny bits of matter that make up everything in the universe            |
| condensed          | The process of a gas turning into a liquid                             |
| thermomete<br>r    | A piece of equipment that measures temperature                         |
| Water<br>vapour    | When water heats up it evaporates to form water vapour.                |