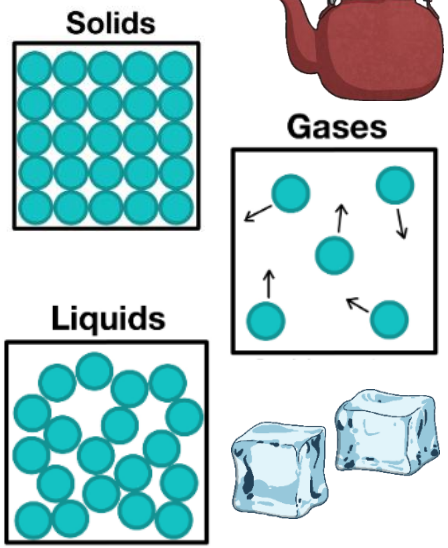
States of Matter – Science Knowledge Organiser

Tier Three Vocabulary

Air: a mixture of invisible, odourless tasteless gases that surrounds the Earth.
Boiling Point: the temperature where a liquid changes into a gas.
Condensation: the change that happens when a gas turns into a liquid. It is the opposite of evaporation.
Temperature: the measure of the warmth or oldness of an object or material.
Degrees Celsius: a temperature scale used to tell how hot or cold something is.
Cooled: to become or cause something to become slightly colder.
Evaporation: the change that happens when a liquid turns into a gas.
Freeze: when a liquid changes state into a solid.
Freezing point: the temperature at which a liquid becomes a solid.
Gas: a gas had no particular shape and can drift easily from one area to another, for example hot air filling a room.
Ice: when liquid water or water vapor becomes cold enough, it changes into solid water (ice).
Liquid: liquids aren't firm: they flow and can be poured easily.
Matter: anything that takes up space.
Melting point: the temperature a solid melts at.
Melting: the physical process that occurs when a solid changes into a liquid after heat is applied to it.
Solid: solids keep their shape and don't flow or spread out by themselves. In solids, the particles sit close together.
Solidify: to change or make something a liquid or gas to a solid.
State: whether something is a solid, liquid or gas.
Temperature: the measurement of how hot or cold something is.



5 Types of Scientific Enquiry

There are 5 types of enquiry to answer science questions

1. **Observing over time:** Observe or measure how something changes overtime
2. **Grouping and classifying:** Identifying features that allow things to be organised into groups
3. **Noticing patterns:** Observe and record phenomena, carry out surveys or collect data from secondary resources and then identify patterns.
4. **Research:** Research and gather scientific findings to answer questions or help explain events
5. **Comparative and fair testing:** Observe and measure the effect that changing one variable has on another whilst attempting to keep the other variables constant