Science- Year 4

Autumn 2- In a State

In Science, I have learnt:

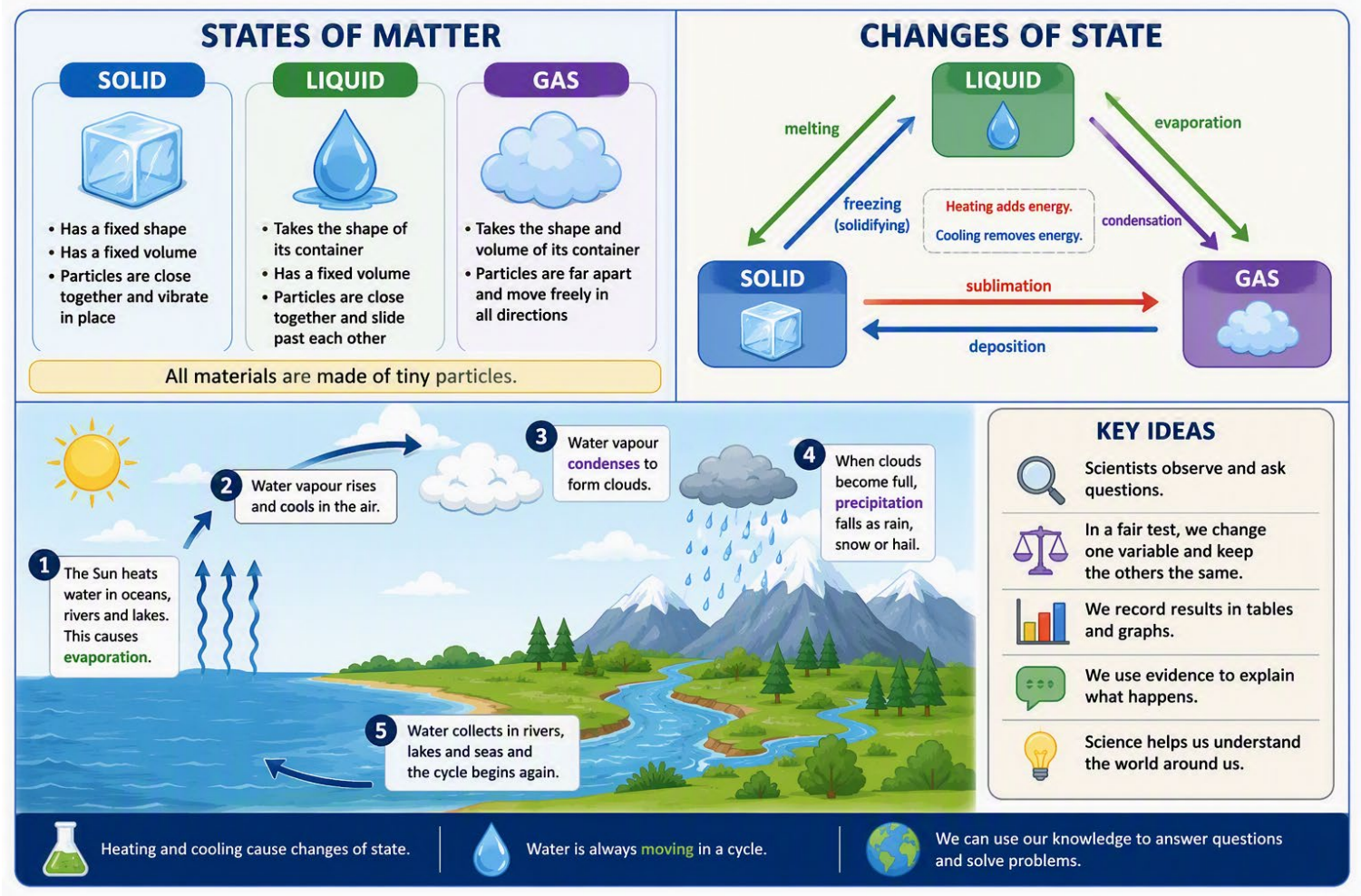
About different types of materials and how to describe and sort them based on their properties.
To carry out a fair test:

- I can predict what I think will happen and say why using my prior knowledge.
- I can explain what we are changing, measuring and keeping the same in the experiment.
- My conclusion contains detailed observations and explains my results.

- I can **classify** materials as **solids, liquids or gases using their properties**.
- I can explain that **melting and freezing are changes of state**.
- I can describe **how heating and cooling cause materials to change state**.
- I can explain that **evaporation** changes a liquid into a gas.
- I can explain that **condensation** changes a gas into a liquid.
- I can explain **how evaporation and condensation create the water cycle** and rain.

<u>Working Scientifically</u>

- I can observe materials closely and use evidence to answer questions.
- I can classify materials based on their properties.
- I can make predictions based on my observations and prior learning.
- I can plan and carry out a fair test.
- I can identify variables and keep a test fair.
- I can record and present results using tables and graphs.
- I can identify patterns and draw conclusions from evidence.
- I can evaluate my investigation and suggest improvements.



Glossary

boiling point ♨️ : the temperature at which a liquid turns into a gas

change of state 🔄 : when a material changes between solid, liquid and gas because of heating or cooling

classify 🗂️ : to organise things into scientific groups

condense/condensation 💧 : to change from a gas to a liquid

degree Celsius (°C) 🌡️ : a unit used to measure temperature

evaporate/evaporation 🌞 : to change from a liquid to a gas

fair test ⚖️ : an enquiry where only one variable is changed

freeze 🧊 : to change from a liquid to a solid because of cooling

gas 🎈 : a state of matter that spreads out to fill the space it is in

ice ❄️ : water in its solid state

liquid 🥛 : a state of matter that flows and takes the shape of its container

melt 🫠 : to change from a solid to a liquid

melting point 🌡️ : the temperature at which a solid becomes a liquid

observe/observation 👀 : to use senses or equipment to gather information

solid 🧱 : a state of matter that keeps its shape unless a force is applied

steam ♨️ : water in a gas state

temperature 🌡️ : a measure of how hot or cold something is

thermometer 🌡️ : a piece of equipment used to measure temperature

variable 🔁 : something that can be changed, measured or observed in an enquiry

water vapour 🌫️ : water in its gas state