

# Science Knowledge Organiser

## Working Scientifically (Term 6)

Year 5

### Our learning

In our science lessons this term, we will be working scientifically with our knowledge of changing states. This is part of the **chemistry** aspect of science and will help us to develop the skills to become a scientist.

We will look at using our scientific knowledge to explain **patterns** that we find.

Make an observation

Ask a question

Plan an investigation

Make a hypothesis

Conduct your investigation

Record your results

Draw a conclusion

### Information

#### Keep it hot! Keep it cold!

Some materials are better insulators than others.

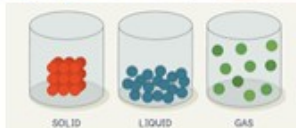
Insulating materials do not conduct heat well.

Insulating materials can control heat and keep things hot or cold.

Changing state refers to a material changing between a solid, liquid and gas.

#### As a scientist I will...

- Make predictions and give reasons.
- Plan and carry out fair tests making systematic and careful observations.
- Take measurements using a range of scientific equipment.
- Use scientific vocabulary and images to share and justify my ideas.
- Recognise how scientific ideas change over time.



### Vocabulary

**Thermal insulator**— A material which does not easily allow heat to pass through it

**Thermal conductor**— A material which allows heat to pass through it easily

**Fair test**— A test that controls all but one variable when attempting to answer a scientific question

**Plan**— A method for conducting a test or experiment

**Variable**— One element of a test which can be changed

**Hypothesis** - A sensible guess based on information you have.



Thermal



Plan



Insulate



Measurements



Hypothesis

Louis Pasteur discovered that heating milk killed off most of the microbes and this made it last longer. This process is called pasteurisation.

