

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 analyse, present and 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...

- Recognise how scientific ideas change over time.
- Raise different scientific questions and hypotheses.
- Make predictions and give reasons.
- Plan and carry out fair tests making systematic and careful observations.
- Take measurements using a range of scientific equipment with increasing accuracy and precision.
- Use relevant scientific vocabulary and images to share and justify my ideas.
- Communicate my conclusions on a hypothesis.

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

Accuracy– How close something is to what it should be

Systematic– To plan out and complete in a specific way or order

Quantitative measurements– Information that is described in numbers

Hypothesis– An educated guess, or a guess you make based on information you already know

Variable– One element of a test which can be changed

Conclusion– a summary of what has been found out during an investigation

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

