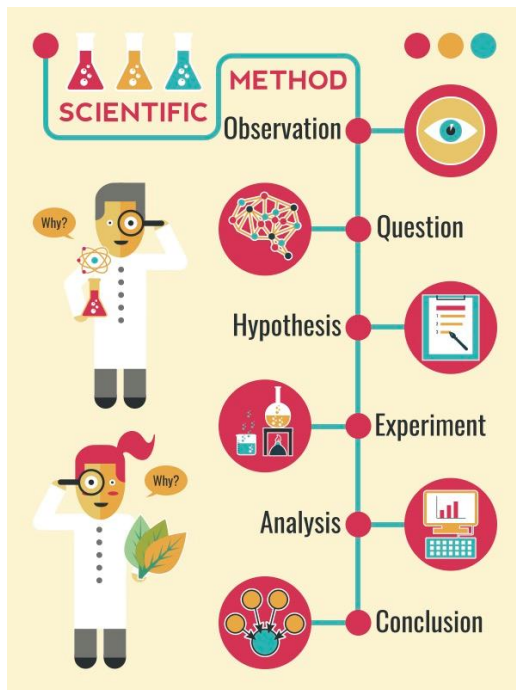


Knowledge Organiser

Science – Scientific Enquiry

Useful Diagrams

The Scientific Method



fair test – where one variable is changed, and all other elements are kept the same

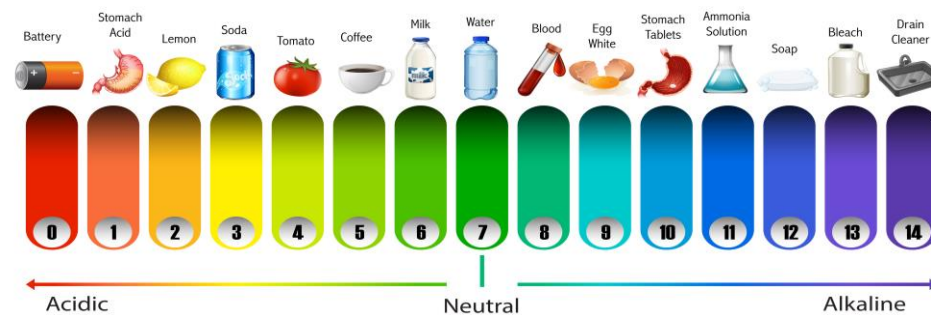
control experiment – an experiment that is used to compare other experiments where there are variables

variable – something that is changed

Key Vocabulary

scientific investigation	finding answers to questions using research methods
prediction	explaining what you think might happen
plausible	having a reason
record	writing the measurement of something
data	a set of facts or numbers used to learn about something
method	instructions for carrying out an experiment
control experiment	an experiment that is used to compare other experiments where there are variables
equipment	tools or items that are needed
enquiry	a question to find something out
practical	the performing of a scientific experiment
conclusion	the end result or outcome
fair test	where one variable is changed and all other elements are kept the same

The pH Scale



The Scientific Method

- **Comparative / fair testing** - Changing one variable to see the effect on another, whilst keeping all others the same.
- **Research** - Using secondary sources of information to answer scientific questions.
- **Observation over time** - Observing changes that occur over a period of time, ranging from minutes to months.
- **Pattern-seeking** - Identifying patterns and looking for relationships in enquiries where variables are difficult to control.
- **Identifying, grouping and classifying** - Identifying observations to name, sort and organise items.
- **Problem-solving** - Applying prior scientific knowledge to find answers to problems.