

Leamington Primary School Knowledge Organiser: Scientific Enquiry

Careers connected to scientific enquiry: lab technician, research scientist



Lesson Sequence



1. How can a solar oven be made more effective: posing questions and writing predictions



2. How can a solar oven be made more effective: recording and presenting results



3. Cleaning coins: writing a method and carrying out a practical test



4. Cleaning coins: writing a method

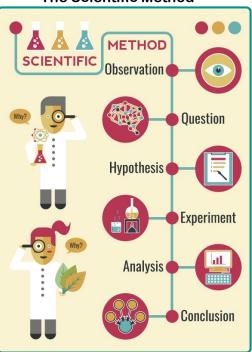


5. Making a cake: fair testing, controls and variables



6. Making a coin: scientific enquiry

The Scientific Method



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

variable something that is changed

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

The Scientific Method



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.

