# Working Scientifically (Nursery)

## (30-50) I must:

- Say what I have seen in plants.
- Say what I have seen in animals.
- Say what I have seen in natural objects.
- Say what I have seen in objects.

- Try to explain why things happen.
- Try to explain how things work.

- Have an awareness of growth.
- Have an awareness of decay.
- Have an awareness of change over time.

- Care for living things.
- Care for the things around me.

### Enquiry types

There are five types of scientific enquiry you must cover all of these in your learning in Reception more than once.

- Observation over time
- Comparative testing
- Pattern seeking

# Working Scientifically (Reception)

(Key skills knowledge in bold)

## (40-60) I must:

- Find things that are the same about living things and objects.
- Find things that are different about living things and objects.
- Spot patterns between things.
- Know that things change.

## Enquiry types

There are five types of scientific enquiry you must cover all of these in your learning in Reception more than once.

- Observation over time
- Comparative testing
- Pattern seeking

## (ELG) I must:

- Know similarities between objects, materials and living things.
- Know differences between objects, materials and living things.
- Observe animals and plants.
- Explain why some things happen.
- I must talk about change.

## (Exceeding) I must:

- Know that the things around me are changed/looked after by humans.
- Know that living things are changed/looked after by humans.
- Know the properties of some materials.
- Explain some things that materials might be used for.
- Know about floating, sinking and experimenting.

# Working Scientifically (Year 1)

(Key skills knowledge in bold)

## Planning

- I can ask simple questions.

For example:

- Why are flowers different colours?
- Why do some animals eat meat and others do not?

## Observe closely using simple equipment

- I can use the measurements that I have learnt about in maths in science too. I can draw or photograph evidence and label this with support

## Perform simple tests

- I can set up a test to see which materials are best for a particular job.

## Perform simple tests

- I can set up a test to see which materials are best for a particular job.
- I have to say what we have learned from my investigation.
- I need to tell someone else what they have learned from their investigation.
- I have to say if a test has helped us to learn what I wanted to.

EYFS skills should also be reinforced in Year 1.

## Gather and record data

- I have to answer the question that we have asked in an investigation.
- I must try to use simple scientific language.

## Enquiry types

There are five types of scientific enquiry you must cover all of them in your learning in year 1 more than once.

- Observation over time
- Comparative and fair testing
- Research using secondary sources
- Pattern seeking
- Identifying, classifying and grouping

# Working Scientifically (Year 2)

(Key skills knowledge in bold)

## Planning

- My questions can be answered in more than one way.

For example:

- Why do some trees lose their leaves in Autumn and others do not?
- How long are roots of tall trees?
- Why do some animals have underground habitats?

Year 1 skills should also be reinforced in Year 2.

## Gather and record data

- I have to answer the questions that we investigated as a fair test.
- I have to say what we have found out.

## Observe closely using simple equipment

- I can use measurements to help me find out more about my investigation.
- I can use thermometers and rain gauges to spot changes around me across the year.
- I can use a microscope to find out more about small creatures and plants.

## Perform simple tests

- I can set up a fair test to find out about how seeds grow best.

## Identify and classify

- I can group things when given headings.

## Enquiry types

There are five types of scientific enquiry you must cover all of them in your learning in year 2 more than once.

- Observation over time
- Comparative and fair testing
- Research using secondary sources
- Pattern seeking
- Identifying, classifying and grouping