

Science
Knowledge and Skills Organiser:
Seasonal Change (EYFS and Y1)

Our Science Knowledge and Skills organisers are primarily a planning guide for the teachers. They include the statutory statements (**Subject Knowledge to be covered**) and the non statutory guidance (in blue). They offer suggestions (in red) for how these statements might be taught working scientifically – which is a requirement of the National Curriculum.

The Knowledge and Skills Organisers map out how and when these areas are taught and help to build a clear, progressive scientific statement of intent for our children as they progress through the school.

We have added additional ideas and guidance for the teachers, which they can choose to use and interpret i.e. how the local area might be used, key questions and ideas which might be pursued, outdoor learning opportunities and cross curricular links as these are features we recognise are important in terms of our holistic curriculum provision.

Parental/ carer support:

By mapping out our curriculum in this way we hope that these documents also help parents and carers support the learning of their child/ren by

- Showing the knowledge being covered
- Offering some suggestions which might also be investigated at home
- Sharing key vocabulary, which can be discussed to ensure your child's understanding
- Suggestions of places to visit

EYFS

Nursery

Development Matters Ages and Stages to be covered:

3-4 Year olds:

- Talk about what they see, using a wide vocabulary.
- Plant seeds and care for growing plants.
- Understand the key features of the life cycle of a plant and an animal.
- Begin to understand the need to respect and care for the natural environment and all living things.

Characteristics of Effective Learning to be covered

- Creating and Thinking Critically thinking
- Having their own ideas
- Thinking of ideas
- Finding ways to solve problems
- Finding new ways to do things
- Making links
- Making links and noticing patterns in their experience
- Making predictions
- Testing their ideas
- Developing ideas of grouping, sequences, cause and effect

Choosing ways to do things

- Planning, making decisions about how to approach a task, solve a problem and reach a goal
- Checking how well their activities are going
- Changing strategy as needed
- Reviewing how well the approach worked

Reception

Development Matters Ages and Stages to be covered:

Explore the natural world around them. Describe what they see, hear and feel whilst outside.

Recognise some environments that are different from the one in which they live. Understand the effect of changing seasons on the natural world around them.

Early learning goals:

Explore the natural world around them, making observations and drawing pictures of animals and plants.

Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.

Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

• Characteristics of Effective Learning to be covered

- Creating and Thinking Critically thinking
- Having their own ideas
- Thinking of ideas
- Finding ways to solve problems
- Finding new ways to do things
- Making links
- Making links and noticing patterns in their experience
- Making predictions
- Testing their ideas •Developing ideas of grouping, sequences, cause and effect
- Choosing ways to do things
- Planning, making decisions about how to approach a task, solve a problem and reach a goal
- Checking how well their activities are going
- Changing strategy as needed
- Reviewing how well the approach worked

Science skills (Working Scientifically) to be covered

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment e.g weather measuring instruments.
- performing simple tests
- identifying and classifying e.g grouping objects made of different materials
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions —e.g making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change

Outdoor Learning:

Cloud spotting
Forest School/Cobbins corner
– observe and plot the
changes over the year
Collect examples of how the
leaves change
(draw/photograph)

Year 1 – Seasonal Changes Topic: Across the year

Key Vocabulary for topic

Weather (sunny, rainy, windy, snowy etc) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length

Possible Questions/ experiences

Chart the weather daily and produce recorded weather reports focusing on type of weather, daylight hours and temperature

Predict the weather for the next day based on wind direction and cloud conditions

Subject Knowledge to be covered:

observe changes across the 4 seasons (observe and talk about changes in the weather and the seasons.)

observe and describe weather associated with the seasons and how day length varies

Note: pupils should be warned that it is not safe to look directly at the sun, even when wearing dark glasses.

Cross - Curricular links

Maths – measuring rainfall /wind direction and putting into graphs
English – season poems
Art paintings of the seasons, colour mixing to match the seasons
Music – weather music/sounds
DT-Make simple weather instruments