

Science: Seasonal Changes

Definition:

How the earth changes over the course of a year.

Chemistry definition: the branch of science that studies the properties of matter and how matter interacts with energy.

POS:

- Observe changes across the four seasons.
- Observe and describe weather associated with the seasons and how day length varies.

Prior learning:

- Similarities and differences in relation to places, objects, materials and living things.
- The features of their own immediate environment and how environments might vary from one another.
- Make observations of animals and plants and explain why some things occur and talk about changes. (Early Learning Goal)

Links to other science topics:

Space – The tilt of the Earth and the effect on the seasonal changes.
Properties of materials.
Plants.

Disciplinary concepts:

Cause and effect: How do the seasons affect the animals and plants throughout the year?

Growth: How is growth affected by the seasons?

Similarities and differences: How are the seasons different?

Common misconceptions:

It always snows in winter
It is always sunny in the summer
There are only flowers in spring and summer
It rains most in the winter.

Core Knowledge:

In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again.
The weather also changes with the seasons. In the UK, it is usually colder and rainier in winter, and hotter and dryer in the summer. The change in weather causes many other changes. Some examples are: numbers of minibeasts found outside; seed and plant growth; leaves on trees; and type of clothes worn by people.

Wider Knowledge:

Why do some animals hibernate? Hibernation is a long sleep some animals take because food is scarce and animals conserve energy.
Migration – Seasonal movement across a large area of animals and birds to find food.

Working scientifically:

Observe and talk about changes in the weather
Making tables and charts about the weather
Make displays of what happens in the world around them including day length as the seasons change.

End Goals:

Talk about similarities and differences of weather in each season.
Understand that days are shorter in winter and longer in summer.
Talk about how the plants change through the year
Observe the weather and collect data to look for patterns.
Describe the weather commenting on whether it is typical for the season

CPD: Reach out CPD

Science Association / STEM website