

Year 1

Seasonal changes Summer

Also see <https://www.hamilton-trust.org.uk/science/year-1-science/seasonal-changes-wonderful-weather/>

Background information

This is the final session of the seasonal changes topic. The children should now be used to recording temperature and rainfall recording their findings in a weather chart. They will have observed how the school grounds have changed during Autumn, Winter and Spring including following a tree through the seasons.

These sessions include a mini beast hunt which links with the animals, including humans. You could include worm charming or pond dipping activities as part of the mini beast hunt.

In the UK the day length is longest in 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 drier in summer. The changes in weather may cause other changes. Some examples are numbers of mini beasts found outside, seed and plant growth, leaves on trees and types of clothes worn by people.

Misconceptions

Some children may think;

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

What children should know / can do

To comment and ask questions about aspects of their familiar world, such as the place where they live or the natural world.

To talk about the things they have observed, such as plants, animals, natural and found objects.

To develop an understanding of growth, decay and changes over time.

To show a concern for the environment and living things.

To look closely at similarities, differences, patterns and change.

To look closely at similarities and differences in relation to places, objects, materials and living things. Talk about features of their immediate environment and how environments might vary from one to another.

National curriculum objectives	Children's objectives
<p>observe changes across the 4 seasons</p> <p>observe and describe weather associated with the seasons and how day length varies</p> <p>identify and name a variety of common animals.</p>	<p>I can observe and comment on the changes in the seasons including day length.</p> <p>I can name the seasons and suggest the type of weather in each season.</p> <p>I know it is not safe to look directly at the sun.</p> <p>I can name a variety of animals</p> <p>I can sort animals into categories.</p>
<p><u>Scientific enquiry</u></p> <p>asking simple questions and recognising that they can be answered in different ways</p> <p>Observing closely using simple equipment.</p> <p>Identifying and classifying.</p>	<p>I can ask simple questions about objects I observe.</p> <p>I can make simple observations using appropriate language to describe them.</p> <p>I can compare living things.</p> <p>I can observe change over time.</p> <p>I can use simple scientific language.</p>

Assessment
<p>What is it like in Autumn, Winter and Spring?</p> <p>What is the weather like today? How would you describe it?</p> <p>How can we look after ourselves on sunny days? What must we never do?</p> <p>What did we find that is a sign of summer?</p> <p>What mini beasts did we find? What would you like to find out about them?</p>

Working towards	Expected	Exceeding
<p>I can record the weather on a weather chart and talk about what the weather is like in summer. I can recognise how to look after myself in summer and know I should not look directly at the sun. I can recognise some of the signs of summer and how things have changed from spring. I can observe mini beasts and with support record my observations and think of questions about what I see. I can sort them into groups with help. I can recognise some features of the different season and talk about how things change. I am starting to use some simple scientific words.</p>	<p>I can record the weather on a weather chart independently and know what type of weather to expect in summer. I know the dangers of being out in the sun and know I should never look directly at it. I can recognise the signs of summer and can compare them to other seasons. I can observe mini beasts closely, recording what I see and identifying things I would like to find out. I can sort them into groups. I can identify the features of the different seasons and explain how the day length and weather changes. I can use some simple scientific words.</p>	<p>I can record the weather on a weather chart independently including temperature and know what type of weather to expect in summer. I can read temperatures on a simple thermometer. I know the dangers of being out in the sun and know I should never look directly at it. I can recognise the signs of summer and can compare them to other seasons explaining how things change. I can observe mini beasts closely, confidently recording what I see and identifying things I would like to find out. I can sort them into groups stating why. I can identify the features of the different seasons and confidently explain how the day length and weather changes. I can use simple scientific words in my explanations.</p>

Key Vocabulary

Season- The parts a year is divided into.

Temperature- The measure of how hot something is.

Weather- what it is like outside.

Weather chart- a place where we record what the weather is like.

Summer- The warmest part of the year from June to August.

Autumn- When the weather begins to get colder and the leaves fall off the trees from September to November.

Winter- the coldest part of the year from December to February.

Spring- When the weather begins to get warmer and plants start to grow from March to May.

Mini-beast- a very small animal like an insect.

Observe- look closely at.

Sort- put into groups by putting similar things together.

Character opportunities

- Working with care to look after nature
- Curiosity of the world around us, asking questions
- Ambition
- Communication with society

Possible future STEM Careers linked to unit

- Climatologist
- Horticulturist
- Meteorologist
- Park Ranger

Science enquiry objectives	Lesson objectives	Activities
Make simple measurements and record in a variety of ways	To make a series of measurements and record in a table	Set up a weather chart recording type of weather, rainfall and temperature. Teach children how to read temperatures using large thermometers and record the temperature in different locations e.g. full sun, shade.
observe changes across the 4 seasons	observe and describe weather associated with the seasons and how day length varies	Identify characteristics of summer (longer days, warmer temperatures) and think of ways to keep safe from the sun. Warn children not to look directly at the sun.
observe changes across the 4 seasons asking simple questions and recognising that they can be answered in different ways	observe and describe weather associated with the seasons and how day length varies	Explore the school grounds or local woodland identifying signs of summer and comparing with other seasons.
Identifying and classifying asking simple questions and recognising that they can be answered in different ways	Recognise the diversity of wildlife Group animals according to features	Mini beast hunt in the school grounds observing and recording their findings, thinking of what they would like to find out about them. Group minibeasts according to their features.
observe changes across the 4 seasons asking simple questions and recognising that they can be answered in different ways Observing closely using simple equipment.	Children record findings and reflect on seasonal changes	Children to record the differences between the four seasons including day length and weather.
		For further activities see https://www.hamilton-trust.org.uk/science/year-1-science/seasonal-changes-wonderful-weather/