

**Pioneer Federation**  
**Medium term plan**  
**KS1- Cycle 1 Term 1**  
**Science**



**Subject:** Science

**Key Concept/ Theme:** Weather with a focus on seasonal change- summer into autumn. Link the senses to strand to this unit too.

**Prior Learning links:** Children in Reception will have looked at weather; how to dress for it, naming weather, weather in different seasons and whether in their local area.

**Vocabulary:**

Seasons; spring, summer, autumn, winter

Year, months, days

Hot, warm, mild, cold

Sunny

Cloudy

Windy, breezy, gust

Temperature

Degrees Celsius

Thermometer

Spring - March to May

Summer - June to August

Autumn - September to November

Winter - December to February

Individual schools to use the land around the school to observe weather, nature and the changes within it. Use ponds, forests, playgrounds, wild areas throughout the year as part of comparison tasks. Visitors to be asked to speak to classes e.g. farmers and how the weather helps them to work the land when growing and harvesting crops.

1. **Deeper learning question for the term:** How is the weather different throughout the year in our country?

**Prior learning reconnection (year group, cycle & term):** Reception T2

**Enquiry skill:** Observe

**LO:** Let's name and identify the senses linked to the different body parts.

**Activity:** Introduce the topic about the weather and seasons and explain that they will be looking at this throughout the year but they will need to use their senses to help them find out how the seasons change. Children to play game where they label parts of their body by taking a card and pointing to the part of the body. Then change it where they have to match the part of the body to their senses. Why do we need our senses, how do they help us in the world around us? Link to the para Olympics and describe how they have to have modifications in their world that they live in to help them when they don't have the sense of sight or hearing. How has technology helped them overcome this?

Children to go outside and use their senses to see any signs of summer (explain that the summers is finishing and it will be turning into autumn), record this and explain that they will be revisiting and adding to this when they learn about other seasons.

**Future learning links after topic:** Children will look at other countries in the world and the weather associated with this so knowledge of key vocabulary can be transferred. In ks2 the children will learn about water cycles and how the weather affects growth of plants, animals and the world around them. Weather will also be taught throughout the year in this cycle so they can apply knowledge taught to different seasons.

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2.	<p><b>Deeper learning question:</b> How do our senses help us to make sense of the world?</p> <p><b>Reconnection:</b> Name the senses and the body parts</p> <p><b>LO:</b> Let's investigate how the senses help us in the world around us.</p> <p><b>Enquiry skill:</b> Question</p> <p><b>Activity:</b> Are there any senses we didn't use last week? Small activity to run in groups. Set up 5 cups, one for taste, smell, touch and sound. Teach the children how they need to ask questions in science to find out an answer. Show them the cups, can they think of questions to ask that they might answer by using their senses? Record these questions. Explain that today they will have their sense of sight blocked with a blindfold and they use their other senses to work out the contents of the cups? Photo for book and comments written or to be written depending on year group. Then ask the children to link this to their feelings when they are in a thunderstorm at night. Have they ever experienced this? Which senses do they rely on and why? Can they then link their learning to jobs in the outside world eg driving a boat at night, working with wildlife,</p>
3	<p><b>Deeper learning question:</b> What happens to nature in throughout the year?</p> <p><b>Reconnection:</b> Why are the senses so important, name them and how they are used in the world around us.</p> <p><b>LO:</b> Let's learn how the seasons affect the animals in autumn.</p> <p><b>Activity:</b></p> <p>Set up a timeline with the children showing them the season and the months. The children can then move a peg to the new month and new season throughout the year. They could add on symbols and average temperature to show the weather they saw in these months and then this could be some of their evidence collected throughout the year and added to their books. Explain that today they will be looking at the change from summer to autumn. Ask the children to draw appropriate clothes on outline of child, one in summer clothes and one in clothes for autumn. They might want to add in objects associated with the season- use this to check their understanding of the different seasons, this links back to their learning in reception so should be a quick recap. Now think about what will happen to animals in different seasons. Focus on amphibians, bats or hedgehogs and how they hibernate. Children to record their learning about hibernation whilst groups go outside to record any animals they can see at this time of year. Use this to compare at other times in the year.</p>
4	<p><b>Deeper learning question:</b> How much wind is there in the different seasons?</p> <p><b>Reconnection:</b> Match the months to the seasons.</p> <p><b>LO:</b> Let's investigate how the wind changes in the different seasons.</p> <p><b>Enquiry skill:</b> observe</p> <p><b>Activity:</b> Today the children will be learning about how the wind changes throughout the year. Take the children outside, somewhere where there is a lot of space. In small groups, one child can blow bubbles, and the others can walk/run in the direction the bubbles are travelling. Children to record the place the bubbles were heading towards and a score (1 to 5) for the speed it was travelling at. Explain that they will do this at different times of year and they could suggest another time to do this so they get a comparison. Encourage the children throughout the year to look at the weather patterns and if it is high winds to go out and repeat the observation. The children could try to make and test a basic anemometer to use throughout the rest of the term. Link their learning to the winds and the damage caused because of them in the Fire in London 1666 – was this unusual for the time of year? Why would it be important to know about the direction of the wind? How do weather forecasters today help with understanding the weather that is coming up in the week. Have a look at daily weather forecasts each day.</p>

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5	<p><b>Deeper learning question:</b> How much daylight is there in different seasons?</p> <p><b>Reconnection:</b> Show a weather forecast and ask them what the wind might be showing us for the week ahead- why is this important to know?</p> <p><b>LO:</b> Let's learn how the day length changes throughout the year.</p> <p><b>Enquiry skill:</b> Predict</p> <p><b>Activity:</b> The children will learn about how the day length varies throughout the year. They will learn about why this happens today and then predict what they think will happen in the different seasons. Remember to come back to these and reflect on these throughout the year. Children to record when they would be able to play outside after school to enable them to understand the difference.</p>
6	<p><b>Deeper learning question:</b> How is rain important to our world around us?</p> <p><b>Reconnection:</b> How does the length of day change and why is this important to know in our daily lives?</p> <p><b>LO:</b> Let's investigate how much rainfall there is at different times of year.</p> <p><b>Enquiry skill:</b> question</p> <p><b>Activity:</b> Children to understand that the amount of rainfall changes throughout the year. Why is rainfall important for the land? Link to harvest time and how the farmers use the land. Add into science book any celebrating or links they might have to harvest time and reflect on how the weather has enabled the harvest at this time of year, if there are any parents who are farmers in the class they could come in to explain how they use the weather in their job. Children to make their own rain gauge and then record the amount of rainfall at different points in the year.</p>
7	<p><b>Quiz/assessment</b></p>

**End points:**

- To be able to name the seasons and months.
- To be able to order the seasons and know the weather associated with each season.
- To ask questions and predict when investigating different weather
- To observe the changes in weather throughout the year.
- To understand how animal behaviour changes throughout the seasons. To focus on hibernation in autumn.
- To investigate the length of day and understand why this changes in different seasons.
- To identify the senses and the body parts associated with the senses.
- To ask questions when investigating the senses. To observe using the senses.