Manor Primary School Knowledge Organiser –KS1 Science

June

August

September

October

Months and Seasons

Winter



Topic: Seasons Phase: KS1 Strand: Seasonal Changes

What should I already know?

- 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.
- How to make observations of animals and plants and explain why some things occur
- Talk about changes.

At the end of the unit, I will be able to:

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

Key Knowledge

In the UK there are four seasons: Autumn, Winter, Spring and Summer. The length of day depends on the season.

<u>Autumn</u>

- Temperatures get progressively colder
- The weather is very changeable
- 12 hours of light per day on average

Winter

- Temperatures are at their coldest
- The weather is generally wet,
 windy and cloudy at the start of the season becoming much drier and much colder in the later part of the season.
- 8 hours of light per day on average

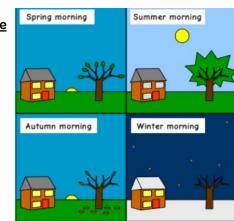
Spring

 Early spring can be quite cold and occasionally the lowest temperatures of the year can occur in March

• 13 hours of light per day on average

Summer

- The warmest and sunniest season
- Thunderstorms are more likely summer
- 16 hours of light per day on average



| We are MANOR! As Scientists we will | | |
|-------------------------------------|--|--|
| Manners | Develop a respect and understanding for the natural world, its people, animals and plants. Share ideas, celebrate good work, value others' contributions, or discussions and debates. | |
| Aspiration | Learn by being challenged in a series of well-designed scientific enquiry and investigation tasks linked to meaningful contexts and develop a knowledge of scientists and careers to broaden our horizons. Be aspirational in developing scientific knowledge and conceptual understanding through biology, chemistry and physics. | |
| Nurture | To recognise that we live in a wonderful world made up of many different people and living things. We will develop an appreciation and respect for the diverse world and environment in which we live, showing care and compassion for the environment around us. | |
| Open- Mindedness | We will be open-minded so that we can conduct experiments or observe what is happening in order to see patterns that might emerge or to gain new knowledge. We will use our curiosity and learn to wonder why something behaves a certain way. | |
| Resilience | Engage confidently with the science curriculum and learn that anything is possible and failure is not something to fear but to learn from. We will develop our scientific enquiry and investigation skills with patience and care, repeating investigations to check the accuracy of results. | |

Weather

Weather is the way the air and the atmosphere feels. It includes the outside temperature, strength of the wind, and whether it is raining, sunny, hailing, snowing, sleeting, foggy, or cloudy. The weather changes regularly and tends to be different during different season and across different countries.

Weather symbols:



We call the general weather trends and the extremes of weather in one place a 'climate'.

Shadows

When something blocks light travelling from a source, a shadow is made.





Can you make a shadow?

Trees through the seasons Leaves begin to change colour from green to Autumn oranges, reds and browns and then they fall from the trees Trees are bare Winter without leaves. Branches and twigs are most visible. New leaves and Spring buds begin to grow Trees appear full Summer of leaves

| Seasons Quiz | | |
|--------------|---|--------|
| | Question | Answer |
| 1 | In which season is March? | |
| 2 | What would I use to measure the amount of rainfall over a day? | |
| 3 | In India they have six seasons. Which seasons do they have that we do not have? | |
| 4 | Draw the symbol for partly cloudy? Colour the symbol in. | |
| 5 | How are shadows made? | |

| Vocabulary | | |
|----------------|---|--|
| observe | to notice and look at something | |
| temperature | how hot or cold something is | |
| elements | the outdoor weather such as rain or wind. | |
| shadows | a dark area or shape produced by an object blocking the rays of light | |
| rainfall gauge | an instrument used by meteorologists to gather and measure the amount of liquid precipitation (rain) over time. | |
| precipitation | rain, snow, sleet, or hail | |
| thermometer | an instrument for measuring and indicating temperature | |
| climate | the weather conditions in a large area | |
| | | |

Did you know?

- There are five different classifications of climate: polar, cold, temperate, dry and tropical.
- The UK has what is called a 'temperate' climate. A temperate climate is one that is not too extreme.
- In India there are six different types of seasons throughout the year Spring, Summer, Monsoon, Autumn, Pre-Winter: and Winter. These seasons are named after Hindu gods.