## **Year 1 Science Knowledge Organiser**



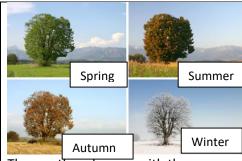
# easonal change

## **Key questions:**

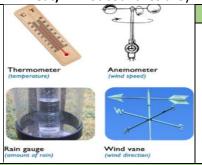
• Why does the length of day change according to the season? What instruments are used to measure and record weather? How does weather affect my life?

#### Key knowledge:

- A day is 24 hours long. Days are made up of day-time and night-time. It is light during the day-time (sun is out) and it is dark at night-time (no sun).
- Day length is shortest in winter, longer in spring and even longest in summer. After summer it is Autumn when days get shorter and colder.
- Deciduous trees will shed/drop their leaves in Autumn, remain bare in winter and sprout new flowers/leaves during spring which will blossom throughout the summer.
- In cold countries people wear thick, warmer clothes to **insulate them (trap heat).** In hot countries they wear lighter clothes to keep them cool.



The weather changes with the changes in the seasons.



### Key knowledge:

- Anemometer is an instrument that measures wind speed and pressure. It is an
  important tool for meteorologists (scientists who predict/forecast the weather)
- Rain gauge is a device used to gather and measure the amount of rainfall.
- Thermometer is partly filled with a liquid metal called mercury as the temperature around it increases the liquid rises to show how hot or cold it is.
- **Wind vanes** help us to determine wind direction, which is important in predicting weather because wind brings us our weather.

## key knowledge:

- Weather affects how people live their lives and the choices they make with what to do in the leisure time or the clothes they might wear.
- Extreme weather such as hurricanes and droughts, will impact on the safety of people and how they live.
- Weather affects the growth of crops which affects the availability and kinds of foods we eat.



I will know how to be safe in the sun.
I know to NEVER look directly at the sun

#### **Key vocabulary:**

- Weather the condition outside at a particular time or place e.g windy, cloudy, sunny, snow, rain, sleet, fog
- **Climate** the usual weather conditions in a place.
- Sunrise- when the sun comes up and daytime begins (this changes with the seasons).
- Sunset when the sun disappears and night-time begins (this also changes with the seasons).
- **Summer -** June, July, and August, in the UK. Tends to be warmer, more sun, day-times are much longer and flowers are in full bloom with insects are pollinating flowers.
- **Autumn -** months of September, October and November, in the UK- leaves on trees change brown and red. The ground is muddier, less sun and more rain. Day-time is starting to get shorter.
- Winter December, January and February, in the UK. Sometimes snow will fall, temperature is much colder, day-time is at its shortest. Few flowers or animals can be seen (many are hibernating sleeping for the winter).
- **Spring** the season between Winter and Summer which falls in the months of March, April and May, in the UK.
- Sleet a mixture of snow and rain that freezes on its way down.
- Fog tiny water drops hovering in the air a low lying cloud.
- **Temperature** how hot or cold it is, measured in degrees Celcius or degrees Farenheit.

## Working like a scientist (outputs)

- Create a rain gauge and windsock to measure rainfall and wind direction.
- Compare and contrast different seasons
- Observe and describe different types of weather create a weather report and weather diaries.
- Collect, record and interpret data based on weather e.g sun-rise/ sunset times and rainfall.
- Describe how day length varies between seasons using diagrams.
- Make observations about changes across seasons.