


# KSI Science Knowledge Organiser - Seasonal Changes

<b>Seasons</b>	In places like the UK, there are four <b>seasons</b> each year, autumn, winter, <b>spring</b> and <b>summer</b> .
<b>Spring</b>	In <b>spring</b> , the <b>weather</b> starts to get warmer. The leaves begin to grow on the trees and some trees may blossom (have flowers). Plants begin to grow and you may see baby animals like lambs around. The daytimes start to get longer.
<b>Summer</b>	In <b>summer</b> , the <b>weather</b> gets hotter. The daytime is long and the nights are short. <b>Summer</b> has the longest days of sunlight. The trees are full of leaves and there are lots of flowers, bees, butterflies and other insects.
<b>Autumn</b>	In <b>autumn</b> , the <b>weather</b> begins to get colder. The leaves start to fall from the trees. The amount of <b>daylight</b> becomes less. This means the daytimes are shorter and the night times are longer.
<b>Winter</b>	In <b>winter</b> , the <b>weather</b> is much colder. Sometimes it is cold enough to freeze, leaving frost and ice on the ground. It sometimes snows. Many trees have bare branches as all their leaves have fallen off. The daytimes are the shortest in the year and the night times are the longest.
<b>Weather</b>	The <b>weather</b> includes the temperature outside, the wind direction and strength, as well as rain, cloud, snow and sun.
<b>Daylight</b>	<b>Daylight</b> is when it is light outside. The amount of <b>daylight</b> changes with each <b>season</b> .
<b>Observations</b>	What you <b>notice</b> when you look carefully at something.
<b>Record</b>	Keep <b>information</b> about something that has happened, e.g. in <b>writing</b> or <b>pictures</b> .
<b>climate</b>	The usual <b>weather conditions</b> of an area.
<b>equator</b>	An <b>imaginary line</b> drawn around the middle of Earth, dividing it into the <b>Northern</b> and <b>Southern Hemispheres</b> .


**Our Weather**

In a weather forecast, **symbols** are used to show what the weather will be like in a particular area. People check the weather forecast before they make plans for a day out. Computers are used to help make accurate weather forecasts.



**Weather around the World**

In some places around the world, the weather can be **extreme** and this can be dangerous.




**Weather Dangers** People need to take special care in **extreme** weather such as: **droughts**, **flooding**, **blizzards**, **heatwaves** and **hurricanes**. **Extreme** weather can **affect** our surroundings as well as us.

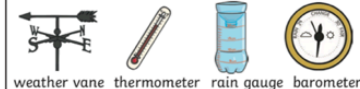


**Climates**

Countries around the world have different **climates**. Countries near the equator have hotter **climates** and the Arctic and Antarctic have much colder **climates**. **Climates** can **affect** many things, such as which plants can grow. Many animals are specially adapted to the climate they live in.



Different instruments can be used to measure and **record** the weather.



weather vane thermometer rain gauge barometer

### What causes the seasons?

- \*The seasons are related to the way sunlight falls on different parts of Earth in the course of a year.
- \*For about 6 months of every year, the North Pole is tilted toward the sun. During this time the Northern Hemisphere gets more direct sunlight (and more hours of daylight) than the Southern Hemisphere.
- \*During the other 6 months, the North Pole is tilted away from the sun. The Southern Hemisphere then gets more direct sunlight and more hours of daylight.

BEE SAFE IN THE SUN

- WEAR A HAT
- APPLY SUNSCREEN
- SEEK SHADE
- PUT ON SUNGLASSES
- COVER UP YOUR SKIN

### Seasons and Months

<b>Spring</b>	<b>Summer</b>
March April May	June July August
<b>Autumn</b>	<b>Winter</b>
September October November	December January February

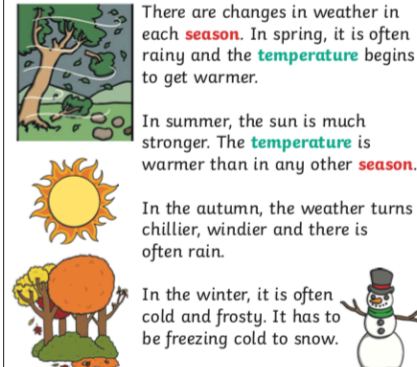
**Seasonal Changes**

There are changes in weather in each **season**. In spring, it is often rainy and the **temperature** begins to get warmer.

In summer, the sun is much stronger. The **temperature** is warmer than in any other **season**.

In the autumn, the weather turns chillier, windier and there is often rain.

In the winter, it is often cold and frosty. It has to be freezing cold to snow.



**How the Weather Affects Us**

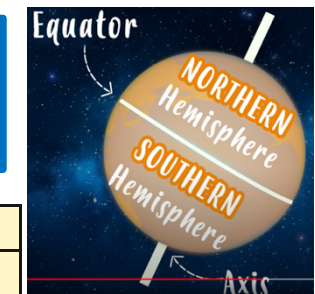
The weather **affects** what we do and what we wear. If it is rainy, we wear **waterproof** clothes when we go outside.

If it is hot, we need to wear sun cream and a sun hat.



### Opposites!

\*The seasons in the two hemispheres are always opposite.



Month	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
Hours of <b>Daylight</b>	13	11	9	8	8	10	12	14	15	16	16	14

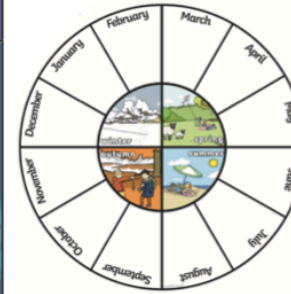


# Reception Weather Knowledge Organiser

Key Vocabulary	
<b>seasons</b>	The year is divided into four <b>seasons</b> : spring, summer, autumn and winter.
<b>observations</b>	What you notice when you look carefully at something.
<b>record</b>	Keep information about something that has happened, e.g. in writing or pictures.
<b>temperature</b>	A measure of how hot or cold something is.
<b>thermometer</b>	An instrument used to measure <b>temperature</b> .
<b>United Kingdom</b>	Made up of England, Northern Ireland, Scotland and Wales. Sometimes known as the UK.
<b>affects</b>	Makes a difference to.
<b>waterproof</b>	Keeps out water.

## Our Weather

The weather in the **United Kingdom** can change from day to day. The four **seasons** have particular weather patterns. You could keep a weather diary by measuring the **temperature** (using a **thermometer**) and **recording** your **observations**.



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## How the Weather Affects Us

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## Seasons and Months

### Spring



### Summer



### Autumn



### Winter



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