

Title: The Seasons

- **WALT: Explain how the Earth's seasons relate to the solar system**
- I must be able to demonstrate how the Earth moves in the solar system.
- I should tell how the angle of the Earth determines the seasons.

Starter: Moon Crash!

- You have crash landed on the moon and need to walk 100 km to the space mission and have a space suit and oxygen for this.
- You have managed to take some items from the crashed aircraft but can only take seven. What do you take?

5 litres water

10 salt tablets

Mirror

Silver foil

Compass

**Tennis racket and
strings**

Inflatable life raft

30 metres of rope

5 packs of biscuits

2 way radio

Matches

Blanket

Distress flare

Why can the Aussies have their Christmas lunch on the beach?



DON ARNOLD/GETTY IMAGES

Why is it so hot when you go on holiday?



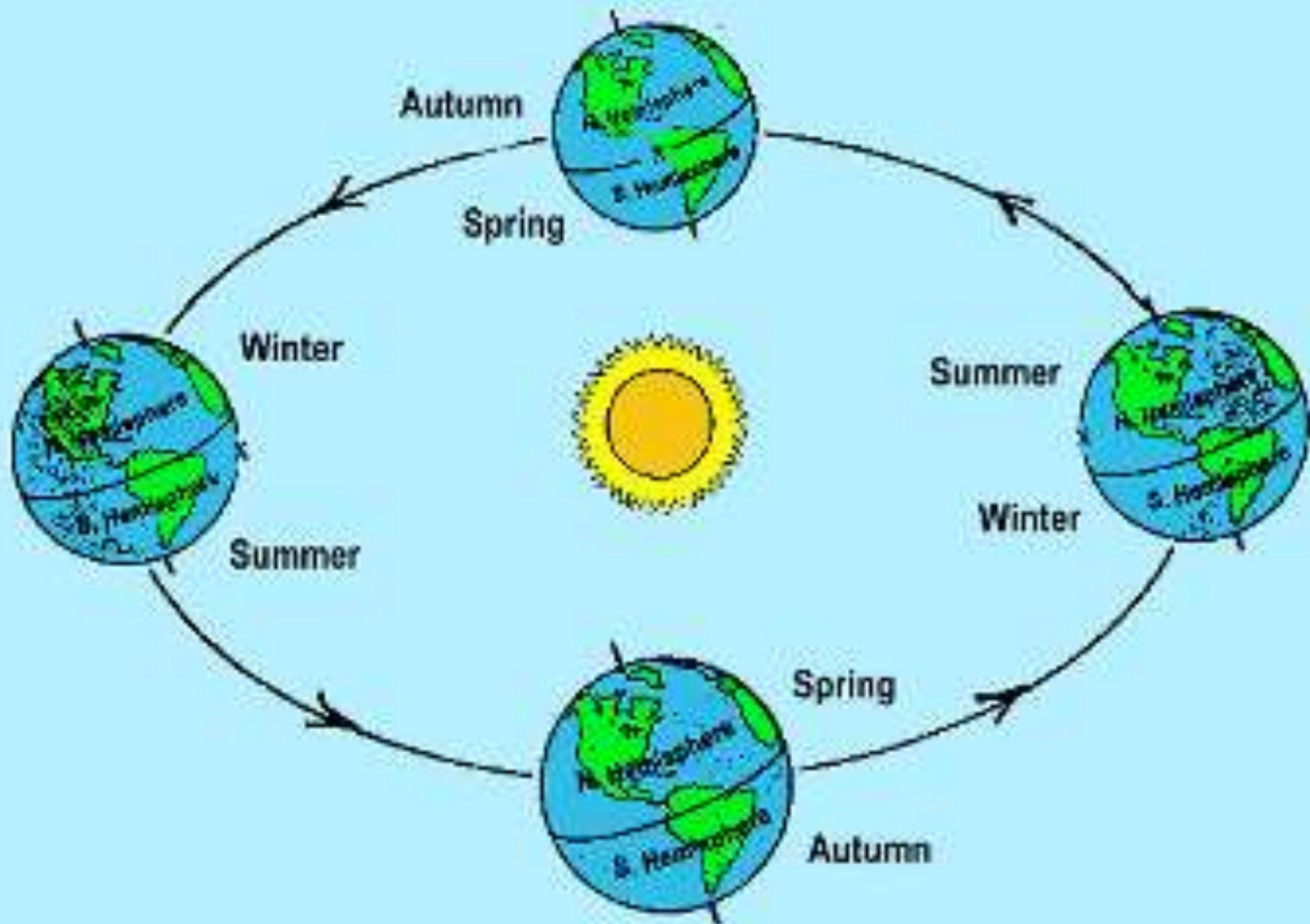
- Why do you think it gets dark so early in Winter and so late in Summer?

– How does Norway have a Midnight Sun?

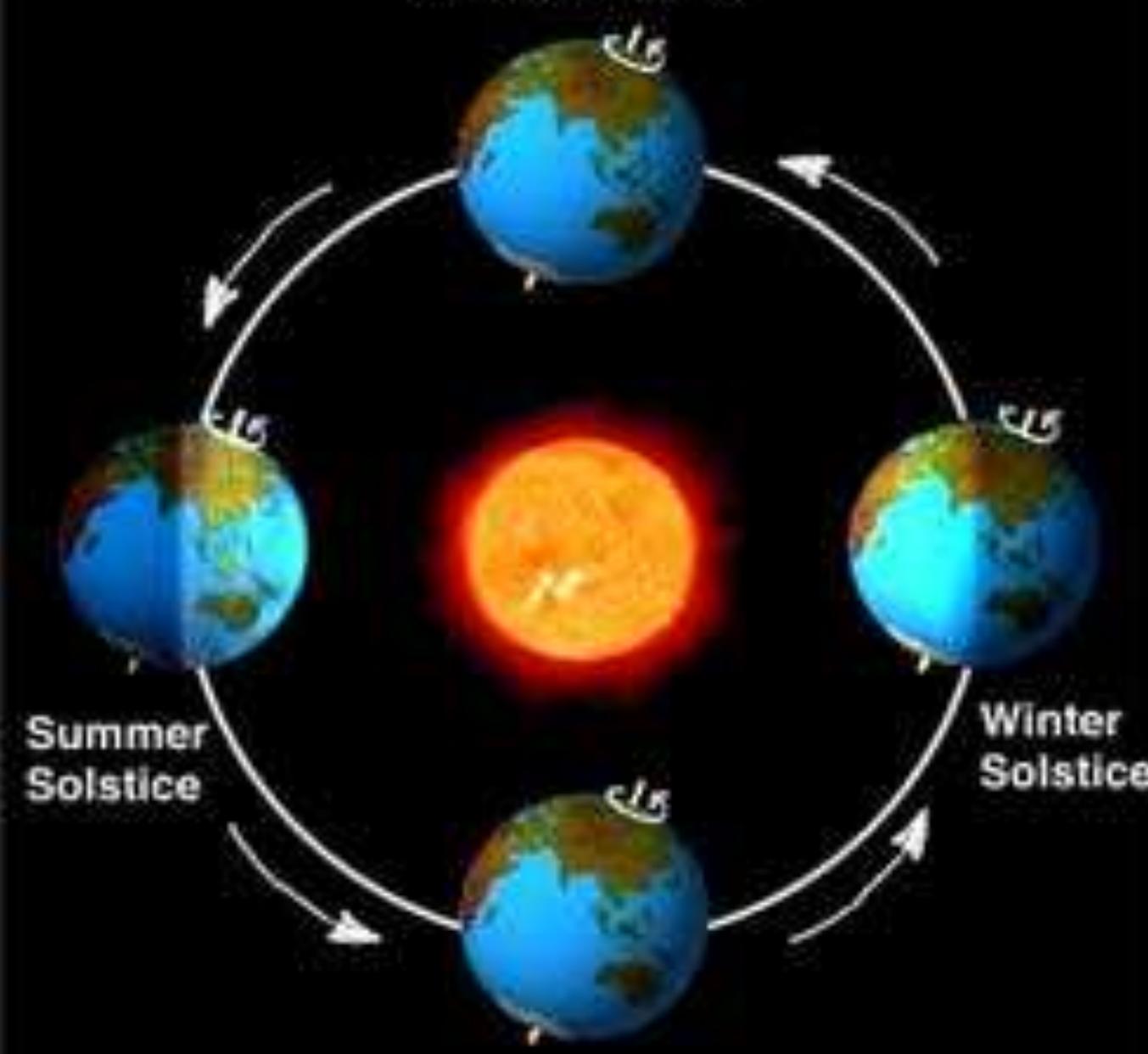


– Jot down 3 sentences in your rough books about why you think this is.

1. The Earth orbits the sun which takes 365 days
2. The different seasons occur because the axis of the spin of the Earth is at an angle to the sun
3. Because of the tilt, different parts of the Earth are orientated towards the sun at different times of the year



Vernal Equinox



Summer Solstice

Winter Solstice

Autumnal Equinox

- Why do you think Summer is warmer than Winter?
 1. The Sun's rays hit the specific part of the Earth at a more direct angle during summer than during winter
 2. The days are much longer than the nights during the summer therefore there is more time for the Earth to heat up from the sun.

Have you heard of the Summer or Winter solstice?

- Solstices are days when the Sun reaches its furthest distances from North and South on the Earth.

This is on the **21st December** and **21st June** each year.

- Equinoxes are days in which day and night are of equal duration. The two yearly equinoxes occur when the Sun crosses the Equator.
- This is on the **21st March** and **21st September** each year.

Plenary

In pairs:

Number 1s: You live in Holland – a country in Northern Europe.

Number 2s: You live in Singapore which is a country in Asia that lies on the Equator

Describe and **explain** to your neighbour how the temperature and length of days of your country change (or don't) throughout the year.