

*Chn to work in groups of 3 for activities below - give chn an antarctic related picture each -*

**1. 10 mins**

Q where does the sun go when we can't see it?

Q What causes daytime?

Q what cause night time?

Q Why is Antarctica so cold?

*Chn to find buddies with same picture as them*

Chn to draw pictures/write explanations

**2. 10 mins**

discuss responses

How could we test our theories?

**3. 10 mins**

Give chn an orange, a skewer, something small to represent the sun. Chn to draw with whiteboard marker (use a blob of blutack) to represent north and south pole. How can you use these items to demonstrate the answer to questions above?

**4. 10 mins**

Share their ideas - then watch video [earth's rotation and revolution](#)

Demonstrate using the globe and torch on phone (put a lump of blu tack on NZ to help)

Chn to draw/add to notes after watching video

**5. 10 mins**

Chn to answer following questions:

1. What is the invisible line that goes through the Earth called? (axis)
2. What is the invisible line that runs around the Earth called? (equator)
3. What is the spinning movement that the Earth does called? (Rotation) What does it give us? (Night and day)
4. What is a word used to describe the Earth going around the sun? (revolution or orbit)
5. How long does it take the Earth to complete a revolution? (365 days - 1 year)
6. How long does it take for the Earth to complete one rotation? (24 hours - 1 day)
7. Is the Earth sitting straight up and down? If not, how is it sitting? (tilted)

If time chn to use equipment to show understanding.

## Why Is Antarctica So Cold?

1. Where does the sun go when we can't see it?
2. What causes daytime?
3. What causes night time?
4. Why is Antarctica so cold?

*Now that you have watched the video have a go at answering these questions.*

1. What is the invisible line that goes through the Earth called?
2. What is the invisible line that runs around the Earth called?
3. What is the spinning movement that the Earth does called?  
What does it give us?
4. What is a word used to describe the Earth going around the sun?
5. How long does it take the Earth to complete a revolution?
6. How long does it take for the Earth to complete one rotation?
7. Is the Earth sitting straight up and down?  
If not, how is it sitting?

Draw a diagram to explain why Antarctica is so cold.



