

# Biomes and climate change

Name:

## MISSION: BIOMES



# Biomes

A biome is... \_\_\_\_\_

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Examples with brief description:

- 1.
- 2.
- 3.
- 4.
- 5.

Colour the map on the next page to identify the 6 biomes shown. Use appropriate colours

Identify the temperature range (minimum and maximum) for each biome as well as any other characteristics.

1 – Tundra =

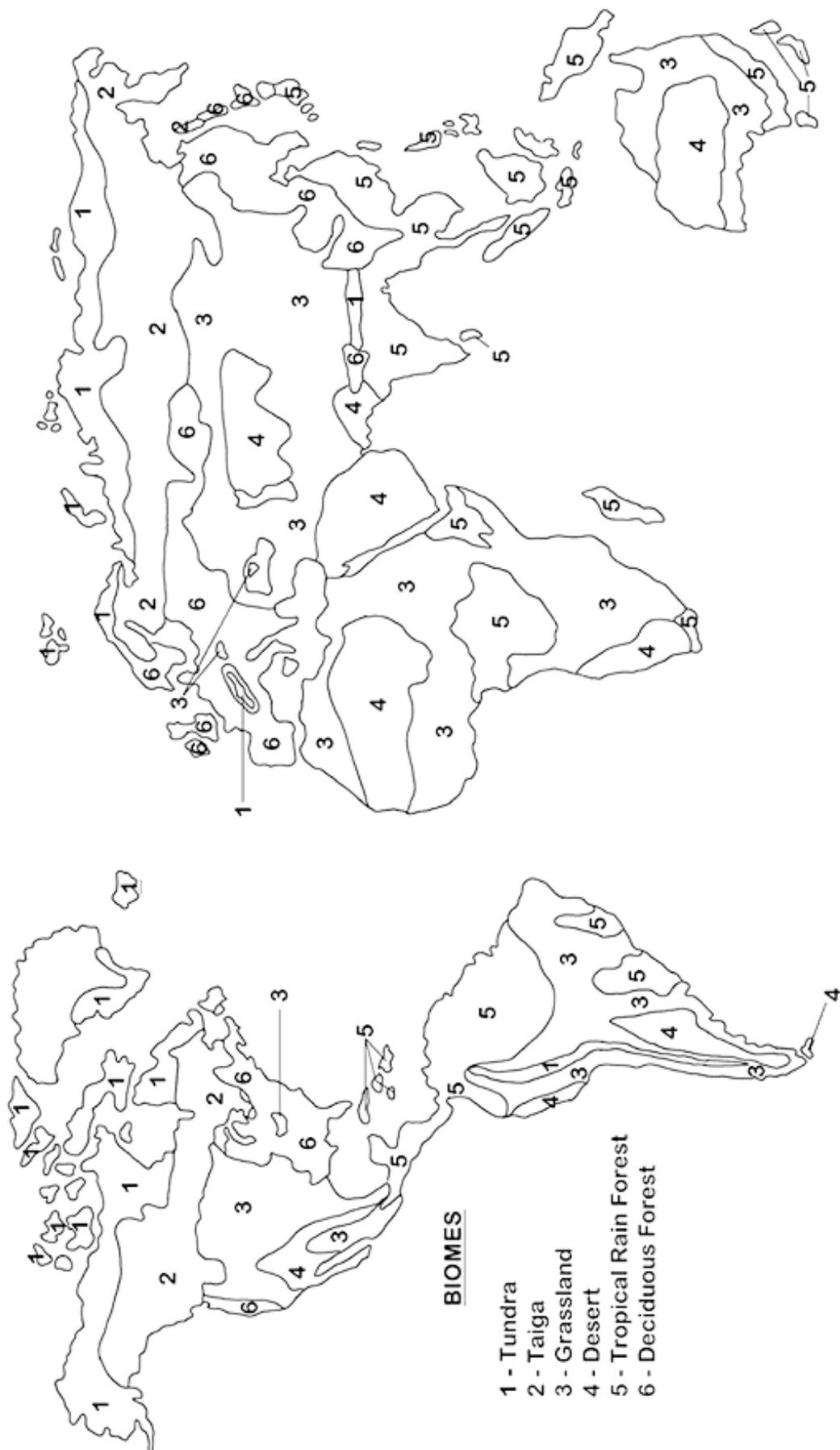
2 – Taiga / Coniferous =

3 – Grassland =

4 – Desert =

5 – Rain Forest =

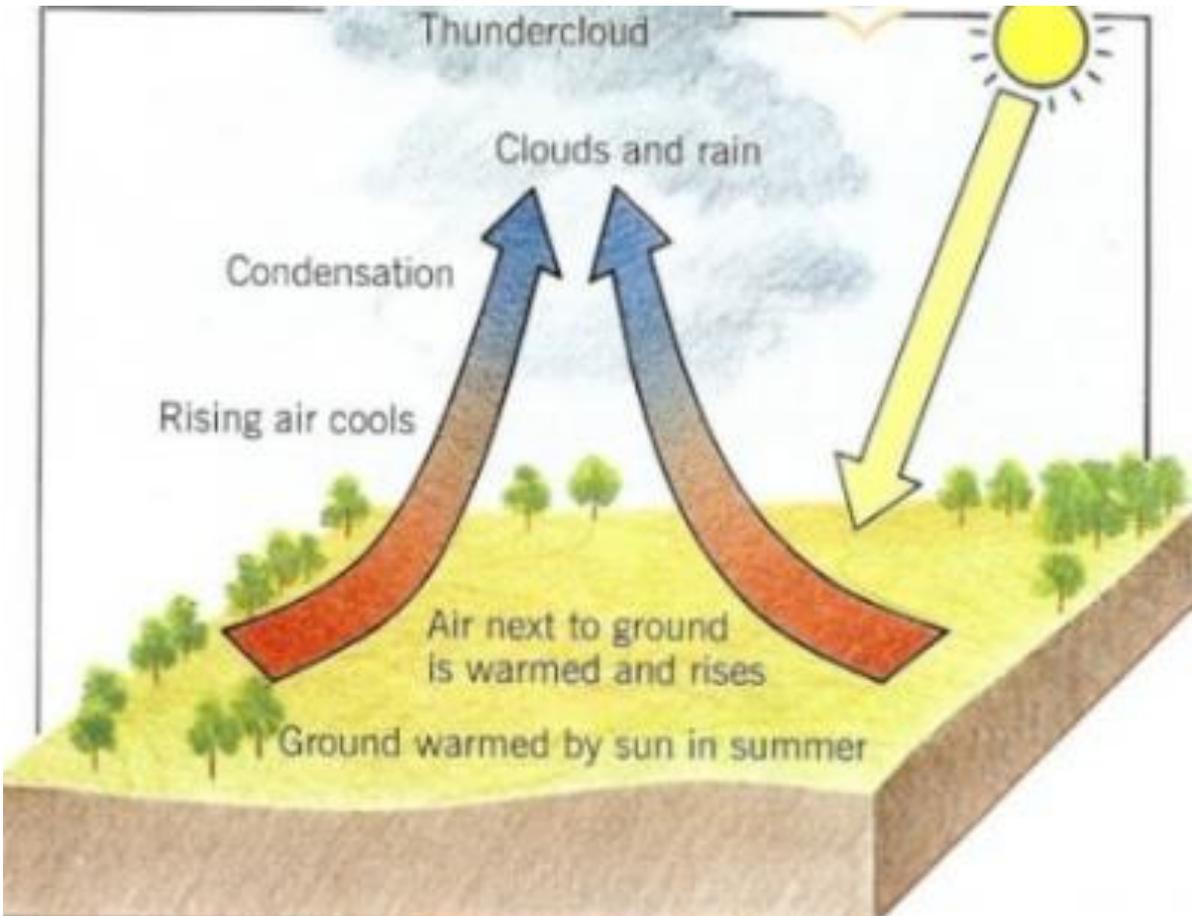
6 – Deciduous Forest =



What are the key differences between deserts and tropical rainforests?

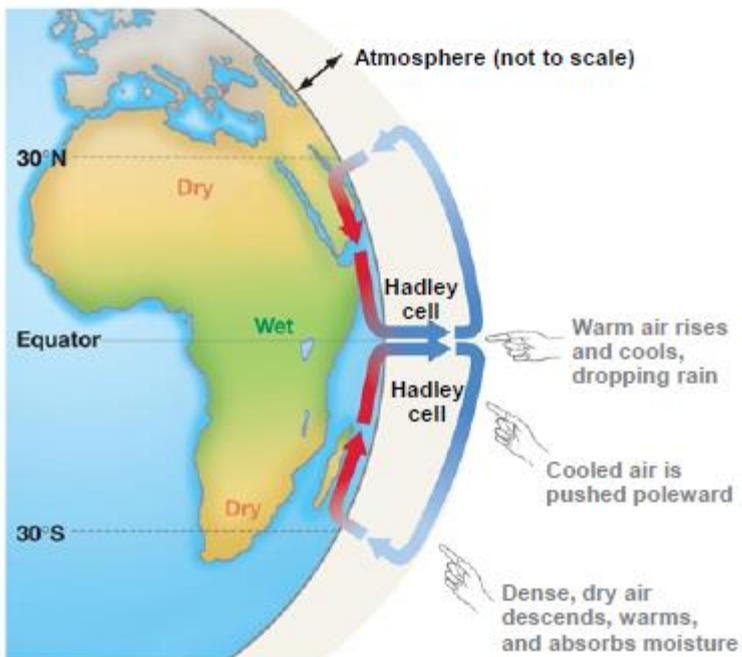
Deserts	Tropical Rainforests

Look at the image below of convectional rainfall and then try to describe the process on the next page

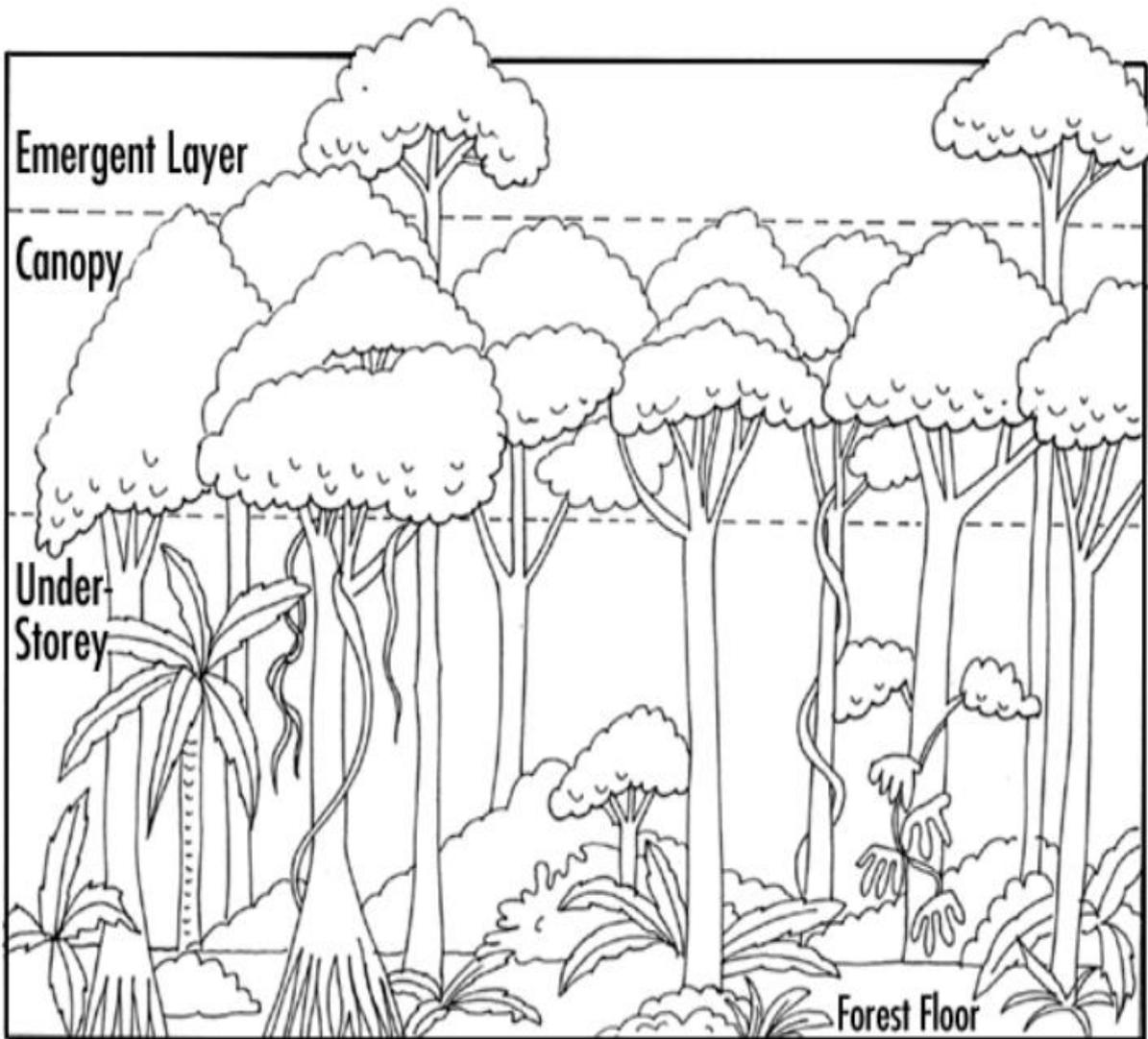


Convictional rainfall occurs when...

Study the image below and try to add further notes explaining why the deserts of the world are located where they are

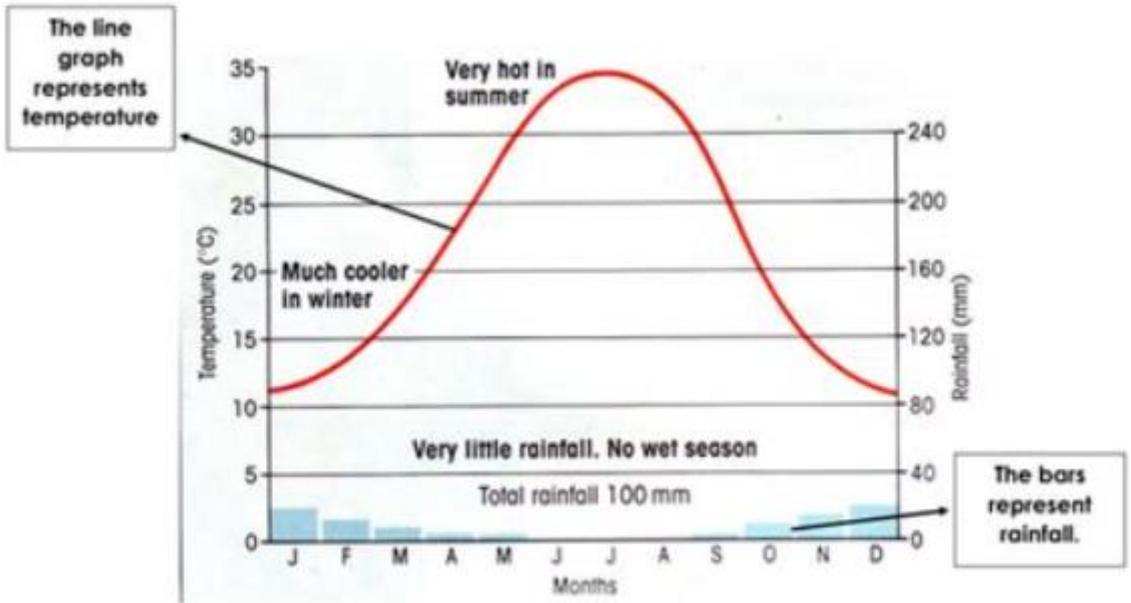


Colour and add further information about the different layers of the rainforest



Emergent Layer	
Canopy	
Under-story	
Forest floor	

Study the graph below and then state the temperature and precipitation range for this hot desert



*Temperature range:*

Coldest = \_\_\_\_\_ Month = \_\_\_\_\_

Hottest = \_\_\_\_\_ Month = \_\_\_\_\_

*Precipitation range:*

Driest = \_\_\_\_\_ Month = \_\_\_\_\_

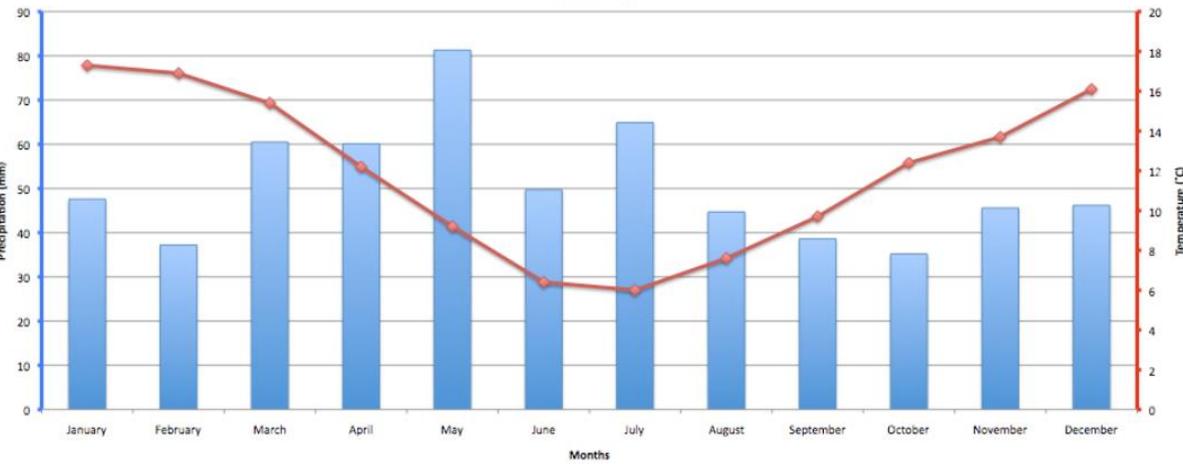
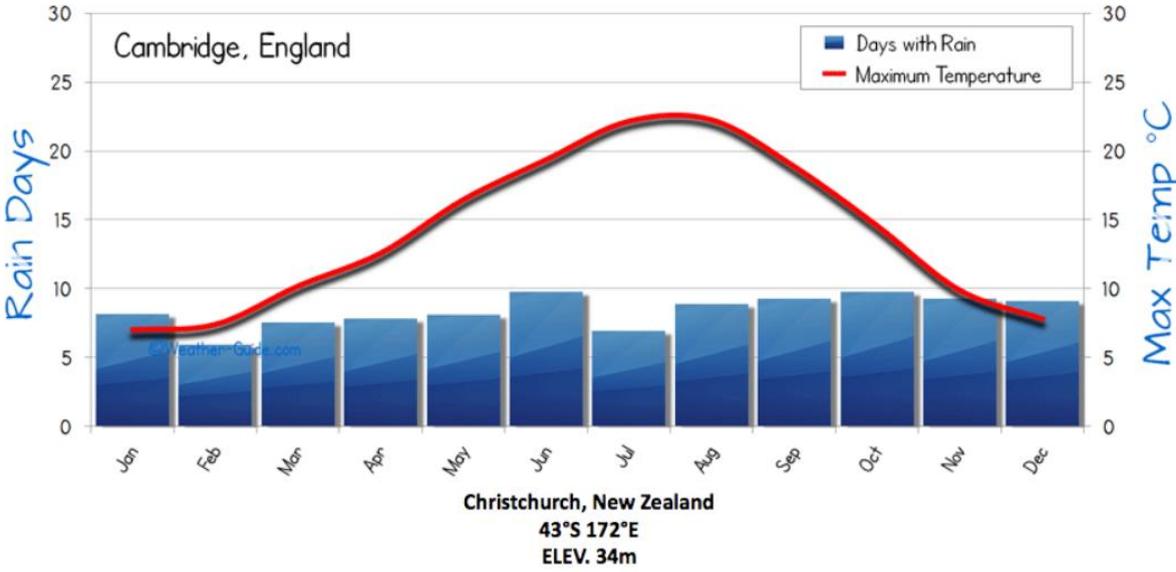
Wettest = \_\_\_\_\_ Month = \_\_\_\_\_

BC: Draw a plant and animal labelling their adaptations in the desert in order for them to survive.

Plant:



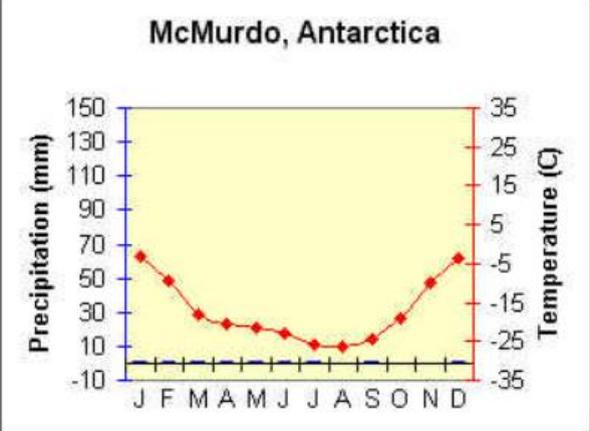
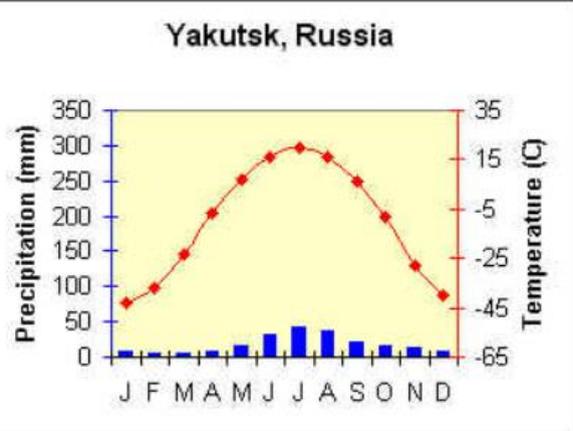
C: Study the 2 climate graphs and answer the questions below



- Which month has the highest temperature in Cambridge? \_\_\_\_\_
- Which month has the highest temperature in Christchurch? \_\_\_\_\_
- Why do you think these are so different even though they are the same biome? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- What is the temperature range for the two locations?  
Cambridge: \_\_\_\_\_ Christchurch: \_\_\_\_\_
- What is the precipitation range for the two locations?  
Cambridge: \_\_\_\_\_ Christchurch: \_\_\_\_\_



C: Identify 3 similarities and 3 differences from the two graphs. Use data in each answer



Similarities	Differences

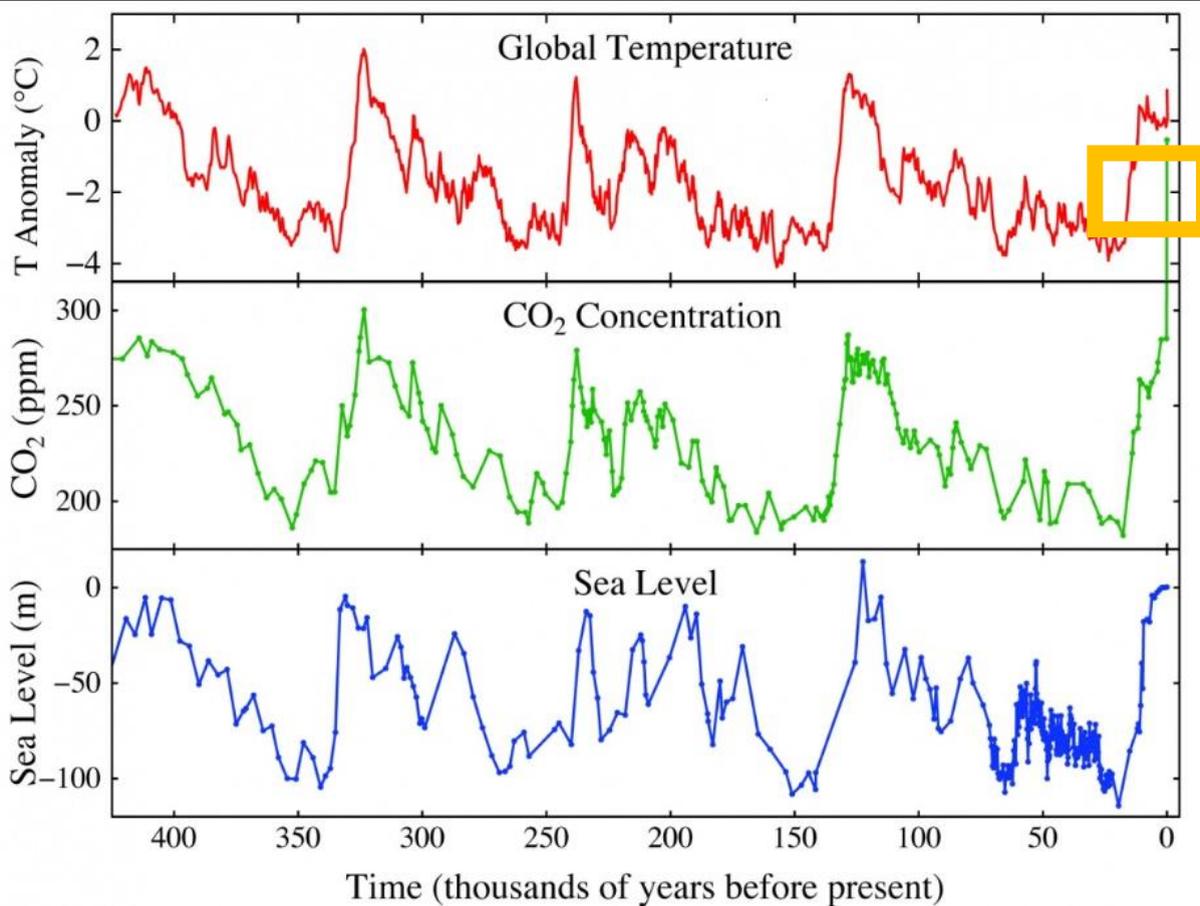
BC: Draw and annotate to show how one animal and one plant has adapted to living in the tundra / polar region

Animal:

Plant:

SC: Create a spider diagram with facts and information from research showing how cold environments are changing

# The Earth's changing climate



C: Study the graphs and answer the questions below

• **Key point is that 0 = present day conditions.**

1. How many times in the past 400,000 years has the Global temperature been above present day temperatures? \_\_\_\_\_
2. Does the Earth temperature rise relatively quickly or slowly when it has increased? \_\_\_\_\_
3. Does the Earth temperature drop relatively quickly or slowly when it has decreased? \_\_\_\_\_

BC Questions:

4. Is there a link between Temperature and CO<sub>2</sub>? \_\_\_\_\_
5. Before the present day, what was the previous high level of CO<sub>2</sub>? \_\_\_\_\_
6. Roughly what is the present day level of CO<sub>2</sub>? \_\_\_\_\_
7. Have Sea Levels ever been higher than they are today? \_\_\_\_\_





List any natural causes of CO2 release and judge how important you think they might have been in increasing the Earth's temperature over the past 250 years

Natural cause	How much do you think this has impacted temperature?

Write a paragraph arguing against climate change caused by humans


# Create a character that can contribute to the climate change

Name	
Job	
Opinion on the causes of climate change	
Lifestyle choices	
Prediction for the future	