

Geography

Term 2 – week 5

Thursday 3rd December 2020

Geography



The **Polar Biome** includes the ice sheets at the poles and areas of **Arctic Tundra**.



Geography



WALT – Use human geography to explore the polar biome.

- S2S. I can:

- research what it would be like to live in the polar biome
- describe what it would be like to live in the polar biome
- present my findings for display

Geography



Life in the polar regions.

What do you think it would be like to live in a polar region?

Watch the video clip

<https://www.youtube.com/watch?v=SxwKa5cR3w4&t=80s>



Geography



- What would it be like to live in the polar biome?
- What do we want to find out?
- What questions do we want to answer?



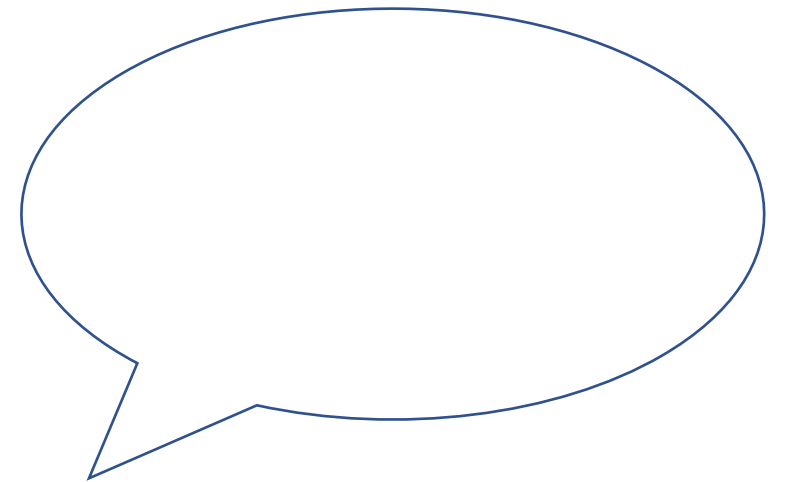
With your partner think of some questions you would like to find the answers to.

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Let's research..

- We know a lot about life in the arctic tundra. Use the fact sheets help answer your questions.
- Answer your question on a speech bubble.



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Term 2 – week 5

Friday 4th December 2020

Geography



How has the arctic tundra and polar biome changed in the last 100 years?

Discuss with your partner.

What do you think might have caused these changes?

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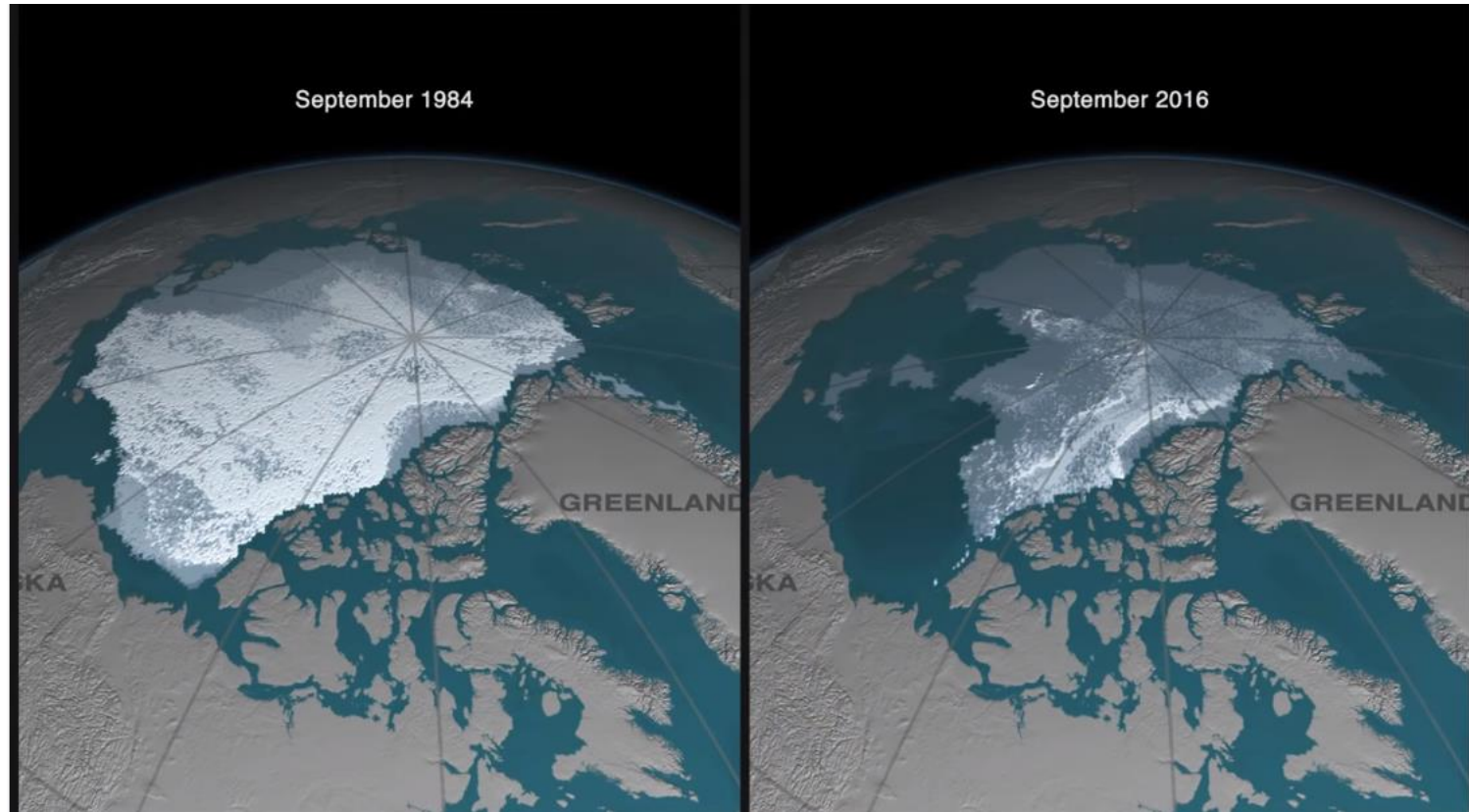


WALT: Explore climate change and its effect on the polar biome.

S2S I can...

- observe how the arctic tundra has changed over time.
- describe and explain the effect that climate change has had on the arctic tundra

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Look at this image showing the ice in the Arctic in 1984 and then in 2016. 32 years apart!

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Let's hop down to the Antarctic. These photos were taken in the same place. The first in 1972 and the second in 2014. 42 years apart!

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Here is another comparison from South Georgia.

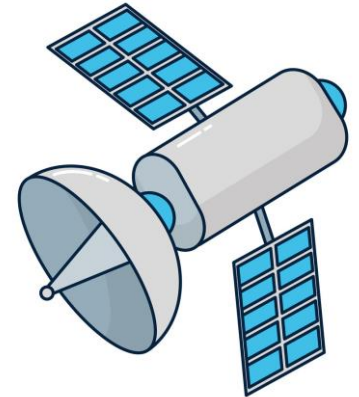


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Scientists use satellites to track the changes in the ice over time.

Can you think of a photographic record of the Antarctic which can show us the ice before satellites were invented?



Geography

Using the photos taken by Frank Hurley on Shackleton's expedition, scientists can compare the changes in the ice and glaciers.



South Georgia. 1914 and again in 2014.
100 years apart!

Geography



Frank Hurley recorded this glacier in 1914. The second picture is a slightly different view but in 1972.

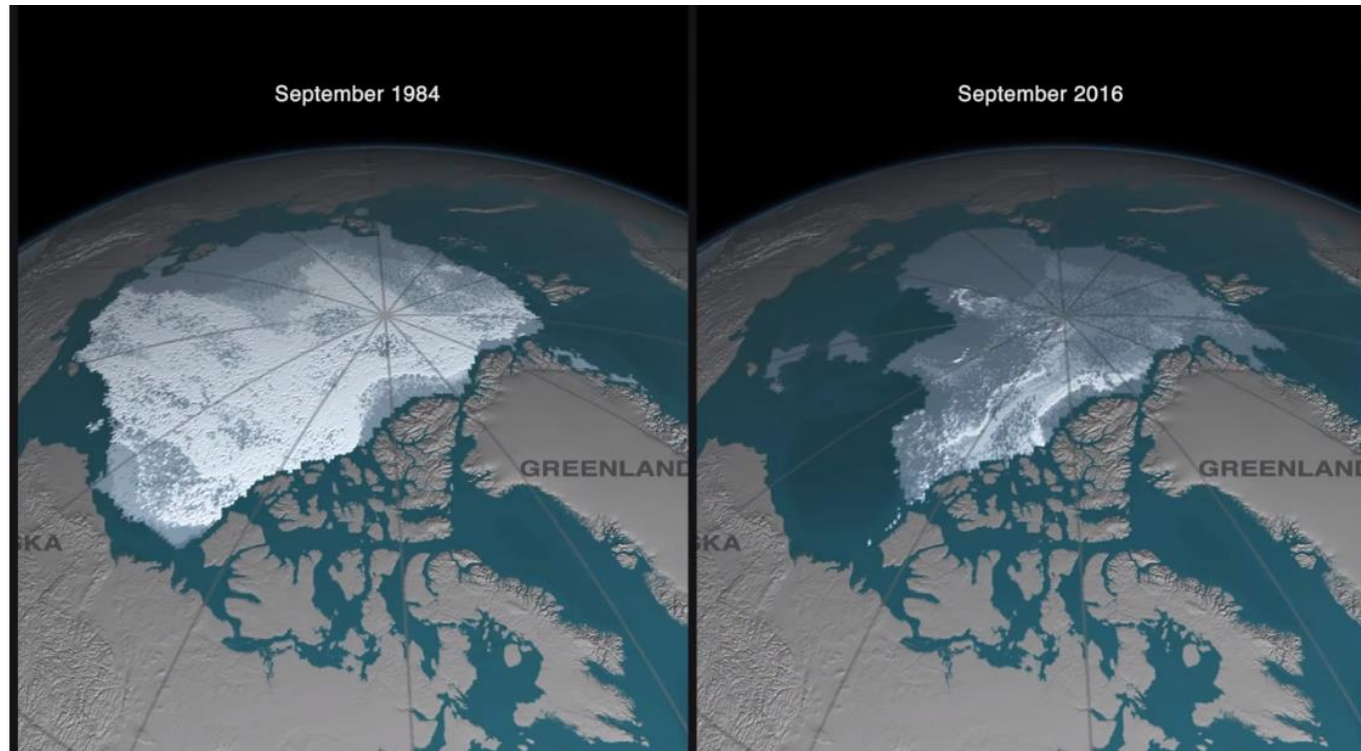
58 years apart!



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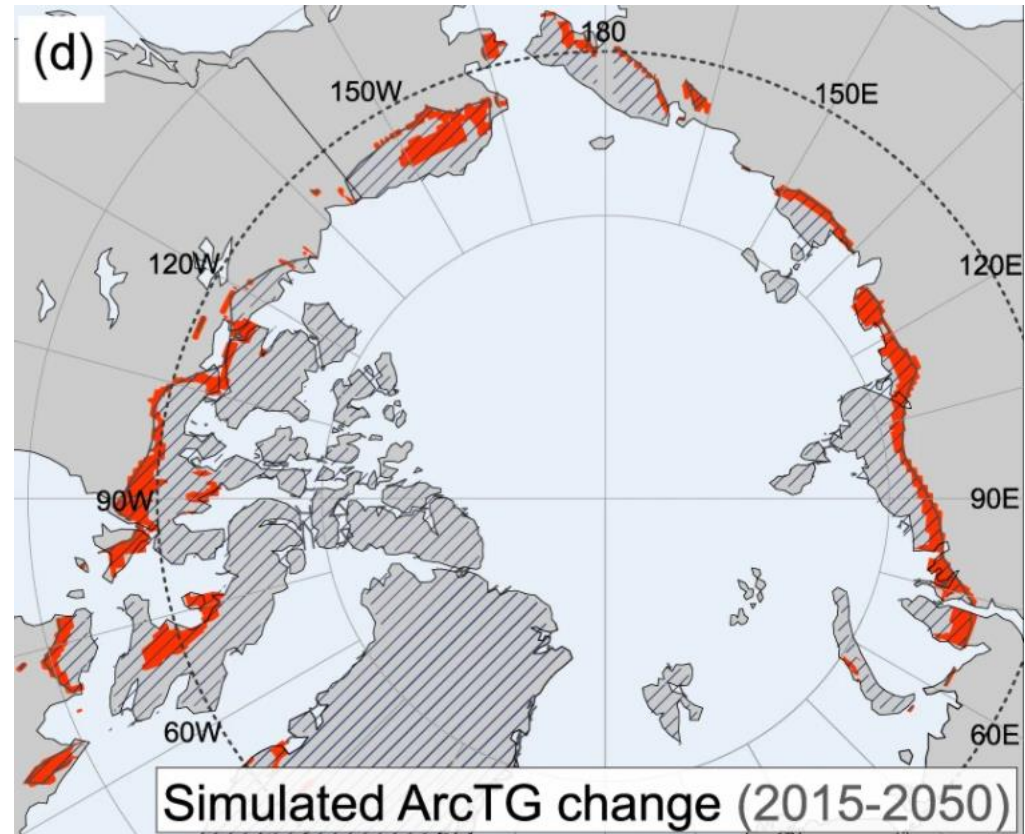
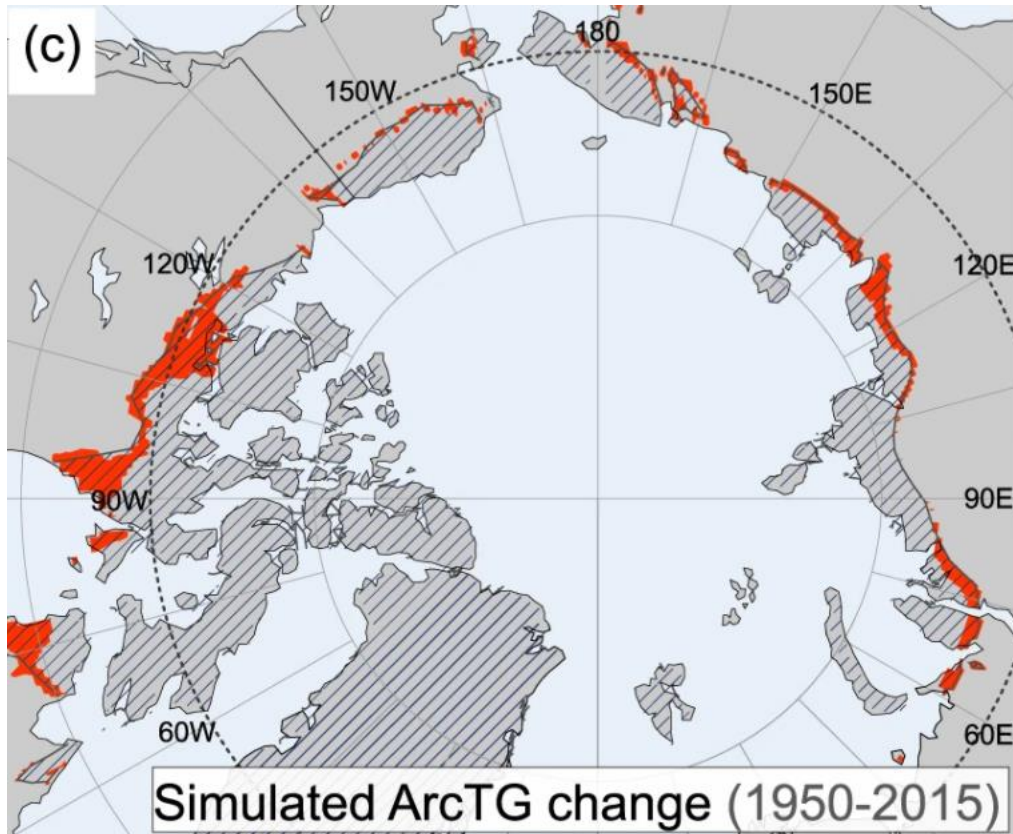
Let's swim back up to the Arctic to look at the changes in the Arctic Tundra.



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The red areas on this map show the areas at the edge of the arctic tundra which are at risk of disappearing. Observe how they have changed.



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What sort of changes will we see in the Arctic Tundra as the climate gets warmer?

Think about:

- **Permafrost** – this will defrost causing the ground to be wet and unstable
- **Climate** – the climate will be warmer
- **Plants** – some plants will no longer survive with new ones replacing them upsetting the balance of the food chain.
- **Animals** - some animals will be unable to survive and new species will move into the area upsetting the balance of the food chain.
- **Humans** – jobs, transport, houses will all be affected.
- **Buildings** – melting permafrost will make buildings unstable or maybe even collapse.

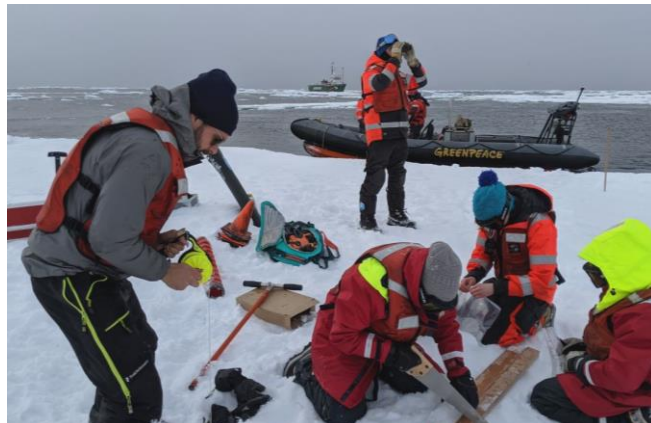
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Imagine you live in the Arctic Tundra.

You could be a daughter/son of a reindeer farmer, or research scientist.

Write a letter to a pen pal describing the changes that you are seeing in the habitat around you.



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