



**Year 4 Knowledge organiser
Autumn 1- The Arctic**

Vocabulary

arctic	The area around the North Pole.
ice sheets	A layer of ice covering a large area for a long amount of time.
glacier	A slow moving mass of ice.
tundra	A large, flat, treeless area of land.
Northern Hemisphere	The half of the Earth north of the equator.
sea ice	Frozen sea water.
adaptation	The process of change whereby a species becomes better suited to its environment.
permafrost	A thick layer of soil below the surface that is below freezing.
Indigenous people	The culturally, ethnic distinct group of people whose members descended from the first inhabitants of an area.

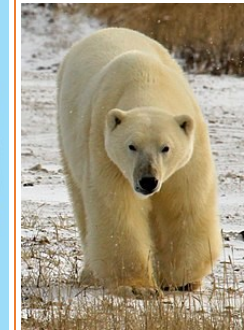
Map of the Arctic



Golden Threads

Where in the world?	Where is the Arctic? Which countries have land in the Arctic circle? Which biomes are in the Arctic? How does this compare to the UK?
Landscapes	How does the landscape in the Arctic Circle compare to the UK?
Settlement	How do Nenet settlements compare to Smallwood and Svalbard?
Weather and Climate	What are the polar seasons like? What is the polar climate like?
Marvellous Mapping	What can we predict about the Arctic landscape by using Google Earth? What does country location tell us about seasons and climate?
Our local area and beyond	How does the climate in Smallwood compare to Svalbard, Norway? Which biomes are in the Arctic? How does this compare to the UK?

Polar Bears



- Carnivore
- Largest bear species
- Largest land carnivore
- Main food source is seal
- Thick fur and fat layers to keep them warm
- Excellent swimmers.

The Nenets

Live in the Yamal Peninsula

Reindeer herding people

Nomadic lifestyle



Climate Change

Rising temperatures are causing:

- Summer sea ice to disappear
- Less snow coverage

Problems for Arctic animals who need the ice to reach their food.

Hotter earth temperature because there is less white ice reflecting the sun and more dark ocean absorbing heat.