



Geography

Y8 Autumn 2 Cold Environments



Slow heart rate to help preserve oxygen under water

Layer of blubber under feathers for warmth and energy store

Solid bones to help with staying under water

Smooth and streamlined bodies to glide through the water

Clawed feet to help grip on snow and ice

Tails and webbed feet to help swim

Opportunities in Svalbard

Mineral extraction

- Rich in coal reserves
- Main way for the area to make money
- Provides 300 jobs

Fishing



- Over 150 fish species
- Monitored by Russia and Norway to make sure it's sustainable
- Waters protected to prevent pollution

Tourism



- 70,000 people visited the capital of Svalbard in 2011
- Harbour enlarged to deal with more cruise ships
- 300 jobs for locals

Uses of Antarctica

Military

- Military personal and equipment may be used for scientific research
- Noise pollution causes a concern

Mining

- No current plans to mine
- Extraction would be very expensive due to temperatures

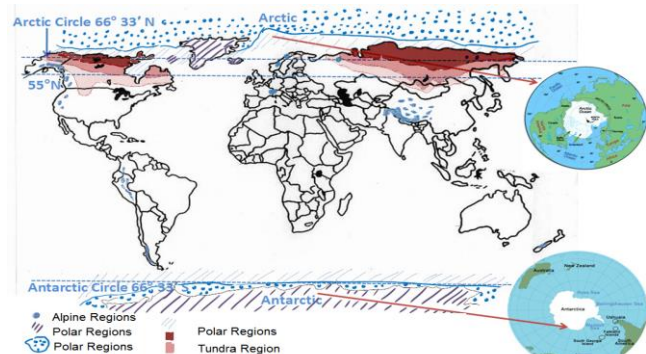
Fishing

- Active marine life
- Cases of illegal fishing
- Hunting for whales and seals



Scientists

- Continent for science
- 4.8km thick ice with -80 degree temperatures



Keyword

Meaning

1	Polar	Regions that cover the Earth's north and south pole and are permanently frozen with ice
2	Tundra	A cold environment with low temperatures and a short growing season
4	Alpine	Cold environments due to them being high in altitude and mountains
5	Adaptation	The process of change by which an organism or species becomes better suited to its environment
6	Antarctica	The southern most continent with zero residents
7	Opportunities	An option that helps either socially, economically or environmentally
8	Challenges	A difficulty faced either socially, economically or environmentally

Tourism in Antarctica

Positives of tourism



Negatives of tourism



Helps scientists discover vital information about climate and wildlife

Cruise ships cause oil spills and damage the environment

Visitors likely to leave with an increased appreciation of nature

Animals become stressed because of crowds

Preservation can be helped by visitors promoting the need to protect the area

Contamination of soil by visitors shoes may bring invasive species



Polar VS Tundra

Soil is permanently frozen

Soils are frozen (permafrost) and melt near surface in summer

Precipitation levels are very low

Precipitation is mainly snow and can fall in high areas

Many animals live here such as the Arctic fox

Animals have thick fur, insulating layer of fat and black nose to absorb sun

Some mosses and lichens grow on fridges of the ice

Low growing plants, bushes and trees grow here