



## Exploring the Polar Regions

### Teaching Ideas

**Learning Objective:** To understand what the polar regions of the Arctic and Antarctica are like.

**Success Criteria:**

- To map key features of the Arctic and Antarctica.
- To research information about the Arctic and Antarctica.
- To summarise information about the Arctic and Antarctica.

**Context:** This is the first lesson in the KS3 polar regions unit of work. Students have the opportunity to research the main characteristics of the Arctic and Antarctica in order to complete a research log.

The classroom should be arranged for a carousel activity with five or six groups of tables. Distribute two or three fact sheets per table. One table should also have a set of atlases. The students have a set amount of time e.g. 10 minutes to complete a section of their research log before moving onto the next table. If the classroom layout is not suitable for a carousel activity, then another option could be for students to work in small groups to complete the activities.

## Starter

**What Do You Know about the Polar Regions?**

Students should study the facts on the [PowerPoint](#) and discuss in pairs whether they describe the Arctic or Antarctica.

## Main Activities

**Where Are the Polar Regions?**

Students should study the map on the PowerPoint and describe the location of the polar regions. **The Arctic is north of the Arctic Circle (66.5° North) and the Antarctic is located south of the Antarctic Circle (66.5° South).**

**What Are the Polar Regions Like?**

Use the PowerPoint to introduce the key characteristics of the Arctic and Antarctica. You may wish to show the students a video clip of each region to help them visualise the environment, and perhaps ask them to list adjectives.

The Arctic is largely ocean surrounded by land, whereas the Antarctic is an ice covered continent. The main ice sheet in the Arctic is the Greenland ice sheet. Sea ice (frozen sea) forms in the Arctic Ocean in winter. Antarctica is covered by huge ice sheets and has huge areas of sea ice which increase in winter.

**Mapping the Polar Regions**

Students use atlases to complete the [Arctic Map Activity Sheet](#) and the [Antarctic Map Activity Sheet](#). You may want to ask your students to compare the two maps by asking what differences and similarities exist between the two areas.

**Polar Expedition**

Students will spend the rest of the lesson researching the key characteristics of the Arctic and Antarctica from a series of [Fact Sheets](#) about topography, seasons and climate, vegetation, wildlife and humans. They should complete the [Arctic Research Log Activity Sheet](#) and the [Antarctic Research Log Activity Sheet](#) (there are differentiated versions of these sheets in the form of cloze activities).

### Extension/Home Learning Task:

You may want your students to test their ability to read satellite images using the [Arctic Satellite Image Activity Sheet](#) as an extension or home learning task.

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## Plenary

### Give Me Five!

Students should list five facts about the polar regions.

You could see who has listed the least common fact in the class by completing a 'last one standing' game where students take turns to read out one of their facts, if anyone else has written that fact down, they tick it off. The student(s) left at the end wins a reward point.