

LESSON 7: DATA ANALYSIS

Summary

Preparation

- Option 1 – offline, with pupils using average data from March 2009

- Option 2 – offline, with pupils using data from one day, 1 March 2009

- ## Notes

[illegible]

Section 2: Sea Ice

LESSON 7: DATA ANALYSIS

All lesson resources can be found at: encounteredu.com/teachers/lessons/frozen-oceans-geography-14-16-lesson-7

Aims / Objectives	Activities	Resources	Outcomes
<p>STARTER:</p> <p>WHAT IS THE SEA ICE LIKE ON THE ARCTIC OCEAN?</p>	<p>The Arctic sea ice is not a uniform thickness. The sea ice in the Arctic moves, melts, pushes together to form rubble and draws apart to form gaps or 'leads.' Snow also drifts into formations called sastrugi</p> <p>Introduce pupils to the different ice states</p>	<p>Gallery: Wonders of ice</p>	<p>Understand the variability of snow and ice thickness on the Arctic Ocean</p>
<p>UNDERSTANDING THE DATA</p>	<p>Use the first page of Student Sheet 7a to introduce pupils to the data collection process</p> <p>Use the second page of Student Sheet 7a to explain how the data can give a profile of the Arctic sea ice and snow thickness</p>	<p>Student Sheet 7a - Using snow and ice data from the Arctic Ocean</p>	<p>Know how the data was collected and what it can show</p>
<p>CREATING A GRAPH OF THE DATA</p>	<p>Using the data on Student Sheet 7b (monthly) or Student Sheet 7d (daily) pupils should create their own sea ice and snow thickness profile on Student Sheet 7c (monthly) or Student Sheet 7e (daily)</p>	<p>Monthly data: Student Sheet 7b- Monthly sea ice data and questions Student Sheet 7c - Monthly data record</p> <p>Daily data: Student Sheet 7d - Daily sea ice data and questions Student Sheet 7e - Daily data record</p>	<p>Use data to create a visual representation</p>
<p>INTERPRETING AND ANALYSING THE DATA</p>	<p>Pupils should answer the questions on Student Sheet 7b or Student Sheet 7d as relevant</p>	<p>Monthly data: Student Sheet 7b - Monthly sea ice data and questions Student Sheet 7c - Monthly data record</p> <p>Daily data: Student Sheet 7d - Daily sea ice data and questions Student Sheet 7e - Daily data record</p>	<p>Demonstrate ability to interpret and analyse data</p> <p>Judge the method of data collection</p>
<p>EXTENSION</p>	<p>Use the template from Ocean Acidification Lesson 4 to develop a poster presentation of the research on Arctic sea ice</p>	<p>See Ocean Acidification Lesson 4 and associated resources</p>	<p>Know how field research teams communicate results</p> <p>Be able communicate the issue and science of Arctic sea ice</p> <p>Discuss research topics with peers</p>