



Lesson 6

Today you will be order fractional reductions of glacial ice sheets volume.

What is Climate Change? How does in effect the world?

Blank area for student response to the question: "What is Climate Change? How does in effect the world?"

What is meant by volume?

Blank area for student response to the question: "What is meant by volume?"

There are two glacial sheets which have an identical volume of $14,000\text{m}^3$. Over the past decade, glacial sheet A has reduced in size by $\frac{2}{3}$ whilst glacial sheet B has reduced in size by $\frac{3}{4}$. Which glacial sheet has been reduced by the most?"

Use the table below to draw your bar model.

1 whole

What glacial sheet has reduced the most and by how much?

There are two glacial sheets which have an identical volume of $16,500\text{m}^3$. Over the past decade, glacial sheet A has reduced in size by $\frac{3}{5}$ whilst glacial sheet B has reduced in size by $\frac{2}{3}$. Which glacial sheet has been reduced by the most?

Use the table below to draw your bar model.

1 whole

What glacial sheet has reduced the most and by how much?

There are three glacial sheets which have an identical volume of $18,000\text{m}^3$. Over the past decade, glacial sheet A has reduced in size by $\frac{3}{4}$, glacial sheet B has reduced in size by $\frac{1}{3}$ and glacial ice sheet C has reduced in size by $\frac{5}{6}$. Which glacial sheet has been reduced by the most?

Use the table below to draw your bar model.

1 whole

What glacial sheet has reduced the most and by how much?

Complete the sentences.

Then ice melts it creates So when ice sheets melt it cause more water in go into the ocean. This causing the sea level to

The Arctic Ocean has increased in volume over the past decade by $\frac{4}{5}$. The North Sea has increased in volume over the past decade by $1\frac{1}{2}$ and the Norwegian Sea has increased in volume by $1\frac{1}{3}$. Order the fractional increases from smallest to largest.

Examine the three fractions and decide how to order them.

The Southern Ocean has increased in volume over the past decade by $1\frac{1}{4}$. The Labrador Sea has increased in volume over the past decade by $1\frac{2}{5}$ and the Greenland Sea has increased in volume by $1\frac{3}{10}$. Order the fractional increases from smallest to largest.

Examine the three fractions and decide how to order them.

Extra Questions

A glacial ice sheet volume was $18,000\text{m}^3$ in 2002 it has decreased by $\frac{2}{3}$ in the last decade. What is the volume of the ice sheet in 2012?

A glacial ice sheet volume was $18,000\text{m}^3$ in 2008 it has decreased by $\frac{4}{6}$ in the last decade. What is the volume of the ice sheet in 2018?