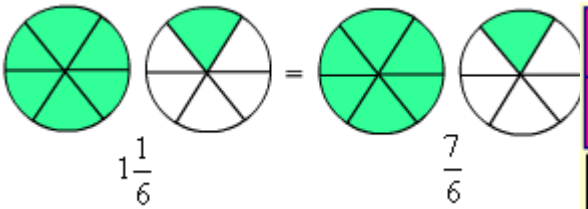
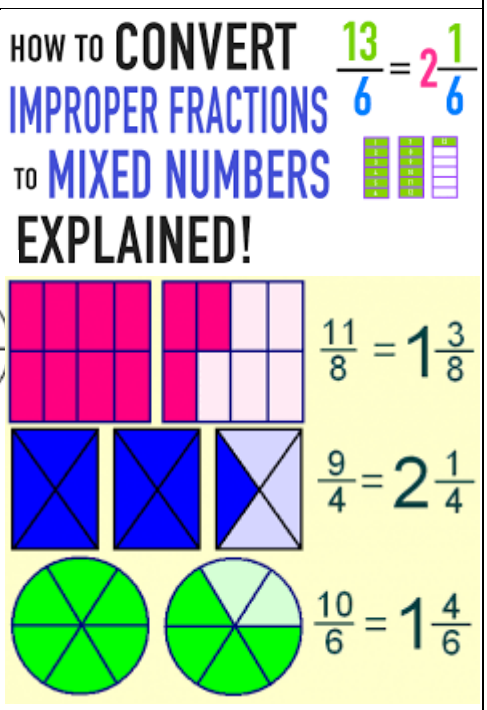
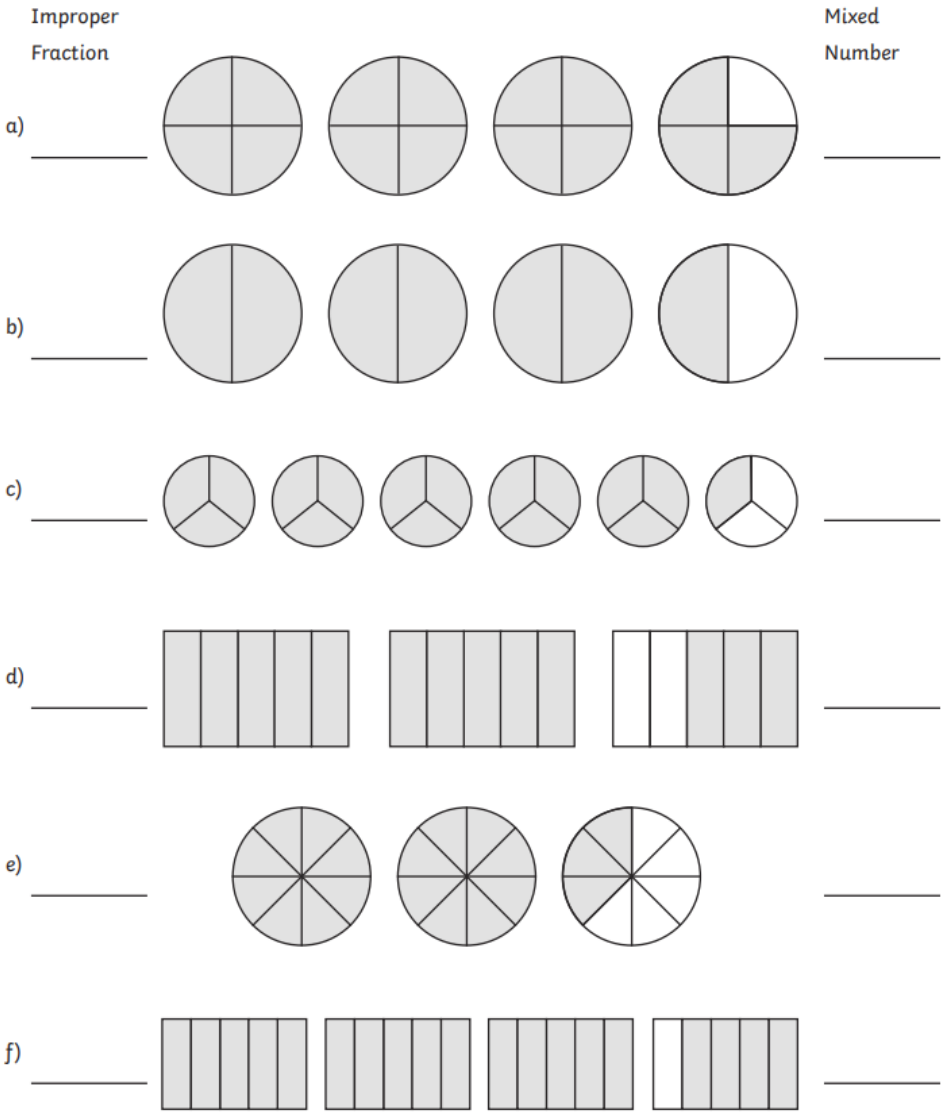
Maths	
	Improper and mixed number fractions  $1\frac{1}{6}$ $\frac{7}{6}$ When dealing with improper fractions the numerator is bigger than the denominator 



The denominator is always how many parts would make a whole so for the first question (a) the wholes are split into 4 so we know our denomintor = 4

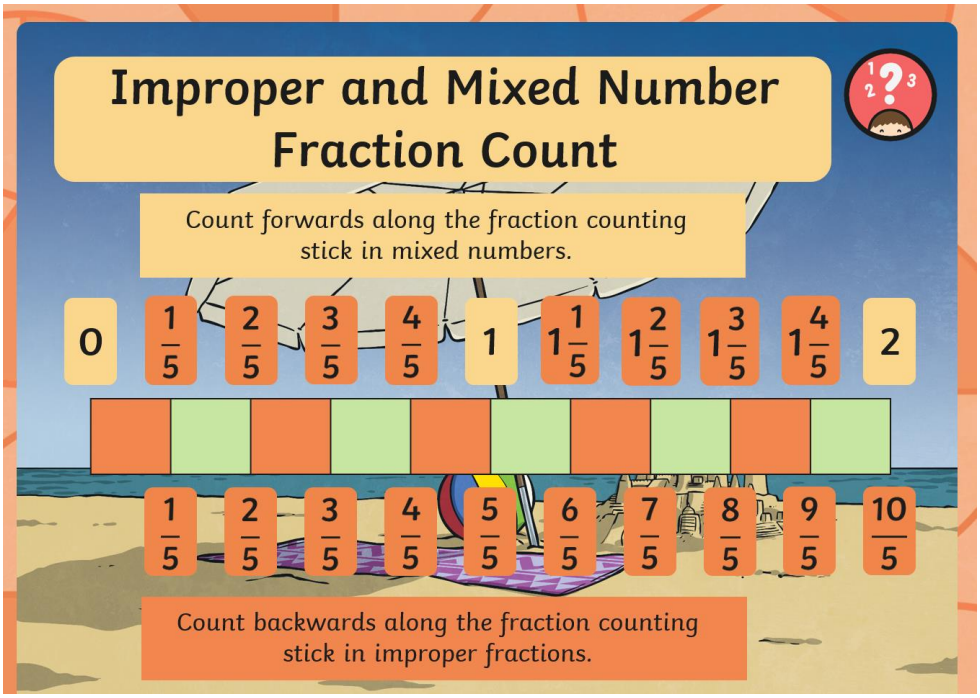
3 wholes have been shaded in and an extra ¾ so the first line shows 3 ¾ as a mixed number.

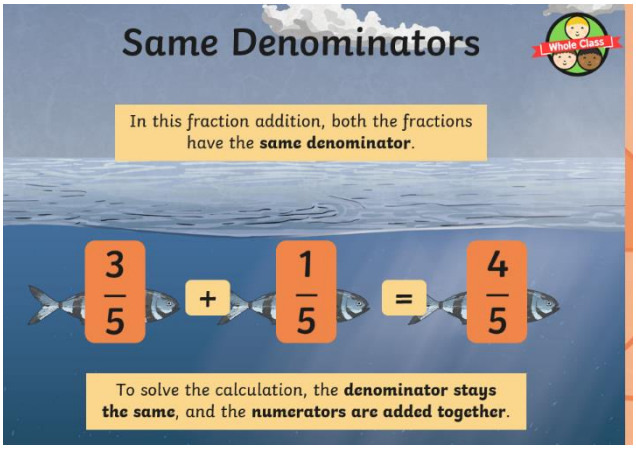
And as an improper number 15 parts have been shaded so it is 15/4

Do not put 16 as your denominator! Although 15 out of the 16 pieces have been shaded we are dealing with what makes the whole. 4 pieces make the whole (you can see they have been cut up into 4)

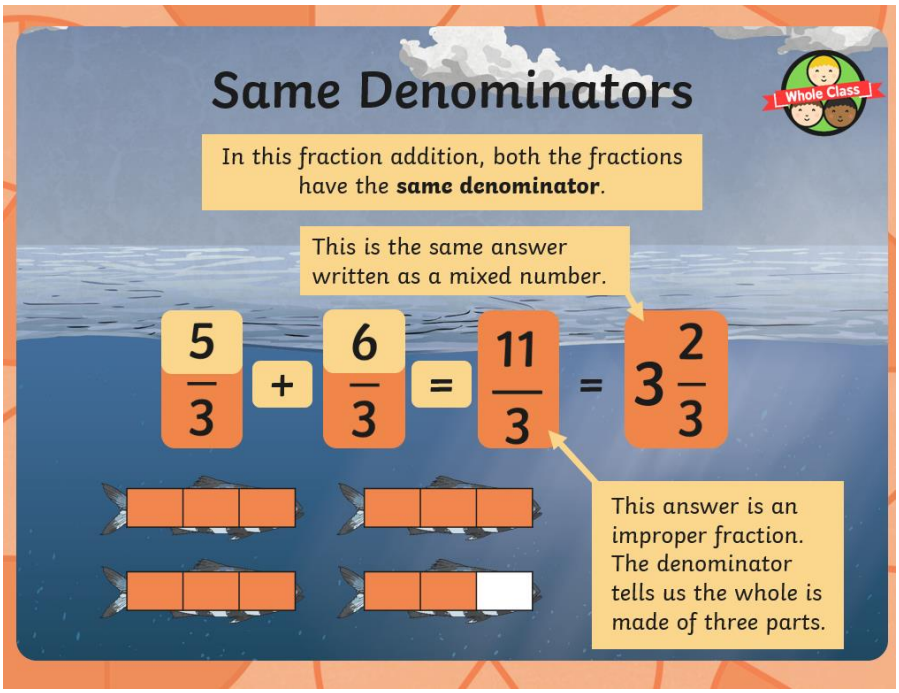
Adding and subtracting fractions with the same denominators.

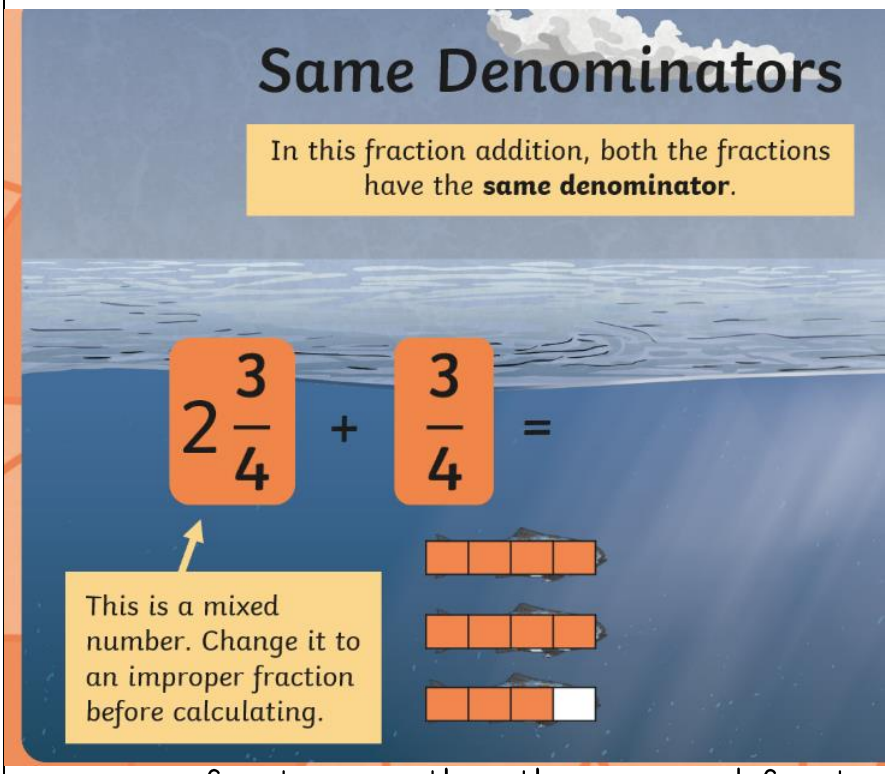
An improper fraction is where the numerator is bigger than the denominator. You might have seen these fractions be called top heavy fractions too. A mixed number fraction contains a whole number and a fraction.



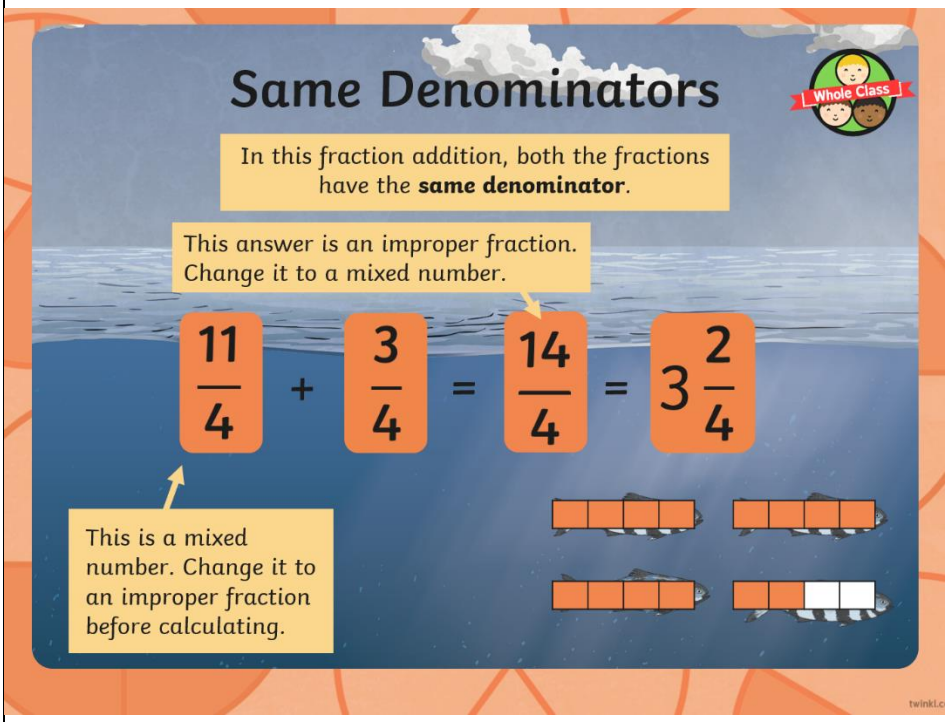


When we add fractions with the same denominator we simply add the numerators and leave the denominators alone.





It is easier to add improper fractions rather than mixed fractions as you simply add the numerators. You must convert the mixed fraction first



2 ¾

becomes 11/4

Questions

Answer and create questions based on adding improper and mixed fractions

e.g.

2/6 +5/6 =

2/9 +5/9 +6/9 =

4/17+ 23/17 =

Work out the totals as improper fractions and then convert them to mixed numbers

1 ½ + 5/2 =
3 5/8 + 17/8 =
6 ¾ + 2/4 =

Fractions

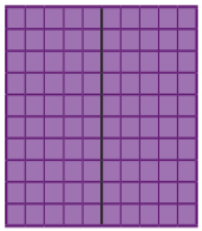
Knowledge Organiser

Key Vocabulary

- numerator
- denominator
- unit fraction
- non-unit fraction
- whole
- equivalent
- mixed number
- improper fraction
- simplest form
- multiple
- common denominator
- common numerator

Equivalent Fractions

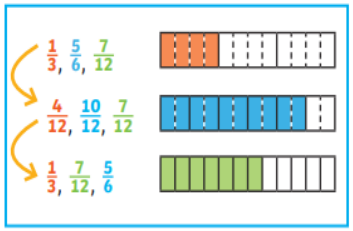
To find equivalent fractions, we multiply or divide the numerator and denominator by the same number.

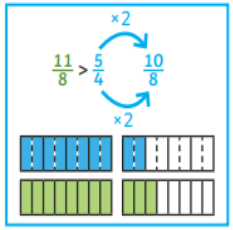


$\frac{1}{2} = \frac{5}{10} = \frac{50}{100}$ (×5, ×10; ×5, ×10)

Compare and Order Fractions

We can compare and order fractions by using common denominators.





Mixed Numbers

Mixed numbers contain a whole number and a fraction.

whole → $2\frac{1}{4}$ ← fraction

Improper Fractions

An improper fraction has a numerator which is greater than or equal to the denominator.

$\frac{5}{3}$

Convert an Improper Fraction to a Mixed Number

$\frac{9}{4}$

$9 \div 4 = 2r1$

Divide the numerator by the denominator.

$2\frac{1}{4}$

This shows you the whole number and the fraction.

Convert a Mixed Number to an Improper Fraction

Multiply the whole by the denominator to make an improper fraction.

$2\frac{5}{6} = \frac{12}{6} + \frac{5}{6} = \frac{17}{6}$

Add the fractions together.

Adding and Subtracting Fractions

To add or subtract fractions with denominators that are multiples of the same number, we must change one fraction to have the same denominator.

$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

$\frac{4}{5} - \frac{3}{5} = \frac{1}{5}$

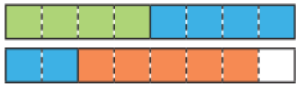
$\frac{1}{4} + \frac{3}{8} = \frac{2}{8} + \frac{3}{8} = \frac{5}{8}$

$\frac{5}{6} - \frac{2}{3} = \frac{5}{6} - \frac{4}{6} = \frac{1}{6}$

Fractions — Knowledge Organiser

Add Fractions Where the Total is Greater Than 1

$\frac{1}{2} + \frac{3}{4} + \frac{5}{8} = \frac{4}{8} + \frac{6}{8} + \frac{5}{8} = \frac{15}{8} = 1\frac{7}{8}$



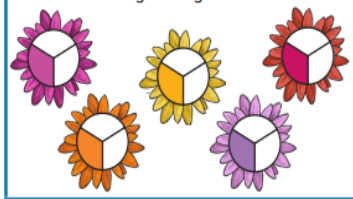
Add Mixed Numbers

$1\frac{1}{4} + \frac{3}{8} = 1\frac{2}{8} + \frac{3}{8} = 1 + \frac{5}{8} = 1\frac{5}{8}$

$1\frac{1}{4} + \frac{3}{8} = \frac{5}{4} + \frac{3}{8} = \frac{10}{8} + \frac{3}{8} = \frac{13}{8} = 1\frac{5}{8}$

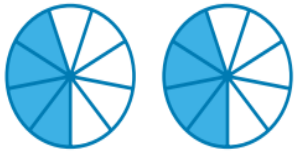
Multiply Unit Fractions by an Integer

$\frac{1}{3} \times 5 = \frac{5}{3}$



Multiply Non-Unit Fractions by an Integer

$2 \times \frac{4}{9} = \frac{8}{9}$



Multiply Mixed Numbers by Integers

Convert to an improper fraction and multiply the numerator by the integer.

$2\frac{1}{4} \times 2 = \frac{9}{4} \times 2 = \frac{18}{4} = 4\frac{2}{4} = 4\frac{1}{2}$

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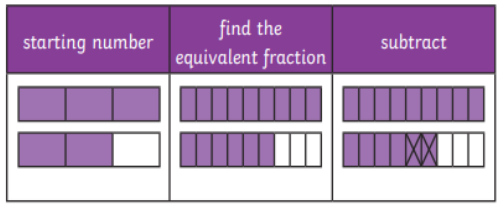
Use repeated addition.

$2\frac{1}{4} \times 2 = 2\frac{1}{4} + 2\frac{1}{4} = 4\frac{2}{4} = 4\frac{1}{2}$

Subtract from a Mixed Number

$1\frac{2}{3} - \frac{2}{9} = 1\frac{6}{9} - \frac{2}{9} = 1\frac{4}{9}$

starting number	find the equivalent fraction	subtract



Subtract Two Mixed Numbers

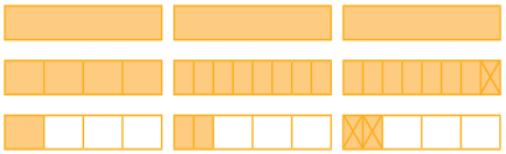
$2\frac{3}{4} - 1\frac{5}{8} = 1\frac{1}{8}$

$2 - 1 = 1$

$\frac{3}{4} - \frac{5}{8} = \frac{1}{8}$

Subtract from a Mixed Number - Breaking the Whole

$2\frac{1}{4} - \frac{3}{8} = 2\frac{2}{8} - \frac{3}{8} = 1\frac{10}{8} - \frac{3}{8} = 1\frac{7}{8}$

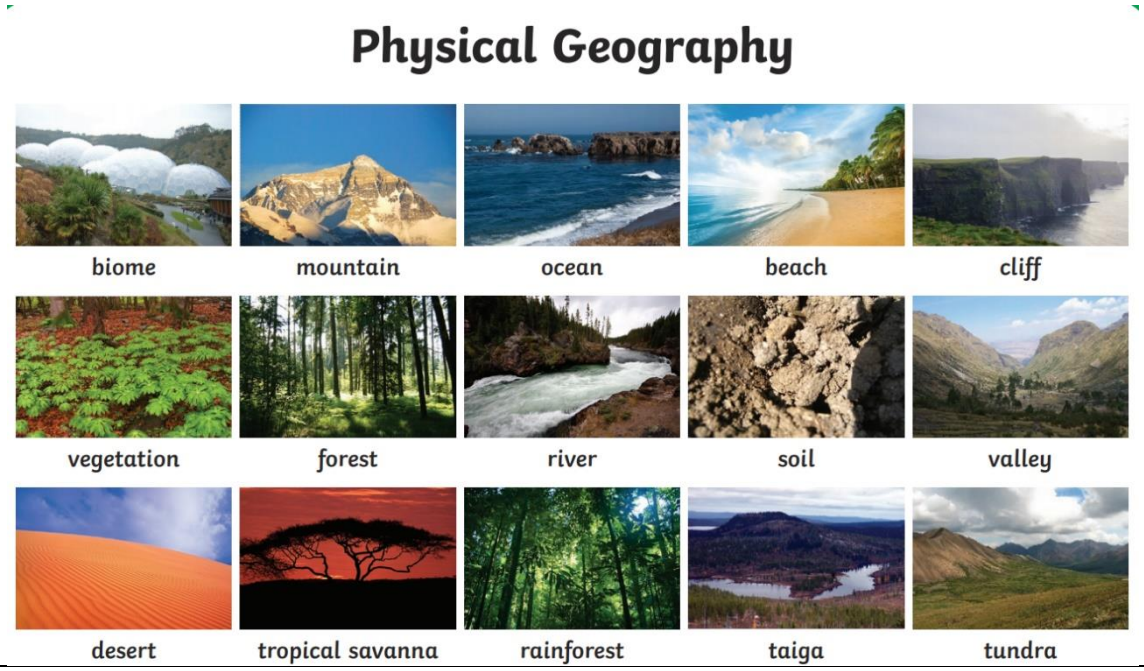


Foundation subjects	

	In our bubble we have used all our geography skills to become experts on a certain country. We explored many aspects of that country and started by writing an information text on that country. We have planned presentations and produced artwork on our chosen place too. We will then be comparing it to the UK. Below are some links that I played the children before they made their decision. If you want to, you can choose a different country/place to explore.

Baghdad Which is in Iraq	How Houses looked in Baghdad 900AD | History of Early Civilisations | BBC Teach - YouTube Baghdad in 900AD, the golden age of Islam | History - Lost Lands - YouTube Visit a Child Friendly School in Baghdad | UNICEF Iraq - YouTube
Peru	Journey Through Peru's Incredible Sights in 6 Minutes | Short Film Showcase - YouTube Peru Facts for Kids - Junior Jetsetters - YouTube
Kenya	Junior Jetsetters Kenya Facts for Kids - YouTube Introducing Kenya - YouTube Cee-Roo - Feel The Sounds of Kenya - YouTube KENYA | Trip of a lifetime - YouTube
Greenland	What It's Like to Grow Up on the Greenland Tundra | Op-Docs - YouTube GREENLAND - LAND OF ICE 4K - YouTube Incredible Facts About Greenland - YouTube
Philippines	PHILIPPINES! - Mini Fantastic Facts - YouTube 10 Things You Didn't Know About the Philippines - YouTube Geography Kids - PHILIPPINES! - YouTube
UK	Geography | KS1 | KS2 | The United Kingdom | BBC Teach - YouTube

	[Physical Geography UK - YouTube] [Top 10 Places To Visit In The UK - YouTube]

	Physical geography is naturally occurring, we have not made it 

HLTA	F	TA	I
LO: Research my chosen country			
I can	Identify the physical features of my country e.g. coasts, rivers, climate zones and mountains		
I know	How to ask geographical questions e.g. what is the landscape like? and research the answers		
I understand	Geographical similarities and differences between my chosen country and another		

Kenya
Greenland
Peru
Philippines
Baghdad (in Iraq)
UK

Use the computers, atlases and fact sheets to explore your chosen country. Things to look for:

Population
Capital city
Location – continent,
Time zone
Longitude and Latitude
Famous rivers
Volcanoes
Mountains
Climate
Biomes
Language
Religion
Interesting facts
Leader/ ruler
Traditional foods
Popular sports
Major bodies of water e.g. lakes
Coastlines and oceans

You must explore the physical features of your chosen country. Remember physical features are all natural.