

# Welcome to GCSE Geography



Where will it take us today?

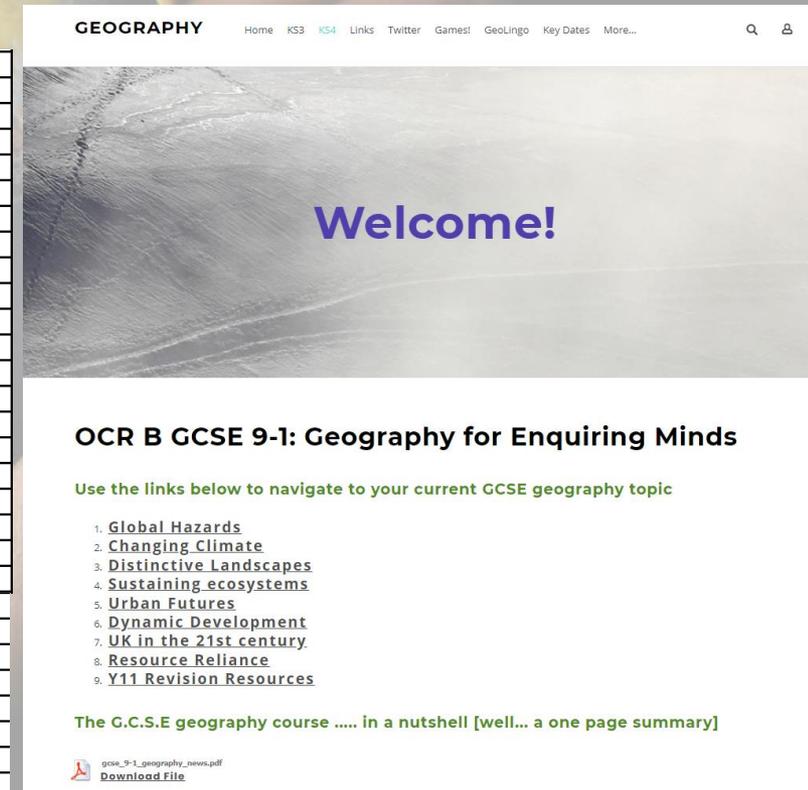
	A01: Knowledge	A02: Understanding	A03: Application of K&U
<b>Comprehensive</b>	good range detailed and accurate fully relevant to the Qn	good range detailed and accurate fully relevant to the Qn	detailed & accurate analysis substantiated judgements substantiated evaluation
<b>Thorough</b>	range accurate relevant to the Qn.	range accurate relevant to the Qn.	accurate analysis supported judgements supported evaluations
<b>Reasonable</b>	some relevant to the Qn.	some; relevant to the Qn	some accuracy partially supported judgement partially supported evaluation
<b>Basic</b>	limited relevant knowledge	limited but relevant	limited analysis unsupported judgement unsupported evaluation



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#geography teacher @ H.A.D. Tweeting useful links about all things geographical.  
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Joined Feb 2017

TWEETS 799    FOLLOWING 76    FOLLOWERS 132    LISTED 2

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# Welcome!

## OCR B GCSE 9-1: Geography for Enquiring Minds

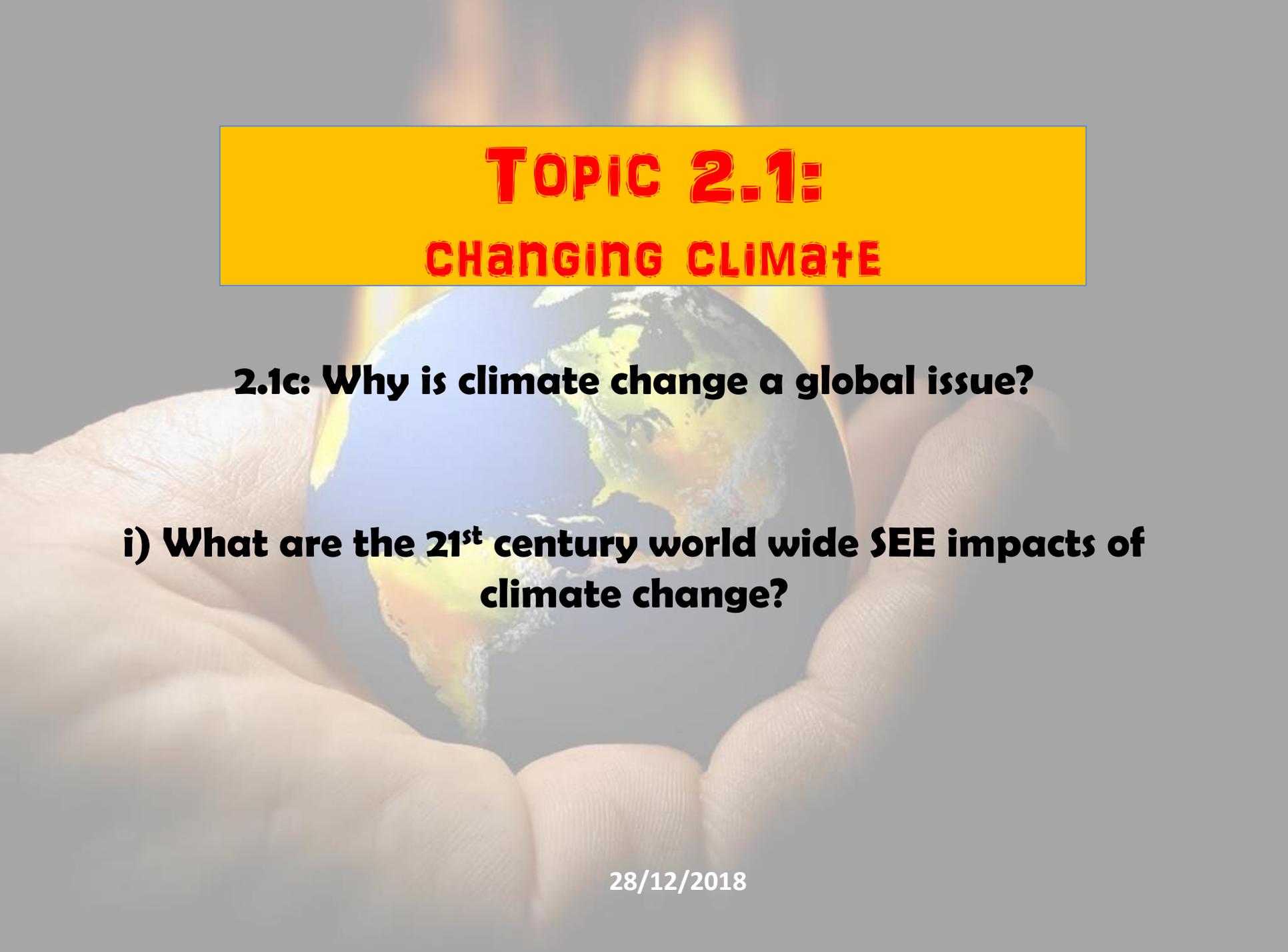
Use the links below to navigate to your current GCSE geography topic

- [Global Hazards](#)
- [Changing Climate](#)
- [Distinctive Landscapes](#)
- [Sustaining ecosystems](#)
- [Urban Futures](#)
- [Dynamic Development](#)
- [UK in the 21st century](#)
- [Resource Reliance](#)
- [Y11 Revision Resources](#)

The G.C.S.E geography course ..... in a nutshell [well... a one page summary]

[Download File](#)

1	G	3c
		3b
		3a
2	F	4c
		4b
		4a
3	E	5c
		5b
		5a
4	D	6c
		6b
		6a
5	C	7c
		7b
		7a
6	B	8c
		8b
		8a
7	A	EP
		EP
		EP
8	A*	EP
		EP
		EP
9	A*	EP
		EP
		EP

A hand holding a small globe of the Earth, with a fire background. The globe shows the continents of North and South America. The hand is positioned in the center, with fingers visible. The background is a blurred image of flames.

# **TOPIC 2.1:**

## **CHANGING CLIMATE**

**2.1c: Why is climate change a global issue?**

**i) What are the 21<sup>st</sup> century world wide SEE impacts of climate change?**

# Cause? Consequence?



How does this make YOU feel?

# Think back.....



Drilling for climate change evidence?

P's & D's are subjective

This is retreating in the Arctic

Happened most recently in 1963



MC – evidence of natural climate change

2 years after the eruption of Mount ?  
Earth's temperatures dropped by ? degrees Celsius

'wobble'

'Mad' spinning?



EGE – when humans interfere

Without the GG's average global temps would be ?

These are 15000 times more efficient at trapping radiation

Has the biggest per capita carbon emissions

**How many points can you rack up?**

# Global Impacts of Climate Change

Learning is successful when I can:

\*outline a range of 'SEE' impacts resulting from climate change

Impressive  
Vocabulary

## Keywords

refugee  
thermal expansion  
yields

## Geography Skills:

Scale  
Conceptual  
understanding

## Literacy Skills:

Exam response  
writing  
Describing trends

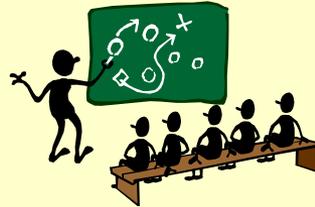
## Employability Skills:

Independent thinking  
Evaluating sources



**PRESENT NEW INFORMATION**

**LOOK, LISTEN, LEARN**



If there was an equal amount of ice on the land as in the sea, which would cause the most change to sea levels and why?

**Brain  
teaser!**



# Rising Sea Levels – mixed up!

Thermal expansion

As glaciers melt, water that was stored as ice is added to the world's oceans.

Melting Glaciers

As the huge expanses of ice in the Arctic and Antarctic melt, more water is added to the oceans.

Melting ice caps

As the temperature of the water in the oceans increases, the water expands making the sea level rise.

# RISING SEA LEVELS... MIX AND MATCH ANSWERS

Thermal expansion

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# Rising Sea Levels

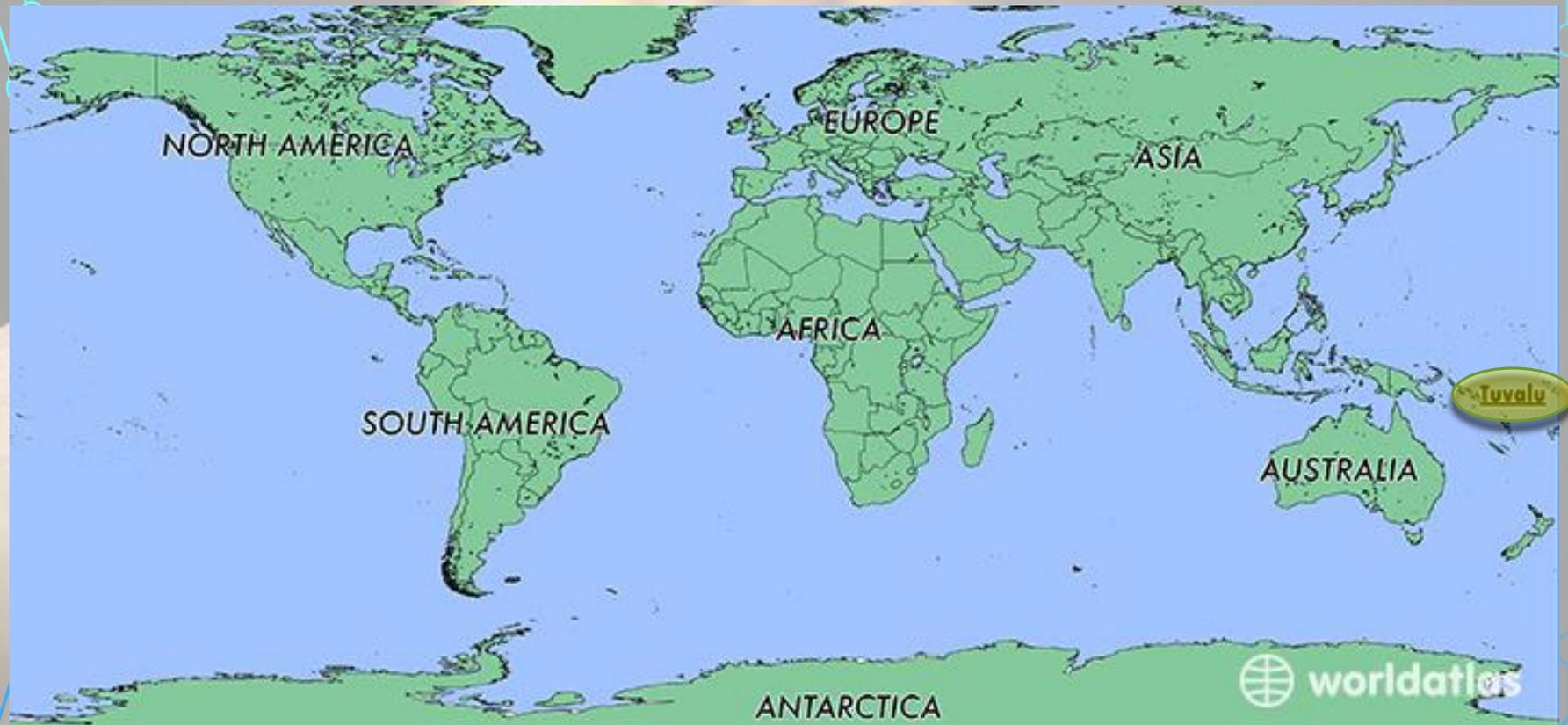
**There has been a 200 mm increase since 1993**

**By 2100 sea levels will have risen by between 100mm and 1000mm**

**This will result in CCRs. It is estimated that by 2050 as many as 100 million people might have been forced to move**



# Rising Sea Levels → disappearing islands → CCRs



**Name it!**  
**CLOCC IT!**

# BIG QUESTION: Why does Maitu need to move house?

- Read the information carefully and organise it into the following categories;
  - Causes of Climate Change
  - How Climate is Changing
  - Information about the Himalayas
  - Information about Tuvalu
- Use the information solve the BIG question above
- **THINK POINT:** What could be done to address the issues faced by the people of Tuvalu?



<p>Glacial streams provide an estimated 100 million people with fresh drinking water.</p>	<p>Plants and trees absorb carbon dioxide, so are natural carbon 'sinks'. As a result, deforestation contributes to the problem of climate change.</p>	<p>Tuvalu is the fourth smallest country in the world.</p>
<p>Half of Tuvalu's 10,000 residents live within three metres of today's sea-level.</p>	<p>Sea levels have risen by almost 2cm every year since 1870</p>	<p>75% of the world's fresh water is stored in glaciers and ice sheets.</p>
<p>The Himalayas contain the largest store of water outside the polar ice caps, and feed seven great Asian rivers.</p>	<p>During the 20<sup>th</sup> century surface temperatures rose on average by 1°C.</p>	<p>Nepal's annual average temperature has risen by 0.06 degrees Celsius</p>
<p>Rising temperatures are being caused predominantly by the burning of fossil fuels.</p>	<p>Tuvalu is an island nation located in the Pacific Ocean, midway between Hawaii and Australia.</p>	<p>Global mean temps are predicted to ↑ between 1.4-5.8C over the next century, with an equivalent sea level rise of between 9 and 88 cm globally.</p>
<p>The Himalayan glaciers are believed to be retreating at a rate of about 10-15m each year.</p>	<p>During the 20th century, surface temps ↑ by 1°C. As a result snow &amp; ice cover has ↓, releasing freshwater into the oceans.</p>	<p>Maitu lives in Tuvalu, an island nation located in the Pacific Ocean, between Hawaii and Australia.</p>

# Wider impacts of climate change



# Classify these wider impacts of global warming

Social

Economic

Environmental

<p>600 million people live in coastal areas that are less than 10 m above sea level.</p>	<p>Up to 25% of all plant and animal species could become extinct by 2050. There will be species refugees too.</p>	<p>Globally the amount of food grown (yields) is dropping inc wheat and rice.</p>
<p>1 billion people will not have enough water by 2025 due to the impacts of climate change.</p>	<p>The numbers of environmental refugees – people who have lost their homes due to flooding – will increase.</p>	<p>Valuable agricultural land (e.g. in Bangladesh, Vietnam, India and China) may be lost to the sea or polluted by seawater. Harbours and ports may be affected, which will have an impact on fishing and trade.</p>
<p>Many important world cities including New York, Venice and London could be affected by flooding.</p>	<p>Transport systems, such as railways, roads and airports may be damaged or destroyed.</p>	<p>People may lose their jobs, for example in fishing or tourism, and have to learn new skills.</p>
<p>Damage to coral reefs by storms and powerful waves will affect fish breeding grounds and ecosystems.</p>	<p>Harbours may become blocked by sediment due to increased rates of coastal erosion.</p>	<p>Warmer oceans seem to be making tropical storms, droughts, heatwaves and flooding more frequent, affecting homes and farmland.</p>
<p>Many countries depend on coastal tourism as their main source of income. Beaches may be eroded or flooded, forcing hotels to close. People may decide not to visit.</p>	<p>Valuable land and property will need expensive measures of coastal defence.</p>	<p>Damage could occur to coastal ecosystems such as mangrove swamps, which form natural barriers to storms.</p>

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# Europe's heatwave 2018

<https://www.youtube.com/watch?v=N2WNxc7N1Iq>



Use the video and the newspaper article to create a mini fact file about Europe's 2018 heatwave.

In the UK 1000 people died as a result, this is a **DEMOGRAPHIC** impact



# Extreme weather impacts around the world

Forests experience more pests, disease and forest fires (E.g. California 2018)

Flood risk increases repair and insurance costs.

Winter- related deaths decrease with milder winters.

Increased risk of diseases such as skin cancer as temperatures increase.

Skiing industries may decline in Alps as less snow.

Flooding in south Asia increases rice yields.

Lower rainfall causes food shortages for orang-utans in Indonesia.

Extreme weather increases investment in prediction and protection.

Increased drought, affecting farming and water supplies. (e.g. California 2012-17)

# Which is worse?

*The  
'disappearance'  
of Tuvalu*

*European  
heatwaves*

**Be prepared to  
explain your  
thinking!**



# WHAT WOULD AN EXAM QUESTION LOOK LIKE?

12  
mins



“Explain two ways in which people are affected by climate change” [4]

## Steps to Success

1. Box
2. Underline
3. Lingo to include .....
4. Write it! Remember to Glance back
5. Spell- check

\* Point Explain Evidence Evaluation Link

S H E E P

Place Specific Detail

# WHAT WOULD AN EXAM ANSWER LOOK LIKE?

“Explain two ways in which people are affected by climate change” [4]

6  
mins  
peer  
assess



**2 x 2**

**Write the mark scheme !!!!**



# Global Impacts of Climate Change

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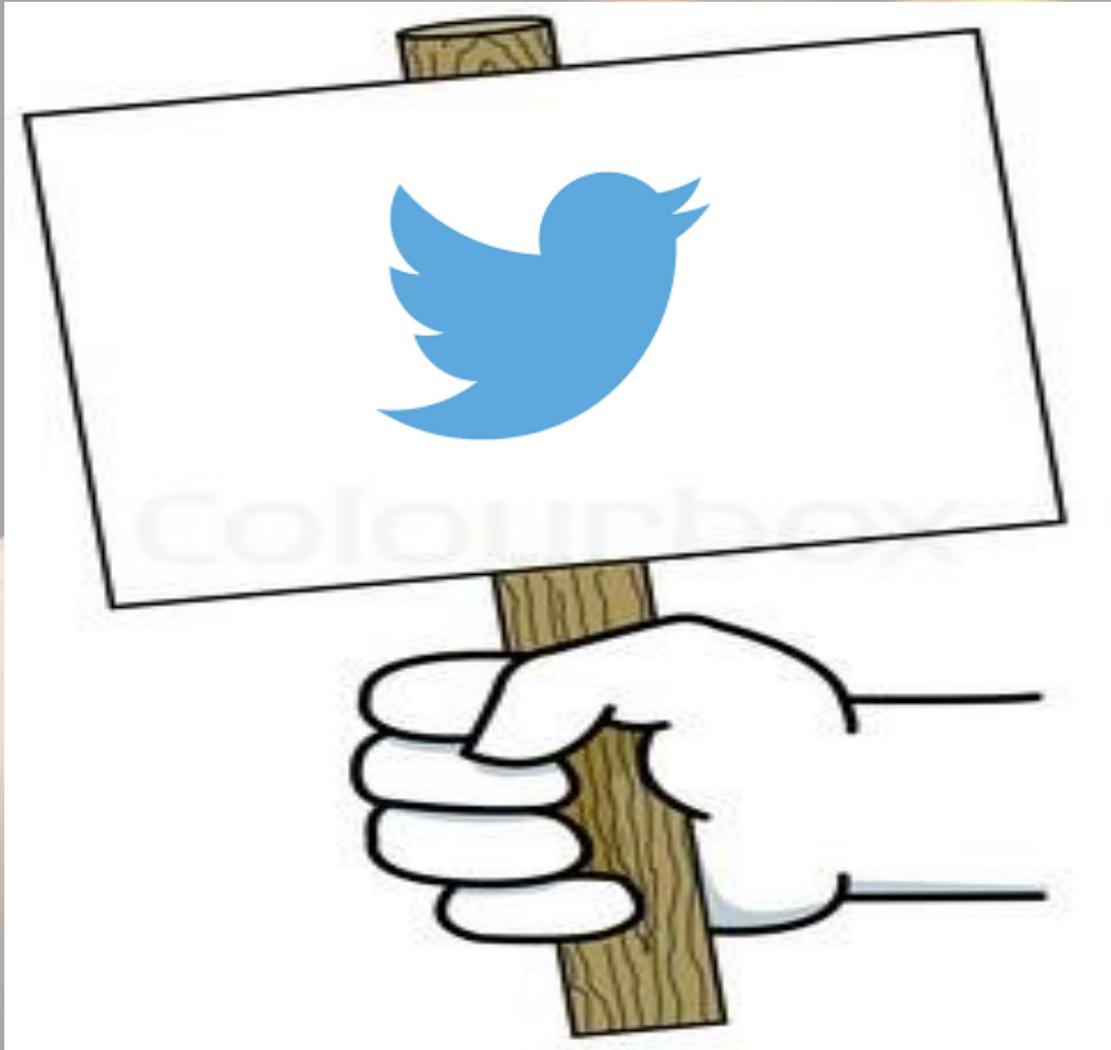
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### Literacy Skills:

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Summarise today's learning in a 240 character tweet in the 4 lines at the bottom of your page OR write two questions that someone could ask you to check if this content has been mastered!