

# Türkiye Earthquake 2023

- What happened?
- Why did the earthquake happen here?
- What were the effects?
- What factors have contributed to the high death toll?

# GCSE Geography



# Why Should I Study Geography?

- Geography will help you understand your place in the world
- Develop a wide range of transferable skills
- Dynamic and relevant subject
- Become a global citizen



# What Will I Study?



- Physical Geography
  - Hazards: Earthquakes, Hurricanes & Climate Change
  - Ecosystems: Rainforests & Deserts
  - UK Landscapes: Rivers & Coasts
- Human Geography
  - Urban Environments: Rio & Bristol
  - Economic World: Development, Nigeria & the UK
  - Resources: Food, Energy & Water
- Fieldwork
  - Pre-release information
  - Fieldwork



# What Will Geography Lessons Be Like?

- Fun, engaging lessons with a focus on exam skills
- Group work, paired work, discussions, research tasks
- Relevant and up-to-date examples from all over the world
- A range of resources including articles, videos as well as your own data collection



# How Will I Be Assessed?



- Paper 1: Physical Geography
  - Worth 35% of final grade
  - 1h30, Qs from 1-9 marks
- Paper 2: Human Geography
  - Worth 35% of final grade
  - 1h30, Qs from 1-9 marks
- Paper 3: Skills & Fieldwork
  - Worth 30% of final grade
  - 1h15, Qs from 1-9 marks



# What Does Work Look Like In Geography?

## The Nepal earthquake

Date: 25/04/15 Time: 77:56 Magnitude: 7.9 Focus:  
Epicentre: Birm Fault: Himalayas HDI: 0.579

Location *Kathmandu, Nepal, 2 km from the epicentre.*

### Primary effects

What happened immediately?

- 9000 people died and 20000 injured - over 8 million displaced
- 3 million people left homeless when homes were destroyed
- Electricity and water supplies, sanitation and communications stopped
- 14 million people needed food, water and shelter in the days and weeks after the earthquake
- 7000 schools, schools destroyed and hospitals overwhelmed
- International airport became congested as aid arrived
- 50% of shops destroyed, affecting poor people's livelihoods
- cost of damage estimated US\$5 billion

Why was the Nepal earthquake so destructive? What were the key causes?

- 7.9 on the richer scale
- 2 years from capital city
- 17mm below the surface
- very severe ground shaking, causing landslides and landslides
- Really close to a destructive plate margin that moves 40mm a year
- LIC meaning they needed more support from other countries.

### Immediate responses/management

What kind of help was needed immediately? Who provided it?

- |   |  |
|---|--|
| <p>Reverse steam, water and other supplies<br/>         arrived quietly from the UK, India and China</p> <p>• Allegedly rescued many people caught in<br/>         landslides and avalanches</p> <p>• Help a million people needed to provide shelter<br/>         for the homeless</p> <p>• Thousands still plagued from many countries</p> <p>• Field hospitals set up to help overwhelmed</p> <p>• 300,000 people migrated from landslides</p> <p>• No more shelter and support, partly a friend</p> | <p>Readers repaired a landslide cleared</p> <p>• Thousands of homeless people to be rehoused</p> <p>• Border converts on building codes</p> <p>• International conference to discuss reconstruction</p> <p>• Tourist sites repair - source of income</p> |
|---|--|

## What for Nepal?

Buildings and construction improvements -

### Secondary effects

What happened after the main event? How did the impact change over time?

- Ground attacking several anti-aircraft gun emplacements, blowing roads and harping railway stations.
- Amtracs on Beach-First killed at least 100 people - the greatest loss of life on the invasion in a single day.
- No resistance in the Landing region - 1500 people missing.
- 1st Marine Division took the "high ground" - Mt. Suribachi on the island - many people evacuated in the next few days.
- The earthquake occurred on Sunday at 11:00 - people were sleeping.
- The earthquake occurred on Sunday at 11:00 - people were sleeping.
- Future of Japan?

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Scientists have identified cyclical changes in solar energy output linked to the presence of sunspots. A sunspot is a dark patch that appears from time to time on the Sun. The number of

Seaweeds increase from a minimum to a maximum and then back to a minimum over a period of about 11 years. This 11-year period is called the **seaweed cycle**.

**volcanic activity**

violent volcanic eruptions blast huge quantities of ash, gases and liquids into the atmosphere

Volcanic ash can block out the Sun, reducing temperatures on the Earth.

This leads to a short-term decrease



Human caused


$$\underline{\text{CO}_2}$$

accounts for an estimated 60% of the enhanced greenhouse effect. Global concentration of carbon dioxide has increased by 30% since 1880.

- Car exhausts

- Deposition and the leaching of wood
- As very fossil fossil fuels
- Nitrogen oxides
- very small concentrations in the atmosphere and up to 300 times more effective in capturing heat than carbon dioxide
- car exhausts
- a greenhouse gas
- strong treatment
- Power stations produce electricity

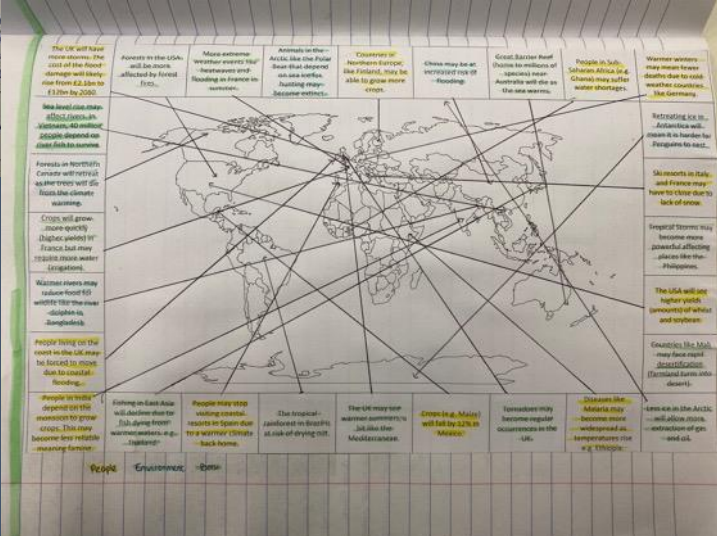


- Rice farming
- Farm livestock
- Burning biomass for energy

orbital changes



Milutin Milankovitch was a Serbian geophysicist and astronomer.



Study **Figure 2**, information about extreme weather in the UK in March 2018.

## Figure 2



'Beast from the East' causes chaos across Britain. The killer freeze costs the UK £1 billion per day as transport routes are disrupted by snow and ice. Businesses and schools are forced to close.

- Snow warnings**
- Yellow:**
- Some impacts
  - Disrupted travel
- Amber:**
- Severe impacts
  - Road and rail closures
  - Potential risk to life buildings
- Red:**
- Dangerous weather
  - Risk to life
  - Major disruption to power supply

Suggest how extreme weather in the UK can have economic and social impacts

Use **Figure 2** and your own understanding.

[6 mark]

It is Figure 2 shows that there is a huge economic impact, as a result of extreme weather, and how it may it is why it is better a day. Furthermore, the fact that we are not aware when there is a large wind impact on this is a risk to life. Another example of extreme weather in the UK would be the flooding in December 2015. Economic impacts on a small world have been travel disruption but also damage, as this cost a lot of money. Social impacts would have been loss of property and destruction. Also, the Somerset Levels Flooding between 2013-2014. Economic impacts would be £80 million worth of damage, and loss of tourism cost £200 million. Social impacts would be over 600 homes and villages like Muchelney are out of it.



# Fieldwork & Trips

- 2 instances of fieldwork (physical and human)
- Completed in one day at Southbourne Beach and Christchurch, Dorset
- International trips to Morocco, Iceland and Italy





# How Do I Find Out More Details?



- Speak to the subject lead: Mr Jackson
- Email: [jacksonj@wallingfordschool.com](mailto:jacksonj@wallingfordschool.com)
- Speak to your geography teacher
- Speak to older students who are already taking the course