

Teaching and Learning Content: Geography

Year Group: 10

Autumn Term

The Living World

Key Questions:

- How is an ecosystem made up of plants and animals and the physical factors affecting them (climate and soil)?
- How do the different parts of an ecosystem interrelate and depend on each other?
- Why is the balance between the different parts of an ecosystem essential?
- Why different ecosystems are found in different parts of the world?
- How and why does the vegetation adapt to the climate and soils in different ecosystems?
- How and why are temperate deciduous woodlands used?
- Do temperate deciduous woodlands provide examples of successful, sustainable management?
- Why tropical rainforests being cut down and what are the economic, social, political and environmental impacts?
- Why do tropical rainforests need to be managed sustainably and why is international co-operation needed?
- How do hot deserts provide opportunities for economic development in Less Economically Developed Countries (LEDCs) and More Economically Developed Countries (MEDCs)?

Students will:

- Evaluate how physical and human changes damage an ecosystem.
- Evaluate how physical and human changes damage a named small scale ecosystem.
- Understand how the vegetation has adapted to the climate and soil in three biomes (global ecosystems)
- Know how deciduous forests in the UK are being managed.
- Explain how Epping Forest has and continues to be sustainably managed.
- Explain how the vegetation has adapted to the climate and soil.
- Evaluate the economic, social, political and environmental impacts of deforestation.
- Understand that it is the whole world's responsibility to ensure sustainable use of rainforests.
- Compare the similarities and differences between the desert in the west of the USA and in southern Pakistan and have evaluated whether the use of the two deserts is sustainable.
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Spring Term

The Restless Earth

N.B. Plate boundaries and plate margins are the same thing.

Key Questions:

- Why is the Earth's crust unstable, especially at plate margins?
- Why do unique landforms occur at plate margins?
- How do people use these landforms as a resource and adapt to the conditions within them?
- What hazards do volcanic eruptions cause? How can their primary and secondary effects be positive as well as negative? How do responses change in the aftermath of an eruption?
- What are super volcanoes and why do their eruptions have global consequences?
- Why do earthquakes occur at constructive, destructive and conservative plate margins?
- Why do the effects of earthquakes and responses to them differ due to contrasts in levels of wealth in different countries?
- What are Tsunamis and why can they have devastating effects in coastal areas?

Students will:

- Describe and explain the differences between the layers.
- Describe and explain the differences between plate margins.
- Explain how fold mountains and oceanic trenches are formed.
- Explain how cone and shield volcanoes are formed.
- Explain how people have overcome the difficulties of living in a named fold mountain range.
- Make links between plate margins and volcano types.
- Describe and explain the primary and secondary effects of a named volcanic eruption.
- Evaluate the effectiveness of immediate and longer term responses to volcanic eruptions.
- Compare the differences between the formation of super volcanoes and composite cone and shield volcanoes.
- Explain how earthquakes are caused, linked to types of plate margin and using a range of key words.
- Evaluate why similar earthquakes have different effects in different places (with specific reference to effects.)
- Compare and explain in detail why the effects and responses to Tsunamis are different in Less Economically developed Countries (LEDCs) and More Economically Developed Countries (MEDCs).
- Explain why warning times for tsunamis vary across the world.
- Evaluate why tsunamis have different effects in different places (with specific reference to effects)

Summer term

Water on the Land

Key Questions:

- How and why does the shape of river valleys change as rivers flow downstream?
- What distinctive landforms result from different processes as rivers flow downstream?
- Why does the amount of water in a river fluctuate?
- What are the physical and human causes of flooding?
- Why is flooding appear to be an increasingly frequent event?
- What are the effects and responses to floods vary between areas of contrasting levels of wealth?
- What are the costs and benefits of hard and soft engineering in managing flood risk?
- How are rivers managed to provide a water supply and what issues result from this?

Students will:

- Explain where along a rivers course each process of erosion mainly happens.
- Explain where along a rivers course each process of transportation mainly happens.
- Explain when and where along a rivers course different cause of deposition may occur.
- Explain how the processes of erosion, transportation and deposition change the long and cross profile of a river along it's course.
- Identify the location of waterfalls and gorges on OS maps and or satellite images and explain how they are formed by erosion.
- Identify the location of meanders and ox – bow lakes on OS maps and or satellite images and explain how they are formed by erosion and deposition.
- Identify the location of levees and flood plains on OS maps and or satellite images and explain how they are formed by deposition.
- Compare hydrographs for different drainage basins.
- Explain why some rivers flash flood and others do not
- Evaluate the best responses to flooding
- Explain why no lives were lost in the Boscastle flood
- Explain why flooding in LEDCS has a longer term impact than flooding in MEDCs
- Evaluate why different groups of people have different attitudes towards hard and soft engineering flood defence strategies.
- Evaluate why different people have different attitudes towards hard and soft engineering flood defence strategies on the River Tees.

- Explain how the imbalance of supply and demand is dealt with in the UK and what issues this may cause
- Evaluate the social, economic and environmental benefits of Cow Green reservoir.

Suggested resources to support your child's learning:

Books

- Understanding GCSE Geography for AQA A: Student Book by John Pallister and Ann Bowen
 - Published in June 2009
 - ISBN 978-0435353308
- AQA GCSE Geography A: Student Book by Simon Ross, Judith Canavan and Alison Rae
 - Published in June 2009
 - ISBN 978 – 1408502716
- GCSE Geography AQA A revision Guide by Richard Parsons
 - Published in September 2009
 - ISBN 978-1847623782

Useful work sheets (some of which will be set for homework, all of which though are available)

The Living World

- 4.1 Advantages of trees and forests
- 4.2 Hot desert ecosystem summary sheet
- 4.3 Case study of a small scale water project in Pakistan
- 4.4 Methods of obtaining irrigation water in hot deserts
- 4.5 Temperate deciduous forest ecosystem summary sheet
- 4.6 Tropical rainforest ecosystem summary sheet
- 4.7 Amazon rubber tappers set a good example
- 4.8 Conflicts in tropical rainforests
- 4.9 Deforestation in Brazil and increases in agriculture

The Restless Planet

- 1.1 Tectonic activity and plate margins
- 1.2 Plate margins
- 1.3 Problems for people and transport in high fold mountain ranges
- 1.4 Human activities in an Alpine valley
- 1.5 Volcanoes
- 1.6 Eruption of Mount Etna in 2001
- 1.7 Earthquakes
- 1.8 Earthquake in Bam (Iran), December 2003

Water on The Land

- 5.1 Drainage basin and river valley
- 5.2 Waterfalls and gorges.
- 5.3 Meander formation and channel cross sections.
- 5.4 River flood hydrographs.
- 5.5 Floods in Bangladesh
- 5.6 Issue relating to hard engineering – large dams
- 5.7 The mismatch between water supply and water demand.

Websites

<http://www.bbc.co.uk/schools/gcsebitesize/geography/>
<https://www.cia.gov/library/publications/the-world-factbook/>
<http://www.bbc.co.uk/news/>