

GEOGRAPHY KS4 CURRICULUM AND ASSESSMENT MILESTONES DOCUMENT

Topic and content	Assessment and feedback
Topic 1 – Urban issues and Challenges 1	Informal assessment will take place every week lesson
Global Urbanisation	through practice exam questions, with show call feedback by the teacher. Example: 'Assess the social and environmental opportunities of urban change in the city you have studied'
 More people now live in cities than ever before. 	
 Urbanisation trends vary between High Income Countries (HICs) and Low Income Countries (LICs). 	
 Driven by natural increase and migration (push-pull factors). 	At the end of the topic there will be a formal assessment (45 mins) which is comprised of example exam questions of varying length and skill (this can include case study information, map, maths, graph skills etc).
 Megacities (cities with over 10 million people) are emerging in many parts of the world. 	
Urban Change in the UK	
A major UK city case study looks at:	
• Its location and importance.	
 Impacts of migration on its growth and character. 	
 Opportunities: cultural diversity, employment, transport systems, urban greening. 	
 Challenges: deprivation, inequalities, dereliction, sprawl, and waste. 	
 Includes a regeneration project: why it was needed and its features.(Sheffield's Park Hill) 	
Sustainable Urban Living	
Covers ways cities can become more sustainable:	
Conserving water and energy	
· Recycling waste	
· Creating green spaces	

Looks at transport strategies to cut down congestion.

Topic 2 - Natural hazards 1

Natural Hazards

- **Definition**: A natural hazard is a natural event that poses risk to people and property.
- Types: Includes hazards such as earthquakes, volcanoes, floods, and storms.
- Risk Factors: The risk from natural hazards is influenced by physical, social, economic, and environmental factors.

Tectonic Hazards

- Causes: Earthquakes and volcanic eruptions are caused by processes related to plate tectonics.
- Plate Margins: Earthquakes and volcanoes occur mostly along plate margins, with different processes at:
- Constructive margins: plates move apart.
- Destructive margins: plates move towards each other.
- · Conservative margins: plates slide past each other.
- Impacts and Responses:
- · Primary effects
- · Secondary effects
- · Immediate responses
- · Long-term responses (rebuilding and recovery).
- Use contrasting examples from richer and poorer countries to illustrate differences. (New Zealand and Turkey)
- Management:
- Despite the risks, people remain in hazard-prone areas for various reasons (e.g. fertile soil, economic opportunities).
- Monitoring, prediction, protection, and planning can all help to reduce risk.

Causes of Climate Change

- Evidence: Includes climate data from the Quaternary period to today.
- **Natural causes**: Orbital changes, volcanic eruptions, and solar variations.
- Human causes: Burning fossil fuels, farming practices, and deforestation.

Effects of Climate Change

 Impacts both people (e.g. health, livelihoods, migration) and the environment (e.g. ecosystems, sea level rise, weather patterns).

Managing Climate Change

- Mitigation (reducing the causes):
- · Switching to renewable energy sources
- · Carbon capture and storage
- · Reforestation
- · Global agreements (e.g. Paris Agreement)
- · Adaptation (adjusting to the effects):
- Modifying agriculture
- Managing water supplies
- Defending against rising sea levels (e.g. sea walls, relocation)

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'Explain the reasons for the difference in responses to an earthquake between a HIC and A LIC country.'

<u>Topic 3 - Changing economic world</u>

Global Economic Development

- · Countries differ in development levels and quality of life.
- Measured using indicators like GNI per head, HDI, life expectancy, birth/death rates, and access to services.
- These measures have limitations—they don't always show regional or social inequalities.
- The Demographic Transition Model (DTM) links population trends with development stages.
- Uneven development is caused by physical, economic, and historical factors and results in wealth and health disparities and migration.
- Strategies to reduce the development gap include aid, investment, fairtrade, tourism, debt relief, and microfinance.
- A case study of tourism in Nigeria shows how it can help narrow this gap.

Nigeria's development economy

- · A case study explores how Nigeria is developing and changing.
- · Its regional and global importance
- · Context (political, social, environmental)
- · Industrial change, with a shift in economic sectors
- · Role of TNCs (Shell), with pros and cons for Nigeria.
- · Changes in trade, aid, and international relations
- · Impacts on the environment and quality of life

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'Aid is the best way to support a developing country' Do you agree with this statement? Explain your reasons.'

At the end of the topic there will be a formal assessment (45 mins) which is comprised of example exam questions of varying length and skill (this can include case study information, map, maths, graph skills etc).

Topic 4 - Physical landscapes Rivers

UK Physical Landscapes

- The UK has a wide variety of landscapes, including upland, lowland, and river systems.
- You'll need to know the geographic distribution of these features across the country.

River Landscapes

- River valley shape changes along the course (long and cross profiles).
- Fluvial processes:
- Erosion: vertical/lateral erosion, hydraulic action, abrasion, attrition, solution
- Transportation: traction, saltation, suspension, solution
- Deposition: when and why sediment is dropped
- River landforms:
 - From erosion: interlocking spurs, waterfalls, gorges
- From erosion and deposition: meanders, ox-bow lakes
- From deposition: levées, floodplains, estuaries
- Flood risk factors: rainfall, geology, relief, and human land use
- Management strategies:
- Hard: dams, channel straightening, embankments, relief channels
- Soft: warnings, zoning, tree planting, river restoration
- Sheffield case study: A UK flood management scheme.

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'Explain the physical and human causes of flooding.'

Topic 5 - Challenge of resource management 1

Importance of Resources

- Food, water and energy are essential for human development, health, and the economy.
- There are global inequalities in how these resources are supplied and consumed.

UK Resource Trends

- Food:
- Increased demand for exotic, seasonal, and organic food.
- Concern over food miles and emissions.
- Shift toward agribusiness (industrial farming).
- Water:
- Demand is rising.
- Quality and pollution management are key.
- Some regions face shortages; water transfer schemes may be needed.
- Energy:
- The UK is moving from fossil fuels to renewables.
- Domestic supply is declining.
- Each energy source has economic and environmental impacts.

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'Discuss the UK's changing energy mix'

At the end of the topic there will be a formal assessment (45 mins) which is comprised of example exam questions of varying length and skill (this can include case study information, map, maths, graph skills etc.)

Topic 6 - Living World 1

Ecosystems

- Ecosystems involve interactions between living (biotic) and non-living (abiotic) components.
- You'll study a small-scale UK ecosystem (Rother Valley Lake) to explore food chains/webs, nutrient cycling, and interdependence.
- Changing one part of an ecosystem can affect the whole system.
- Global ecosystems (biomes) like rainforests and deserts have distinct distribution patterns and features.

Tropical Rainforests - The Amazon.

- Hot, wet, and rich in biodiversity.
- All parts (climate, soil, plants, animals, people) are interdependent.
- Flora and fauna are well **adapted** to conditions.
- **Deforestation** is caused by farming, logging, mining, roads, energy, and settlement growth.
- Consequences include climate change, habitat loss, and soil erosion.
- Sustainable management includes selective logging, education, ecotourism, international agreements, and debt relief.

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'Explain how animals adapt to the rainforest climate?'

Topic 7 - Urban issues and Challenges 2

Rio, Brazil

- · A case study (Rio, Brazil) explores:
- The city's importance on different scales.
- Growth causes: natural increase and migration.
- **Opportunities**: better health, education, water, energy, and job creation.
- Challenges: slums, access to services, unemployment, pollution, and traffic.
- Also includes an example of **urban planning** that improves life for poorer communities.

Sustainable Urban Living

- Covers ways cities can become more sustainable:
- Conserving water and energy
- Recycling waste
- Creating green spaces
- Looks at **transport strategies** to cut down congestion.

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'Explain how animals adapt to the rainforest climate?'

At the end of the topic there will be a formal assessment (45 mins) which is comprised of example exam questions of varying length and skill (this can include case study information, map, maths, graph skills etc).

END OF Y10 - 1 HOUR MOCK PAPER

Includes: Tectonics, New Zealand and Turkey case study, Urban issues, transport, and Sheffield's urban change.

This 1 hour 30 exam will be marked using a recent grade boundary in the subject. Teachers will grade this paper using the previous year's grade boundaries. Students will improve answers with teacher support in lessons.

Topic 8 - Natural hazards 2

Global Weather Patterns

- Global atmospheric circulation explains patterns of weather and climate.
- The circulation model includes pressure belts and surface winds that influence weather systems worldwide.

Tropical Storms

- Formation: Triggered by specific physical conditions like warm ocean waters.
- Distribution: Occur in specific regions (e.g. hurricanes, cyclones, typhoons) and follow global atmospheric circulation patterns.
- Structure & Life Cycle: Composed of an eye, eyewall, and spiral rainbands, with a distinct sequence from formation to dissipation.
- Climate Change Impacts: May alter their frequency, strength, and geographical reach.

Effects and Responses

- Primary effects: Immediate impacts such as flooding and structural damage.
- Secondary effects: Longer-term problems like disease or food shortages.
- Responses: Immediate (rescue efforts) and long-term (rebuilding), illustrated through a named case study.
- Management: Risk reduction via monitoring, prediction, protection, and planning.

UK Weather Hazards

- The UK experiences several types of extreme weather, such as floods, storms, and heatwaves.
- Students must study a recent UK extreme weather event (Sheffield Floods), including:
- Its causes
- Impacts (social, economic, environmental)
- Management strategies used
- Evidence suggests UK weather is becoming increasingly extreme.

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'Explain why tropical storms form near the equator'

At the end of the topic there will be a formal assessment (45 mins) which is comprised of example exam questions of varying length and skill (this can include case study information, map, maths, graph skills etc).

<u>Topic 9 - Changing economic world</u>

Economic Change in the UK

- UK's economy has shifted due to **de-industrialisation**, **globalisation**, and **government policy**.
- Growth of the post-industrial economy—IT, finance, and research sectors.
- Impact of industry on the physical environment, with examples of sustainable industrial development.
- · Contrasting changes in rural areas (growth vs. decline).
- Major transport infrastructure projects (road, rail, airports, ports).
- Addressing the north-south divide through regeneration and investment.
- The UK's global links: trade, culture, the EU, the Commonwealth, and digital communication.

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'Explain how transport infrastructure improvements would increase economic development of the UK'

Topic 10 - Physical landscapes Coasts

Coastal Landscapes

- Shaped by processes like:
- Weathering (mechanical & chemical)
- Mass movement (sliding, slumping, rock falls)
- **Erosion** (hydraulic action, abrasion, attrition)
- Transportation (e.g. longshore drift)
- Deposition (why and where sediment builds up)
- · Landforms:
- From erosion: headlands, bays, cliffs, wave-cut platforms, caves, arches, stacks
- From deposition: beaches, sand dunes, spits, bars
- Coastal management strategies:
- Hard engineering: sea walls, rock armour, gabions, groynes
- Soft engineering: beach nourishment, dune regeneration
- Managed retreat: allowing coastlines to naturally shift
- Case study required: A UK coastline and a coastal management scheme (Holderness coast).

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'Explain 2 methods of coastal soft engineering'

At the end of the topic there will be a formal assessment (45 mins) which is comprised of example exam questions of varying length and skill (this can include case study information, map, maths, graph skills etc.)

Topic 11 - Challenge of resource management 2

Global Water Security

- Water demand is growing due to population growth and development.
- Availability depends on factors like climate, geology, infrastructure, and pollution.
- Water insecurity can cause disease, food and industrial shortages, and conflict.

Managing Water Supply

- Increasing supply: via dams, reservoirs, desalination, and water transfers.
- Large-scale scheme example; Three Gorges Dam.
- Small-scale example; Mtumba.
- Sustainable solutions: include water conservation, using grey water, managing aquifers,

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'Explain how sustainable water management increasing water availability.'

At the end of the topic there will be a formal assessment (45 mins) which is comprised of example exam questions of varying length and skill (this can include case study information, map, maths, graph skills etc).

Topic 12 - Living World 2

Hot Deserts - The Thar Desert

- Extreme temperatures and very low rainfall shape the environment.
- Organisms are **adapted** to survive harsh conditions.
- Deserts provide opportunities like tourism, mining, and farming—but face challenges including water scarcity and poor access.
- **Desertification** threatens desert fringes due to overuse, climate change, and poor land management.
- Solutions include tree planting, soil and water management, and appropriate technology.

Informal assessment will take place every lesson using written exam questions and show call back by the teacher. Example: 'To what extent does the Hot Desert provide opportunities?'