



Blue Coat Church of England Academy

Year: 10

Subject: Geography

Term 1.1

River Landscapes and the processes that shape them

During this unit we will explore;

- a. How river landscapes contrast between the upper courses, mid-courses and lower courses of rivers and why channel shape (width, depth), valley profile, gradient, discharge, velocity and sediment size and shape change along the course of a named UK river.
- b. The interaction of erosion (hydraulic action, abrasion, attrition and solution), transport (traction, saltation, suspension and solution) and depositional processes in river landform formation (meanders, interlocking spurs, waterfalls, flood plains, levees and oxbow lakes, deltas).
- c. Influence of climate, geology and slope processes on river landscapes and sediment load and how storm hydrographs and lag-times can be explained by physical factors (geology, soil type, slope, drainage basin shape, antecedent conditions).
- d. How human activities (urbanisation, land-use change, deforestation) change river landscapes which alter storm hydrographs.
- e. How the interaction of physical and human processes is causing river flooding on one named river, including the significance of its location.
- f. Increasing risks from river flooding (increased frequency of storms and land-use change) and the threats to people and environment.
- g. Costs and benefits of managing flood risk by hard engineering (flood walls,

embankments, flood barriers) and by soft engineering (flood plain retention, river restoration).

During this unit we will also undertake a fieldwork trip to Carding Mill Valley. Students will be able to investigate how a real river works and conduct their own measurements. This is a requirement of the course and specifically assessed in the final exam.

Term 1.2

The causes and challenges of global rapid urban change

During this unit we will explore;

- a. Past (since 1980) and current global trends in urbanisation, how it varies between global regions, and future projections of global urbanisation.
- b. The global pattern of megacities (size, location, growth rates) and how in many countries some urban areas have disproportionate economic and/or political influence (urban primacy).
- c. How economic change and migration (national and international) contributes to the growth and/or decline of cities in the developing, emerging and developed countries.
- d. Why urban economies are different in the developing, emerging and developed countries (formal versus informal employment, relative importance of economic sectors, working conditions).
- e. How urban population numbers, distribution and spatial growth change over time (urbanisation, suburbanisation, de-industrialisation, counter-urbanisation and in some cases, regeneration).
- f. Characteristics of different urban land uses (commercial, industrial, residential) and the factors that influence land-use type (accessibility, availability, cost, planning regulations).

For the Megacity of Mumbai we will explore;

- a. Significance of site, situation and connectivity of the megacity in a national (environmental and cultural), regional and global context.
- b. The megacity's structure (Central Business District (CBD), inner city, suburbs, urban-rural fringe) in terms of its functions and building age.
- c. Reasons for past and present trends in population growth (rates of natural increase, national and international migration, economic investment and growth) for

the megacity.

- d. How population growth has affected the pattern of spatial growth and changing urban functions and land use.
- e. The opportunities for people (access to resources and employment) living in the megacity.
- f. The challenges for people living in the megacity caused by rapid population growth (housing shortages, the development of squatter and slum settlements, inadequate water supply and waste disposal, poor employment conditions, and limited service provision and traffic congestion).
- g. The pattern of residential areas of extreme wealth and contrasted with slums and squatter settlements, and reasons for differences in quality of life within the megacity and the political and economic challenges of managing the megacity.
- h. Advantages and disadvantages of city-wide government (top-down) strategies for making the megacity more sustainable (managing water supply, waste disposal, transport and air quality).
- i. Advantages and disadvantages of community and NGO-led bottom-up strategies for making the megacity more sustainable (city housing, health and education services in the megacity)

Term 2.1

The UK's Physical Landscape and Coastal Landscapes and the processes that shape them.

During this unit we will explore these areas of UK Geology;

- a. The role of geology, past tectonic and glacial processes (glacial erosion and deposition) in the development of upland (igneous and metamorphic rocks) and lowland (sedimentary rocks) landscapes.
- b. Characteristics and distribution of the UK's main rock types: sedimentary (chalk, carboniferous limestone, clay) igneous (granite), metamorphic (schists, slates).
- c. Why distinctive upland and lowland landscapes result from the interaction of physical processes: weathering and climatological, post-glacial river and slope processes.
- d. Why distinctive landscapes result from human activity (agriculture, forestry, settlement) over time.

During the second part of this unit we will explore Coastal Landscapes;

- a. How geological structure (concordant/discordant, joints and faults) and rock type

(hard/soft rock) influence erosional landforms (headlands and bays, caves, arches, cliffs, stacks, wave cut platforms) in the formation of coastal landscapes of erosion.

b. How UK climate (seasonality, storm frequency, prevailing winds), marine (destructive waves) and sub-aerial processes (mass movement, weathering) are important in coastal landscapes of erosion as well as the rate of coastal retreat.

c. How sediment transportation (longshore drift) and deposition processes (constructive waves) influence coastal landforms (spits, beaches and bars) on coastal landscapes of deposition.

d. How human activities (development, agriculture, industry, coastal management) have direct or indirect effects on coastal landscapes.

e. How the interaction of physical and human processes is causing change on one named coastal landscape including the significance of its location.

f. Why there are increasing risks from coastal flooding (consequences of climate change on marine erosion and deposition, including an increased frequency of storms and rising sea level) and the threats to people and environment.

g. Why there are costs and benefits to, and conflicting views about, managing coastal processes by hard engineering (groynes and sea walls) and by soft engineering (beach replenishment, slope stabilisation) as well as more sustainable approaches ('do nothing' and 'strategic realignment' linked to Integrated Coastal Zone Management).

Term 2.2

Changing Rural and Urban Landscapes of the UK

During this unit we will explore;

a. Differences between urban core and rural (population density and age structure, economic activities and settlement) and how UK and EU government policies have attempted to reduce them (via enterprise zones, investment in transport infrastructure, regional development).

b. Why national and international migration over the past 50 years has altered the population geography of the UK (numbers, distribution, age structure) and how UK and EU immigration policy has contributed to increasing ethnic and cultural diversity.

c. Why the decline in primary and secondary sectors and the rise of the tertiary and quaternary sectors in urban and rural areas has altered economic and employment structure in contrasting regions of the UK.

d. Why globalisation, free-trade policies (UK and EU) and privatisation has increased

- foreign direct investment (FDI) and the role of TNCs in the UK economy.
- e. Significance of site, situation and connectivity of the city in a national (cultural and environmental), regional and global context.
 - f. The city's structure (Central Business District (CBD), inner city, suburbs, urban-rural fringe), in terms of its functions and variations in building age and density, land-use and environmental quality.
 - g. Causes of national and international migration that influence growth and character the different parts of the city (age structure, ethnicity, housing, services, culture).
 - h. Reasons for different levels of inequality, in employment and services, education, health in the different parts of the city.
 - i. How parts of the city have experienced decline (deindustrialisation, de-population): de-centralisation (out-of-town shopping centres, retail and business parks), e-commerce, developments in transport.
 - j. How parts of the city have experienced economic and population growth (sprawl on the rural-urban fringe, financial and business services, investment by trans-national corporations, gentrification/studentification, culture and leisure).
 - k. How regeneration and rebranding of the city has positive and negative impacts on people (increased population, environmental quality and economic opportunities). (3)
 - l. Strategies aimed at making urban living more sustainable and improving quality of life in the city (recycling, employment, green spaces, transport, affordable and energy-efficient housing).
 - m. The city and accessible rural areas are interdependent (flows of goods, services and labour), which leads to economic, social and environmental costs and benefits for both.
 - n. Why a rural area has experienced economic and social changes (counter-urbanisation, pressure on housing, increased leisure and recreation and population change) due to its links with the city.

During this unit we will also undertake a fieldwork trip to Leicester city centre. Students will be able to investigate some of the themes we have discussed in our work on urban areas and conduct their own measurements. This is a requirement of the course and specifically assessed in the final exam.

Term 3 (both halves)

Decision making through 3 Geographical contexts.

During this unit we will examine the three topics listed below. We will focus decision making exercises and the use of a variety of resources. While students must understand the concepts discussed as well as a variety of key terms they will not have to learn any specific content for this section of the course.

- People and the biosphere – an overview of the global distribution and characteristics of large-scale ecosystems, why the biosphere is important to human wellbeing and how humans use and modify it in order to obtain resources
- Forests under threat – a detailed study of tropical rainforests and the taiga, looking at processes and interactions and issues related to their biodiversity and to their sustainable use and management
- Consuming energy resources – a study of renewable and non-renewable energy, its supply and

Supporting your child at home

You can support your child at home by promoting the use of showmyhomework. During the year homework tailored to the needs of your child will appear on a weekly basis. In preparation for any in class or pre-public examinations assessments revision materials will also be made available online and in hard copy when students do not have access to them. It is important that you encourage your child to keep up with any work set as they reinforce the work done in the classroom. Our most successful students are those that are able to complement their work in school with that at home.