



What are the aims and intentions of this curriculum?

The aim of our Key Stage 4 Curriculum is to:

- Reinforce the KS3 curriculum and to introduce students to the KS4 curriculum, to ensure that students have a basic understanding of the requirement of KS4.
- Prepare students for the future by developing key communication, literacy and digital and online skills.
- Allow students to experience the importance of creativity, wellbeing and individuality
- Allow students to experience a curriculum with a richness, breadth and depth that develops a web of knowledge
- Give students equitable opportunities for success

Term	Topics	Knowledge and key terms	Skills developed	Assessment
Autumn 1	<p>Plate Tectonics</p> <p>Careers: geologist, disaster risk management, volcanologist, civil engineer, seismologist</p> <p>River processes and landforms Investigating Rivers Storm Hydrographs Flood threats and the future Managing flood risk</p>	<p>River processes and human modification River management</p> <p>The students will increase their knowledge of river processes and landforms which are created within the drainage basin as the river flows from its source to mouth. Students will become aware of Bradshaw's Model and its relevance in describing changes in stream characteristics throughout its stages. The factors which influence the shape of storm(flood) hydrographs will be examined and will enable the students to link the role of natural and human activities in assessing flood risks. Students become more aware of the social, economic and environmental impacts of river flooding. The students will also assess hard and soft</p>	<p>Students will research case studies which outline how specific countries are impacted by earthquakes, tsunamis and volcanoes.</p> <p>Students will draw and label valley cross sections and river landforms such as waterfall, meander bend and oxbow lake. They will draw and interpret storm hydrographs from various drainage basins. The students will use OS and flood risk maps, photographs and GIS to investigate threats from river flooding.</p> <ul style="list-style-type: none"> • Fieldwork: the students will carry out field work investigations based on variations in stream characteristics of the River Wye and the impacts on flood risk management. Students will 	<ul style="list-style-type: none"> • Homework • Research • Peer Assessment • Worksheets • Field studies worksheets and presentations

engineering strategies used to mitigate flood damage.

Key Terms: upper course, lower course, middle course, waterfall, estuary, meander, traction. solution, saltation, suspension, channel, flood plain, Bradshaw's model, storm hydrograph

PSHE-pg.34: physical health and fitness;
pg. 36: mental wellbeing,

understand the range of techniques and methods used in fieldwork.

Careers: development consultant, disaster risk management, urban planning, civil engineer, economist

Autumn 2

Landscapes from the past
UK's relief and geology

UK's coastline
Coastal erosion and deposition
Human activities and the coast
Managing the coasts

Why does the physical landscape of the UK vary from place to place?

Students will gain an appreciation for the variations in the United Kingdom's landscape by examining the factors which caused them, including geology, glaciation, plate tectonics and human activities.

Key terms: igneous, metamorphic, sedimentary, weathering

How does wave action influence the United Kingdom's coastline?

Students will enhance their knowledge of the impacts of wave action along the United Kingdom's coastline, the processes at work and the resultant landforms and effects. The importance of the coast to humans will be examined as well as the coastal management strategies utilized along some coastlines.

Key Terms: bay, cliff, cove, spit, stump, stack, headland, hard and soft engineering, joint, faults, coastal flooding, coastal processes and human modification, coastal management

PSHE- pg.34: physical health and fitness;
pg. 36: mental wellbeing

Students will analyse photographs of landscapes and features across the United Kingdom. They will also identify and locate and physical landforms on relief and Ordnance Survey (OS) maps of the United Kingdom and make comparisons with the geological map of the United Kingdom. The students will calculate the mean rates of coastal erosion at various sites in the United Kingdom. They will also use OS maps and GIS to investigate threats from coastal erosion. The students will conduct Cost Benefit Analysis on various sites to investigate coastal management strategies used. The students will create models which depict how coastlines can be managed.

- Group project
- Homework
- Group presentations on the types of engineering
- Worksheets
- Models
- Essay writing
- Trial Examination

Careers: geologist, coastal management consultant, civil engineer

Spring 1

The decline of the old economy
Globalisation and the UK
London's inequalities
Challenges facing rural areas

How does London compare to rural areas within the UK?

Students will account for the variation in population density and distribution across the United Kingdom. They will examine the impacts of globalization and immigration on the United Kingdom. The students will become more aware of inequalities in London and the impact on the quality of life for residents. Students will increase their knowledge of the efforts made by the government to reduce the gap between core and peripheral regions. They will also examine the challenges facing rural areas and to assess efforts made to diversify economic activities in these regions.

Key terms: Net immigration, ageing population, de-industrialisation, new economy, knowledge economy, free trade, privatization, CBD, rural

Students will use numerical data to compare climate graphs for different biomes. They will enhance their map skills through the use of the atlas, globe and GIS mapping to identify and locate biomes. Students will research and make presentations about the importance of biomes. Students will analyze line graphs which compare population growth and resources. Students will conduct debates about both theories so as to improve their communication, analytical and critical thinking skills.

Students will use statistics to investigate foreign direct investment and immigration to the UK. They will examine OS maps and photographs to identify different land use types. The students will draw and label diagrams which depict generalized land use patterns from the Central Business District to the rural areas. Students will analyze data bases and statistical charts such as bar graph, pie chart as well as choropleth maps to investigate urban problems.

- *Students will conduct geographical investigations in Buckinghamshire to ascertain how and why quality of life varies across villages. Students will understand the range of techniques and methods used in fieldwork.*

- Homework
- Peer Assessment
- Research
- Group presentations
- Essay writing
- Trial examination

Tropical rainforests
Soil fertility and biodiversity
Threats to tropical rainforests
Threats to taiga
Sustainable rainforests

Careers: development
consultant, disaster risk
management, urban planning,
civil engineer, economist,
energy consultant, soil scientist

urban fringe, internal migration, multiple
deprivation, depopulation, gentrification,
regeneration, studentification

What is the importance of biomes and how are they being threatened?

The students will become more knowledgeable of the characteristics of tropical rainforests and the taiga. The importance of these biomes to life on earth will be highlighted by the students. Students will develop an awareness of the threats these forests face as well as the efforts to protect them.

Key Terms: tropical rain forests, taiga, biodiversity, nutrient cycle, food webs, productivity, deforestation, strip mining, invasive species

PSHE-pg.34: physical health and fitness;
pg. 36: mental wellbeing,

Students will analyze and explain data from graphs about the importance of tropical rainforests and the taiga as well as the threats they face.

They will also interpret nutrient cycle and food web diagrams and examine their role in maintaining a healthy ecosystem. The students will use GIS to identify forest loss and will debate the issues related to their use. The students will research and make presentations about conservation efforts to counteract vegetation loss in the forests.

Spring 2

Types of energy resources
Global Energy use
Environmental impacts of energy use and extraction
Reduce reliance on fossil fuels

What are the types of energy resources and why it is important to diversify energy sources?

Students will develop an understanding of the types of energy resources and the environmental impacts of oil drilling and opencast mining. They will also explore the potential for the further diversification in the use of renewable energy sources. The students will examine the costs and benefits of searching for energy resources in ecologically sensitive areas.

Key Terms: Renewable, nonrenewable, recyclable, fossil fuels, energy poor, peak oil, OPEC, fracking, tar sands, carbon footprint, energy security, energy diversification

PSHE-pg.34: physical health and fitness;
pg. 36: mental wellbeing,

Careers: development consultant, disaster risk management, urban planning, civil engineer, economist, geologist

Students will interpret world maps showing the distribution of energy resources. They will use data from graphs to analyze trends in energy use over time.

The students will research and make presentations about the environmental impacts of energy use extraction as well as the efforts to reduce the reliance on fossil fuels. Students will conduct debates about the costs and benefits of utilizing various energy resources so as to improve their communication, analytical and critical thinking skills.

- Test
- Homework
- Peer Assessment
- Research
- Group presentations
- Essay writing

- Exam revision

Summer 1

Exam revision

Exam revision

Exam revision

Exam revision