

Class – 9 Navigator Curriculum - Geography/2 Lessons weekly

| Year | 2024 – 2025 Autumn 1 Unit 1 | 2024 – 2025 Autumn 2 Unit 2 | 2024 – 2025 Spring 1 Unit 3 | 2024 – 2025 Spring 2 Unit 4 | 2024 – 2025 Summer 1 Unit 5 | 2024 – 2025 Summer 2 Unit 6 |
|--|---|--|--|--|---|---|
| <p>Year 9 (8035)</p> <p>Paper 1 Living with the physical environment</p> | <p>Topic: Section A The challenges of natural hazards – 1 Natural hazards, 2 Tectonic plates.</p> <p>Key questions:</p> <p>Key skills and knowledge: 1 Natural hazards. 1.1 What are natural hazards? • explain what is meant by a natural hazard. • give examples of different types of natural hazards and be able to distinguish between atmospheric, flooding and geological hazards. • understand how various factors have increased the number of people at risk of natural hazards.</p> | <p>Topic: Section A The challenges of natural hazards – 3 Weather hazards.</p> <p>Key questions:</p> <p>Key skills and knowledge: 3 Weather hazards. 3.1 Global atmospheric circulation. • explain how global atmospheric circulation works. • understand how global atmospheric circulation influences weather and climate in different parts of the world. 3.2 Where are tropical storms formed? • explain what is meant by a tropical storm.</p> | <p>Topic: Section A The challenges of natural hazards – 4 Climate change.</p> <p>Key questions:</p> <p>Key skills and knowledge: 4 Climate change. 4.1 What is the evidence for climate change? • describe the pattern of global temperatures during the Quaternary period to the present. • describe the pattern of average global temperatures from 1860 to the present. • understand what is meant by global warming and climate change.</p> | <p>Topic: Section B The living world – 5 Ecosystems, 6 Tropical rainforests.</p> <p>Key questions:</p> <p>Key skills and knowledge: 5 Ecosystems. 5.1 A small-scale UK ecosystem – freshwater pond. • understand that ecosystems can be found at different scales • identify and describe the components of a small-scale ecosystem • describe the role of producers, consumers, and decomposers • understand the concept of interrelationships</p> | <p>Topic: Section B The living world – 7 Hot deserts.</p> <p>Key questions:</p> <p>Key skills and knowledge: 7 Hot deserts. 7.1 Physical characteristics of hot deserts. • describe the distribution and location of hot deserts • outline the physical characteristics of hot deserts • describe and explain the characteristics of hot desert soils • understand interdependence in hot deserts.</p> | <p>Topic: Section B The living world – 8 Cold environments.</p> <p>Key questions:</p> <p>Key skills and knowledge: 8 Cold environments. 8.1 Physical characteristics of cold environments. • describe the distribution and location of cold environments (polar/tundra) • contrast the characteristics of cold environments – polar and tundra • understand interdependence in cold environments • describe the impact of climate change on cold environments.</p> |

Curriculum intent (overview) – To deepen students’ skills and knowledge through a broad and balanced curriculum which prepares students for adulthood.

| | | | | | | |
|--|---|---|--|---|---|--|
| | <p>2 Tectonic plates. 2.1 Plate tectonic theory.</p> <ul style="list-style-type: none"> • explain what is meant by plate tectonics theory • describe the characteristics of oceanic and continental crust • outline the direction of plate movement at constructive, destructive, and conservative plate margins • explain why tectonic plates move. <p>2.2 Distribution of earthquakes and volcanoes.</p> <ul style="list-style-type: none"> • explain why an earthquake occurs • describe and explain the global distribution of earthquakes • describe and explain the global distribution of volcanoes. <p>2.3 Physical processes at plate margins.</p> <ul style="list-style-type: none"> • describe the physical processes taking place at constructive, destructive, and | <ul style="list-style-type: none"> • describe the distribution of tropical storms. • outline the physical conditions that are needed for tropical storm formation. • explain how aspects of global atmospheric circulation affect tropical storms. <p>3.3 The formation and structure of tropical storms.</p> <ul style="list-style-type: none"> • explain the causes of tropical storms. • describe the structure and main features of a tropical storm. • describe how the weather changes in different parts of the tropical storm. <p>3.4 How might climate change affect tropical storms?</p> <ul style="list-style-type: none"> • suggest how climate change may affect the distribution, frequency, and intensity of tropical storms in the future. <p>3.5 Cyclone Idai – a tropical storm.</p> <ul style="list-style-type: none"> • understand the difference between primary and | <ul style="list-style-type: none"> • give examples of some of the global effects of climate change. • describe recent evidence for climate change. <p>4.2 What are the natural causes of climate change?</p> <ul style="list-style-type: none"> • explain the three Milankovitch cycles, and how each one affects global climate • understand how variation in sunspot activity affects global climate • explain how volcanic eruptions can temporarily affect global temperatures. <p>4.3 What are the human causes of climate change?</p> <ul style="list-style-type: none"> • explain the greenhouse effect • explain how fossil fuel usage, agriculture, and deforestation are contributing to greenhouse gases • explain how increasing amounts of greenhouse gases | <p>and interdependence.</p> <p>5.2 How does change affect ecosystems?</p> <ul style="list-style-type: none"> • understand the causes and effects of change to ecosystems (natural and human activities) • explain how change can have an impact on the balance between components in a freshwater pond ecosystem • explain how management can help to restore balance in Stow Bedon freshwater pond. <p>5.3 Introducing global ecosystems.</p> <ul style="list-style-type: none"> • understand that global ecosystems are defined by their dominant vegetation type • describe and explain the distribution of global ecosystems • outline the characteristics of global ecosystems (climate, | <ul style="list-style-type: none"> • Adapting to hot desert environments • describe the extreme climatic characteristics experienced in hot deserts • describe and explain the adaptations of plants and animals • explain the issues threatening biodiversity • construct and make comparisons between two climate graphs • calculate temperature range and mean (average) annual rainfall. <p>7.2 Opportunities for development in hot deserts.</p> <ul style="list-style-type: none"> • describe the location of the Thar Desert • identify valuable minerals extracted • suggest how tourism creates opportunities for development | <p>8.2 Adapting to cold environments.</p> <ul style="list-style-type: none"> • describe the extreme climatic characteristics • describe and explain the adaptations of plants and animals • explain the issues threatening biodiversity • construct and make comparisons between two climate graphs • calculate temperature range and mean (average) annual rainfall. <p>8.3 Opportunities for development in cold environments.</p> <ul style="list-style-type: none"> • describe the location of Svalbard • identify valuable minerals extracted in Svalbard • describe opportunities for energy developments in Svalbard • outline opportunities for fishing in Svalbard • suggest how tourism creates opportunities for development in Svalbard. |
|--|---|---|--|---|---|--|

Curriculum intent (overview) – To deepen students’ skills and knowledge through a broad and balanced curriculum which prepares students for adulthood.

| | | | | | |
|---|---|---|--|---|---|
| <p>conservative plate margins.</p> <p>2.4 The effects of earthquakes.</p> <ul style="list-style-type: none"> • describe the primary and secondary effects of the Japan and the Nepal earthquakes. • explain how wealth influenced the impacts of the two earthquakes. <p>2.5 Responses to earthquakes.</p> <ul style="list-style-type: none"> • describe and compare the immediate and long-term responses to the Japan and the Nepal earthquakes. • explain how wealth influenced the responses to the two earthquakes. <p>2.6 Living with the risks from tectonic hazards.</p> <ul style="list-style-type: none"> • identify densely populated areas that are located on plate margins. • suggest reasons why people live in areas at risk from earthquakes and volcanic eruptions. | <p>secondary effects, and immediate and long-term responses.</p> <ul style="list-style-type: none"> • describe the primary and secondary effects of Cyclone Idai. • describe the immediate and long-term responses to Cyclone Idai. <p>3.6 Reducing the effects of tropical storms.</p> <ul style="list-style-type: none"> • explain what is meant by monitoring, prediction, protection, and planning • explain and give examples of how the impacts from tropical storms can be reduced. <p>3.7 Weather hazards in the UK.</p> <ul style="list-style-type: none"> • understand the difference between weather and climate. • explain what is meant by extreme weather. • give examples of different types of weather hazards | <p>in the atmosphere are leading to climate change.</p> <p>4.4 Managing climate change – mitigation explain what is meant by mitigation.</p> <ul style="list-style-type: none"> • explain how alternative energy production, carbon capture and storage, planting trees, and international agreements can mitigate the causes of climate change. <p>4.5 Managing climate change – adaptation explain what is meant by adaptation.</p> <ul style="list-style-type: none"> • describe the effects that climate change will have on agriculture, and how farmers can adapt to these changes • explain the strategies that can be used to manage water supply • describe some of the effects of sea level rise on coastal areas • describe how the Maldives are managing the | <p>vegetation, animals)</p> <ul style="list-style-type: none"> • explain how the climate and characteristics of global ecosystems are linked to global atmospheric circulation. <p>6 Tropical rainforests.</p> <p>6.1 Physical characteristics of rainforests.</p> <ul style="list-style-type: none"> • describe the distribution and location of tropical rainforests • outline the physical characteristics of tropical rainforests • describe and explain the characteristics of tropical rainforest soils • understand nutrient cycling in tropical rainforests. <p>6.2 Adaptation and biodiversity in rainforests.</p> <ul style="list-style-type: none"> • describe the characteristic stratification of vegetation in tropical rainforests • describe and explain the adaptations of | <ul style="list-style-type: none"> • describe opportunities for energy developments • explain how irrigation has revolutionised farming. <p>7.3 Challenges of developing hot deserts.</p> <ul style="list-style-type: none"> • outline the challenges associated with extreme temperatures • describe the sources of water • understand the importance of irrigation in supporting agriculture • understand how extreme temperatures, water supply and inaccessibility present challenges for development in hot deserts. <p>7.4 Causes of desertification in hot deserts.</p> <ul style="list-style-type: none"> • explain why desert margins are at greatest risk from desertification | <p>8.4 Challenges of developing cold environments.</p> <ul style="list-style-type: none"> • outline the challenges associated with extreme temperatures • explain why Svalbard faces challenges associated with inaccessibility • understand why permafrost creates challenges in the provision of buildings and infrastructure • understand how extreme temperatures and provision of buildings present challenges for development in cold environments. <p>8.5 Value of cold environments as wilderness areas.</p> <ul style="list-style-type: none"> • describe the characteristics of cold environment wilderness areas • understand why cold environment wilderness areas are fragile • suggest how cold environment wilderness areas are at risk from human activities • explain why cold environment |
|---|---|---|--|---|---|

Curriculum intent (overview) – To deepen students’ skills and knowledge through a broad and balanced curriculum which prepares students for adulthood.

| | | | | | |
|--|--|---|--|---|--|
| <p>• explain how people in Iceland benefit from living in a country on a plate margin.</p> <p>2.7 Reducing the risks from tectonic hazards.</p> <ul style="list-style-type: none"> • explain what is meant by monitoring, prediction, protection, and planning. • explain and give examples of how the risks from earthquakes can be reduced. • explain and give examples of how the risks from volcanoes can be reduced. <p>2.8 Dispersion graphs.</p> <ul style="list-style-type: none"> • construct a dispersion graph showing earthquake depth values for a destructive plate margin. • calculate mean, median, range, lower quartile, upper quartile, and inter-quartile range. • compare earthquake depths | <p>experienced in the UK.</p> <ul style="list-style-type: none"> • suggest reasons why the UK experiences a wide range of different types of extreme weather. <p>3.8 Extreme weather in the UK.</p> <ul style="list-style-type: none"> • give examples of different extreme weather events in the UK • suggest reasons why the frequency of extreme weather events in the UK is increasing. <p>3.9 The Somerset Levels floods, 2014.</p> <ul style="list-style-type: none"> • describe the location and environment of the Somerset Levels. • explain the causes of the floods in 2014. • describe the social, economic, and environmental impacts of the floods. • describe the immediate responses to the flood event. • explain what has been done to reduce the risk of future flooding. | <p>impacts of rising sea levels.</p> <p>4.6 Graphs and charts.</p> <ul style="list-style-type: none"> • calculate percentages and use a variety of techniques to present data – line graph, divided bar chart and pie chart • use and calculate measures of central tendency – mean and median • evaluate the usefulness of Arctic Sea ice data as an indicator of climate change • evaluate the effectiveness of different measures of central tendency – mean, median and mode • describe the effects of climate change on the Arctic. | <p>plants and animals to the physical conditions in tropical rainforests</p> <ul style="list-style-type: none"> • describe and suggest reasons for the huge biodiversity in tropical rainforests • explain the issues threatening biodiversity in tropical rainforests. <p>6.3 Causes of deforestation in Malaysia.</p> <ul style="list-style-type: none"> • describe the changing global rate of deforestation (2002–2019) • describe the changing rate of deforestation in Malaysia • describe and explain the causes of deforestation in Malaysia, such as road building and energy developments. <p>6.4 Impacts of deforestation in Malaysia.</p> <ul style="list-style-type: none"> • contrast the positive and negative economic | <ul style="list-style-type: none"> • suggest how human activities contribute to desertification • outline the causes of desertification in the Badia • evaluate the extent to which poor land management contributes towards desertification. <p>7.5 Reducing the risk of desertification in hot deserts.</p> <ul style="list-style-type: none"> • describe the process of salinisation and explain how it can contribute to desertification • explain how water and soil management has helped to reduce desertification in the Badia • explain how tree planting can reduce the risk of desertification • understand how intermediate technology can help to reduce the risk of desertification. | <p>wilderness areas should be protected.</p> <p>8.6 Managing cold environments.</p> <ul style="list-style-type: none"> • understand how technology has helped to conserve the natural environment in Alaska through the construction of the trans-Alaska oil pipeline • outline the role of government (Alaska), international agreements (Antarctic Treaty) and conservation groups (WWF, Canada) in managing cold environments • understand that managing cold environments involves balancing economic development and conservation. |
|--|--|---|--|---|--|

Curriculum intent (overview) – To deepen students’ skills and knowledge through a broad and balanced curriculum which prepares students for adulthood.

| | | | | | | |
|--|---|--|--|---|--|--|
| | <p>at different types of plate margin.</p> <ul style="list-style-type: none"> • suggest reasons for the variation in earthquake depths between different types of plate margin. • evaluate mean and median as different measures of central tendency. | <p>3.10 OS maps (1:25 000) and photo skills</p> <ul style="list-style-type: none"> • use a variety of OS map skills including four- and six-figure grid references to locate places, symbols to identify features, scale to calculate distance, direction to describe location, and contours to describe the relief of the land • be able to compare maps with photographs • use OS maps and photographic evidence to explain why an area is at risk of flooding • use OS maps and photographic evidence to suggest impacts of flooding • evaluate the use of OS maps and aerial photographs in devising flood management strategies. | | <p>impacts of deforestation</p> <ul style="list-style-type: none"> • describe the sequence of events leading to soil erosion • suggest reasons why deforestation can contribute to climate change • explain how deforestation can have environmental impacts. <p>6.5 The value of tropical rainforests.</p> <ul style="list-style-type: none"> • describe how indigenous people live sustainably in tropical rainforests • identify the medicinal value of tropical rainforest plants and animals • outline the value of resources found in tropical rainforests • understand the value of tropical rainforests to the environment • discuss whether tropical rainforests are more valuable left intact or deforested. <p>6.6 Sustainable management of tropical rainforests.</p> | | |
|--|---|--|--|---|--|--|

Curriculum intent (overview) – To deepen students' skills and knowledge through a broad and balanced curriculum which prepares students for adulthood.

| | | | | | | |
|--|--|--|--|---|--|--|
| | | | | <ul style="list-style-type: none">• understand the reasons why rainforests need to be managed sustainably• describe the selective logging and replanting system• describe the characteristics of ecotourism• explain how strategies, such as ecotourism and international agreements (such as hardwood forestry and debt relief), can help to manage tropical rainforests sustainably. <p>6.7 Graphs.</p> <ul style="list-style-type: none">• calculate rates of deforestation and extrapolate into the future• construct a bar chart showing the loss of primary rainforest• draw a line graph to show the changing rate of deforestation in Malaysia• calculate percentages and | | |
|--|--|--|--|---|--|--|

Curriculum intent (overview) – To deepen students’ skills and knowledge through a broad and balanced curriculum which prepares students for adulthood.

| | | | | | | |
|------------------------------------|--|--|--|---|--|---|
| | <p>Assessment outcomes:</p> <p>Sample student answer. Practice questions. Past paper.</p> | <p>Assessment outcomes:</p> <p>Sample student answer. Practice questions. Past paper.</p> | <p>Assessment outcomes:</p> <p>Sample student answer. Practice questions. Past paper.</p> | <p>construct a pie chart</p> <ul style="list-style-type: none"> • interpret a satellite image showing deforestation for an oil palm plantation • use graphical and satellite photo evidence to describe and suggest reasons for trends in deforestation. <p>Assessment outcomes:</p> <p>Sample student answer. Practice questions. Past paper.</p> | <p>Assessment outcomes:</p> <p>Sample student answer. Practice questions. Past paper.</p> | <p>Assessment outcomes:</p> <p>Sample student answer. Practice questions. Past paper.</p> |
| <p>Links to Gatsby Benchmarks:</p> | <p>Gatsby Benchmark 4. Linking curriculum learning to careers.</p> <p>Students to consider what skills are needed to access the opportunities they are interested in.</p> | <p>Gatsby Benchmark 3. Addressing the needs of each pupil.</p> <p>Students to consider what skills are needed to access the opportunities they are interested in.</p> | <p>Gatsby Benchmark 4. Linking curriculum learning to careers.</p> <p>Students to consider what skills are needed to access the opportunities they are interested in.</p> | <p>Gatsby Benchmark 5. Encounters with employers and employees.</p> <p>Students to consider what skills are needed to access the opportunities they are interested in.</p> | <p>Gatsby Benchmark 3. Addressing the needs of each pupil.</p> <p>Students to consider what skills are needed to access the opportunities they are interested in.</p> | <p>Gatsby Benchmark 6. Experiences of workplaces.</p> <p>Students to consider what skills are needed to access the opportunities they are interested in.</p> |