

## Year 10 Geography

	<u>Topic</u>	<u>Key concept – what do I want the students to learn from this unit?</u>	<u>What knowledge will they acquire?</u>
<b>YEAR 10 OVERVIEW</b>			
<b>Y10 - half term 1</b>	Forests under threat	Why are taiga forests so important, how are they being damaged and what is being done to protect them?	<p>8.2a. How biotic and abiotic characteristics are interdependent how taiga plants and animals (migratory) are adapted to the climate.</p> <p>8.2b. Why the taiga has lower productivity, with less active nutrient cycling and much lower levels of biodiversity. (1)</p> <p>8.4a. Direct threats from logging for softwood, pulp and paper production and indirect threats</p> <p>8.4b. How acid precipitation, forest fires, pests and diseases and forest fires contribute to a loss of biodiversity. (2)</p> <p>8.6a. Challenges of creating and maintaining protected wilderness areas, national parks and sustainable forestry in the taiga.</p> <p>8.6b. Reasons for conflicting views on protecting or exploiting forest and natural resources in the taiga.</p>
<b>Y10 – half term 2</b>	Energy	How can the growing demand for energy be met without serious environmental consequences?	9.1a/b. How energy resources can be classified as non-renewable (finite stocks of fossil fuel coal, oil and gas), renewable (flows

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			<p>of solar, wind, HEP) and recyclable (nuclear, biofuels).How mining and drilling can have environmental impacts (landscape scarring, oil spills, carbon emissions, removal of forests) and the landscape impacts of renewable energy (HEP flooding, land use for wind turbines and solar panels).</p> <p>9.2a. How access to energy resources is affected by access to technology and physical resources (geology, accessibility, climate and landscape influences on renewable potential).</p> <p>9.2b. The global pattern of energy use per capita and the causes of variations (levels of economic development, reliance of traditional fuel sources, demand from different economic sectors).</p> <p>9.3a. How oil reserves and production are unevenly distributed and why oil consumption is growing (rising per capita GDP, rapid industrialisation in emerging economies).</p> <p>9.3b. How oil supply and oil prices are affected by changing</p>

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			<p>international relations (conflicts, diplomatic relations) and economic factors (periods of recession versus boom, over or under supply).</p> <p>9.4a. Economic benefits and costs of developing new conventional oil and gas sources in ecologically-sensitive and isolated areas.</p> <p>9.4b. Environmental costs (negative impacts on water quality and ecosystems) of developing new unconventional oil and gas sources (tar sands, shale gas) in ecologically-sensitive and isolated areas.</p> <p>9.5a. The role of energy efficiency and energy conservation (in transport and the home) in reducing demand, helping finite energy supplies last longer and reducing carbon emissions.</p> <p>9.5b. Costs and benefits of alternatives to fossil fuels (biofuels, wind, solar and HEP) and future technologies (hydrogen) aimed at reducing carbon footprints, improving energy security and diversifying the energy mix.</p>

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			<p>9.6a. How different groups (consumers, TNCs, governments, climate scientists and environmental groups) have contrasting views about energy futures (business as usual versus sustainable).</p> <p>9.6b. How, in some developed countries, rising affluence, environmental concerns and education are changing attitudes to unsustainable energy consumption and reducing carbon footprints.</p>