**Year 10 Geography**

|  | **Topic** | **Key concept – what do I want the students to learn from this unit?** | **What knowledge will they acquire?** |
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|  **YEAR 10 OVERVIEW** |
| **Y10 - half term 1** | Forests under threat | Why are taiga forests so important, how are they being damaged and what is being done to protect them? | 8.2a. How biotic and abiotic characteristics are interdependenthow taigaplants and animals(migratory) are adapted to the climate.8.2b. Why the taiga has lower productivity, with less active nutrientcycling and much lower levels of biodiversity. (1)8.4a. Direct threats from logging for softwood, pulp and paperproduction and indirect threats8.4b. How acid precipitation, forest fires, pests and diseases andforest fires contribute to a loss of biodiversity. (2)8.6a. Challenges of creating and maintaining protected wildernessareas, national parks and sustainable forestry in the taiga.8.6b. Reasons for conflicting views on protecting or exploiting forestand natural resources in the taiga. |
| **Y10 – half term 2** | 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 (flowsof solar, wind, HEP) and recyclable (nuclear, biofuels).How mining and drilling can have environmental impacts(landscape scarring, oil spills, carbon emissions, removal offorests) and the landscape impacts of renewable energy (HEPflooding, land use for wind turbines and solar panels).9.2a. How access to energy resources is affected by access totechnology and physical resources (geology, accessibility,climate and landscape influences on renewable potential).9.2b. The global pattern of energy use per capita and the causes ofvariations (levels of economic development, reliance oftraditional fuel sources, demand from different economicsectors).9.3a. How oil reserves and production are unevenly distributed andwhy oil consumption is growing (rising per capita GDP, rapidindustrialisation in emerging economies).9.3b. How oil supply and oil prices are affected by changinginternational relations (conflicts, diplomatic relations) andeconomic factors (periods of recession versus boom, over orunder supply).9.4a. Economic benefits and costs of developing new conventional oiland gas sources in ecologically-sensitive and isolated areas.9.4b. Environmental costs (negative impacts on water quality andecosystems) of developing new unconventional oil and gassources (tar sands, shale gas) in ecologically-sensitive andisolated areas.9.5a. The role of energy efficiency and energy conservation (intransport and the home) in reducing demand, helping finiteenergy supplies last longer and reducing carbon emissions.9.5b. Costs and benefits of alternatives to fossil fuels (biofuels, wind,solar and HEP) and future technologies (hydrogen) aimed atreducing carbon footprints, improving energy security anddiversifying the energy mix.9.6a. How different groups (consumers, TNCs, governments, climatescientists and environmental groups) have contrasting viewsabout energy futures (business as usual versus sustainable).9.6b. How, in some developed countries, rising affluence,environmental concerns and education are changing attitudesto unsustainable energy consumption and reducing carbonfootprints. |