Pearson Edexcel International Advanced Level in Geography
SCHEME OF WORK: Unit 3: Contested Planet

Introduction

The outline Scheme of Work has been specifically designed to provide teachers with a starting point, from which to aid and build their own Scheme of Work. It is not intended as a definitive document. Teachers must use the scheme of work outline in combination with the published specification IAL in Geography. The document is in Word format and is easy to adapt to meet teachers' specific needs.

- This unit is worth 60% of the total International Advanced Level (**IA2**) raw marks in this subject.
- The outline Scheme of Work is based on teaching over 20 weeks.
- There are 2 compulsory topics and you should choose two option topics, making a total of 4 topics.

Section A – Compulsory topics:	Section B – Optional topics	Section C – Optional topics
Topic A1: Atmosphere and Weather Systems Topic A2: Biodiversity Under Threat	Topic B1: Energy Security **or** Topic B2: Water Conflicts	Topic C1: Superpower Geographies **or** Topic C2: Bridging the Development Gap

- As teachers, schools and colleges have very different policies on the format and production of Schemes of Work, you may wish to change the format of the table. This can be done by inserting columns, changing column headings, and cutting and pasting.

In the scheme of work below:

[KI] refers to the Key Ideas in the left hand column of the Specification
[IS] Refers to the Integrated Skills in the 'Detailed content' column of the Specification
[PC] Refers to the requirement to deliver the content in the context of a Place Context (case study) in the 'Detailed content' column of the Specification.

Content Topic A1: Atmosphere and Weather Systems		
Week 1 Global Atmospheric Circulation	**Suggested activities/resources** • Atmosphere structure • Atmospheric gases • [IS] Use Atlas maps to link maps of average precipitation to the cells and pressure zones in the general circulation model, including identifying anomalies.	**Teaching points to note** [KI] Weather takes place within the context of the general circulation of the atmosphere. [KI] Precipitation and air masses are important in understanding weather
Aims and learning outcomes • Define weather versus climate (short term variation versus 30 year average). • Understand the atmosphere by drawing a diagram of the atmosphere's layers; annotate it to explain their role; draw a pie chart of the % composition of different gases in the atmosphere and annotate it to explain their role. • Watch a video on atmospheric circulation https://www.youtube.com/watch?v=WXuGYSM2D8k and annotate a blank globe with Hadley, Ferrel and Polar cells and locations of high and low pressure belts, to understand how circulation influences air pressure. • Research the earth's heat budget Earth's heat budget • Annotate a world outline map with major ocean currents (warm and cold) https://earth.usc.edu/~stott/Catalina/Oceans.html • Understand the processes of precipitation (orographic / relief, frontal and convectional) Types of precipitation • Understand the different types of air mass (A, Tm, Tc, Pm, Pc, E) by completing a table comparing their sources, temperature, humidity, modification as they track from source areas and stability Air mass types		

Content Topic A1: Atmosphere and Weather Systems		
Week 2 Global Atmospheric Circulation / Extreme weather hazards	**Suggested activities/resources** • Climate data for different locations • ITCZ video ITCZ • Met Office website for jet stream details Met Jet • [IS] Use Google Earth to view cloud cover and land use on satellite images, with can be related to global circulation and the ITCZ • [IS] Use of synoptic charts to interpret depressions and anticyclones Synoptic Charts • Drawing a cross section through a depression (warm and cold fronts) • Interpretation of pollution data.	**Teaching points to note** [KI] Seasonal variations in global circulation affect climate and weather systems. [KI] Mid-latitude weather hazards are associated with high and low pressure systems

Aims and learning outcomes

- Understand why the heat equator moves seasonally, and how this influences the position of the ITCZ and locations of seasonal precipitation.
- Use outline maps of Asia to show the movement of different monsoons and their impacts.
- Use an online data base (search for cities using Wikipedia; most pages include climate data e.g. Lagos) to source climate data to draw contrasting climate graphs in Asian Monsoon areas and West Africa (ITCZ movement); annotate graphs to relate ITCZ shift to rainfall totals.
- Understand the significance of the polar from as the boundary between T and P air masses; draw a cross section through the front showing air motion and precipitation locations and types; investigate the characteristic of the polar front jet stream and the workings of Rossby waves Jet Stream Rossby Waves Jet Stream 2
- Understand the formation of depression (cyclogenesis) from formation to dissipation; use a table to compare the characteristics of warm, cold and occluded fronts; annotate a cross section through a depression to explain weather Depressions
- Research a case study [PC] of the impacts of depression e.g. St Jude day storm St Jude Storm and the causes and consequences of a major blocking anticyclone event e.g. the 2003 European heatwave UNISDR 2003 heatwave

Content Topic A1: Atmosphere and Weather Systems		
Week 3 Extreme weather hazards	**Suggested activities/resources** • Use of the US National Hurricane Centre as a data source http://www.nhc.noaa.gov/ • [IS] Mapping tracks using satellite images • [IS] Analysis of long term rainfall data trends in the Sahel; basic calculations (mean, running mean, trend) • Case study research on named tropical cyclones and drought events (can be done in groups, and collated)	**Teaching points to note** [KI] Tropical cyclones are a major short-term weather hazard [KI] Drought is a longer term weather hazard
Aims and learning outcomes • Understand the source and track areas of tropical cyclones in major basins / seasons: map basins onto an outline world maps and related to migration of the heat equator Cyclone map • Annotate cross-section of a tropical cyclone to explain formation processes and weather characteristics Cyclone formation • Understand the hazards associated with tropical cyclones including storm surges Storm Surge ; use of the Saffir-Simpson scale and understanding how it is calculated (storm surge and wind speed) • [PC] Research named contrasting cyclones e.g. 2005 Katrina and 2008 Nargis, and use tables to compare physical characteristics and human impacts. • Understand and define drought NDMC drought and recognize its complex causes and link to global warming Drought GW , including analysing trends in precipitation Sahel rainfall data • [PC] Research a case study of the causes and consequences of long-term trends in precipitation and more frequent drought e.g. the Sahel WFP Sahel AlJazeera Sahel and / or Australia Australian drought		

Content Topic A1: Atmosphere and Weather Systems		
Week 4 Managing Extreme weather	**Suggested activities/resources** • Construct a timeline of weather forecasting technologies • Assess a range of real forecasts to determine their accuracy • Evaluate responses to named weather hazard events in countries at different levels of development • Examine the role of engineering of protecting against weather extremes.	**Teaching points to note** [KI] Forecasting and response are important in reducing impacts [KI] Tropical cyclone prediction and mitigation can reduce impacts
Aims and learning outcomes • Using websites to construct a timeline of forecasting technology NASA forecasting Met Office forecasting including the role of satellites in forecasting New satellite tech and computer modelling Computer models • Understand the accuracy of 2, 5 and 10 days forecasts by comparing local area forecasts to actual experienced weather; could be combined with practical measuring of simple weather variables • Research a case study of an extreme event e.g. Hurricane Sandy, 2011 Thailand floods and produce a spider diagram explaining and evaluating the roles of contrasting players in response (short and long term) • [PC] Evaluation of cyclone response in a named developing country e.g. Bangladesh Red Cross UK DFID Shelters Warnings compared to a developed country e.g. critically evaluating the response to Hurricane Katrina or Sandy • Cost-benefit analysis of hard engineering solutions to protect against cyclone impacts New Orleans Flood embankments Bangladesh		

Content Topic A1: Atmosphere and Weather Systems		
Week 5 Managing Extreme weather	**Suggested activities/resources** • Comparison of long and short term responses in contrasting countries • Evaluation of governance of and resilience to weather hazards • Assessment of aid as an immediate response and for longer term management and capacity building **End of topic assessment using the SAMs**	**Teaching points to note** [KI] A variety of approaches are needed to manage weather hazards successfully
Aims and learning outcomes • Understanding how water management can cope with drought in developed and developing world contexts Australia water management intro and how intermediate technology can improve supply and sustainability Practical Action NGO • Understanding how farming can be made more resilient to drought Kenya Farming and evaluation of drought / famine early warning systems e.g. Fewsnet http://www.fews.net/ and the response to this • SWOT analysis of water transfer schemes to evaluate their impact http://www.water.ca.gov/watertransfers/ • An assessment of the pros and cons of short term aid in drought stricken regions Action Aid drought versus long-term planning and adaptation USaid Drylands		

Content Topic A2: Biodiversity Under Threat		
Week 6 Biodiversity patterns	**Suggested activities/resources** • Contrasting definitions of biodiversity • Identifying factors that affect biodiversity levels • Mapping and analysing biomes and explaining their locations [SF] • Critical analysis of biodiversity hotspot patterns	**Teaching points to note** [KI] Biodiversity can be defined in different ways [KI] The distribution of biodiversity depends on a range of factors

Aims and learning outcomes

- Understand why biodiversity is defined in different ways, and the pros and cons of each approach (genetic, species, ecosystem) WWF biodiversity
- Understand the reasons for variations in biodiversity levels, by completing a spider diagram of factors including physical and human factors
- Complete a map of major terrestrial biomes using a blank world outline map, and explain the pattern with reference to the world's major climate zones and global circulation model Biomes Biomes2 ; understand the role of climate limiting factors by drawing and annotating climate graphs for tropical forest, savanna and tundra biomes.
- Investigate local factors through a study of altitudinal zonation in the Andes Andes and local vegetation patterns in the UK UK woodlands
- Understand the definition of biodiversity hotspot and their distribution Hotspots

Content Topic A2: Biodiversity Under Threat		
Week 7 Biodiversity patterns / Threats to biodiversity	**Suggested activities/resources** • Defining and evaluating ecosystem services • Understanding energy flows and nutrient cycles [SF] • Evaluating local threats to ecosystem services • [PC] study of one global terrestrial biome e.g. tropical rainforest, savanna or other	**Teaching points to note** [KI] Ecosystem services is an important concept [KI] Key processes operate within ecosystems maintaining their health
Aims and learning outcomes • Defining supporting, cultural, provisioning and regulating services Ecosystem services • Understanding the value of ecosystem services generally and through the chosen [PC] e.g. tropical rainforest Amazon services Mongabay by constructing a table to evaluate their local and global significance • Consider how perceptions of value are different for indigenous people, TNCs, farmers, tourists and others. • Draw a nutrient cycle diagram for the chosen [PC] biomes and annotate it to explain the sizes of stores and transfers Nutrient Cycle; this can be compared to a different biome e.g. tundra. • Understand energy flow in the chosen biome by drawing a trophic pyramid and annotating it to explain the size of levels [SF]; print a food web and understand the relationship between producers and consumers TRF food web [SF] • Be able to evaluate the relative importance of local threats to the chosen [PC] biome e.g. for tropical rainforests Rainforest threats, including how alien invasive species threaten food webs		

Content Topic A2: Biodiversity Under Threat		
Week 8 Threats to biodiversity	**Suggested activities/resources** • Investigate global pressures on biomes from rising affluence, population pressure and resources demand. • Use a case study to analyse local pressures on biomes from economic development, including the use of satellite images [SF] • Evaluate the environmental Kuznets curve concept • Investigate the attitudes of contrasting players to ecosystem conservation and exploitation.	**Teaching points to note** [KI] There are both local and global threats to biodiversity [KI] Conservation of ecosystems is not universal
Aims and learning outcomes • Understand the pressures on global resources and how this impacts on biomes FOE resources within the context of global population growth globally and regionally Population • Use satellite images / Google Earth to analyse patterns of ecosystem change e.g. deforestation in the Amazon or Indonesia NASA rainforest • Analyse attitudes to ecosystem conservation and exploitation e.g. changing attitudes in Brazil and trends in deforestation rates Amazon def rate Brazil attitudes • Assess the value of the Environmental Kuznet's curve Kuznets is understanding the relationship between development and conservation • Evaluate the importance of keystone species Keystone species and the role of iconic species in promoting conservation Iconic Species as well as the benefits that can be gained through conservation e.g. ecotourism Ecotourism		

Content Topic A2: Biodiversity Under Threat		
Week 9 Managing biodiversity	**Suggested activities/resources** • Defining and analysing the concept of sustainable yield • Evaluating the role of contrasting players and the potential for conflict over ecosystem use • Assessing the success of local and global approaches to ecosystems management • [PC] study of management in a chosen terrestrial biome	**Teaching points to note** [KI] Decisions about ecosystem management are made by a range of players [KI] Both local and global approaches can use used in conservation
Aims and learning outcomes • Define the term sustainable yield and investigate its applicability Sustainable Yield to ecosystem management OECD SY • For a chosen biome [PC] produce a conflict matrix to show which players are most likely to have conflicting views on ecosystem management Amazon Gov Tribes , including TNCs and IGOs / NGOs • Investigate the success of ecosystem management at a local scale Juma Forest Reserve FAS Juma • Evaluate the aims of National Parks and other conservation strategies to identify possible conflicting aims • Use a table to assess different approaches to conservation at a global scale such as CITES https://www.cites.org/ and Biodiversity Action Plans http://jncc.defra.gov.uk/ukbap UNESCO biosphere reserves in terms of their pros and cons for conservation and people		

Content Topic A2: Biodiversity Under Threat		
Week 10 Managing biodiversity	**Suggested activities/resources** • Investigate the more extreme forms of conservation where ecosystems have been seriously degraded • Evaluate the pros and cons of highly interventionist approaches • Consider the future of global biodiversity in the context of global economic and demographic change **End of topic assessment using the SAMs**	**Teaching points to note** [KI] Extreme measures may not be enough to save ecosystems and their species.
Aims and learning outcomes • Evaluate the role of ecosystem restoration Restoration and the degree to which is can assist conservation http://www.nps.gov/yose/ecoprojects.htm in high pressure, high value locations • Consider the role of zoos and other forms of ex-situ conservation in terms of species survival and reintroduction Chester Zoo Ex Situ WWT –Wildfowl and Wetlands Trust, Slimbridge is a similar organisation focusing on wetland habitats and species http://www.wwt.org.uk/conservation/ • Use a table to consider the different 'futures' for ecosystem: this could include business as usual, high growth and sustainable scenarios for population growth, global average income growth, global warming and the balance of renewable versus non-renewable resource consumption.		

Content Topic B1: Energy Security		
Week 11 Energy supply, demand and security.	**Suggested activities/resources** • Classification of energy resources • Investigate the use / mix of energy sources in countries at different levels of development • Analyse different demand scenarios for current and future energy use • [SF] Map and analyse the pattern of trade in energy sources globally and analyse energy data	**Teaching points to note** [KI] Energy sources can be classified in different ways, and their use varies widely. [KI] As well as rising global demand, distribution of energy resources is uneven
Aims and learning outcomes • Group energy resources into non-renewable and renewable categories (and consider the classification of biofuels and nuclear as recyclable) Energy types and define primary and secondary energy EIA energy • Investigate per capita energy use and energy types in countries at different levels of development EIA energy mix and explain these in relation to economic and resource factors • Consider how physical, economic, technical and attitudinal factors affect the use of nuclear, biofuels, coal and wind power. • Explain contrasting scenarios for future energy demand and consider their resource and environmental implications http://www.worldenergyoutlook.org/ • Use world outline maps to map areas of energy surplus (oil, coal, case, uranium) versus locations of highest consumption, and locations with high renewable potential; add flow lines of major trade flows in oil, coal and gas BP energy review (this dataset can be used to construct a variety of graphs by country, region or energy type to make international and regional comparisons)		

Content Topic B1: Energy Security		
Week 12 Energy supply, demand and security / The impact of energy use	**Suggested activities/resources** • Define the term energy security and understand its components • Map energy pathways and recognise their differing risks to disruption • Understand the concept of peak oil and gas • Identify the factors influencing energy demand	**Teaching points to note** [KI] Energy security varies, as does the security of pathways [KI] The future supply of affordable fossil fuels is uncertain
Aims and learning outcomes : • Understand the concept of energy security IEA energy security and identify which countries have high and low energy security Energy security maps in relation to the components of energy security • Use a world outline map to plot conflict zones, shipping 'choke points' and locations of piracy which may disrupt oil supplies; research the Russia / Ukraine gas conflict in 2006 / 2009 Russian Gas and the consequences of the 2012 Indian electricity blackouts Indian blackouts • Understand the concepts of peak oil and gas by undertaking a critical review of prices, production trends and reserve data Peak Oil http://peakoilbarrel.com/ [SF] a variety of data sources should be used and their reliability assessed. • Understand the difficulties of predicting future fossil fuel demand by comparing different future scenarios Shell scenarios 2050 WEC Scenarios 2050 by recognizing the different variables that will contribute to future demand (population, economic development, renewable switching, carbon emissions reductions)		

Content Topic B1: Energy Security		
Week 13 The impact of energy use	**Suggested activities/resources** • Identify the major players in energy supply and their roles • Researching case studies of unconventional fossil fuel development [PC] • Linking fossil fuel use to the global carbon cycle • Evaluating the possible role of biofuels [PC]	**Teaching points to note** [KI] Major energy players are key to supply continuity [KI] Global energy demand has implications for the carbon cycle
Aims and learning outcomes • Understand the role of TNCs, supermajors, state owned companies, governments and OPEC in finding, extracting, processing and selling fossil fuels; complete a spider diagram of roles and a ranking of importance in global energy markets Forbes oil companies http://www.opec.org/opec_web/en/ • Research [PC] the exploitation of tars sands (Athabasca, Canada), deep water oil in Brazil and shale gas / oil (USA, Dakotas) and compete a table comparing the economic and environmental costs and benefits of each type (for example different organizations involved in Athabasca: NASA Shell Alberta Greenpeace First Nations • Understand the implications of fossil fuel use for the carbon cycle and related environmental issues CC Science Museum CC NASA; annotate a diagram, of the carbon cycle showing the sizes of stores and fluxes, as well as changes as a result of human activity • Define different types of biofuel (fuelwood, biomass, biodiesel, bioethanol) and evaluate its environmental impact' [PC] case study research of biofuel development in Indonesia Biofuels WorldWatch ; SWOT analysis of Indonesian biofuel development.		

Content Topic B1: Energy Security		
Week 14 Energy security and the future	**Suggested activities/resources** • Timeline of the development of nuclear power • Evaluation of nuclear as an energy alternative • Comparison of renewable energy source costs and benefits • [PC] case studies of nuclear and selected renewables • [SF] Cost –benefit analysis of large energy developments	**Teaching points to note** [KI] Nuclear power is a contested energy source [KI] Renewable energy alternatives are increasingly popular
Aims and learning outcomes • Understand the development and growth of nuclear power over time, and reasons for slower recent growth and reversals in some countries e.g. Germany but growth in others e.g. China NEI • Complete a table of the social, economic, environmental and political costs and benefits of nuclear power Nuclear adv disadv and compare the reasons for adoption is some countries and rejection in others; examine the issue of nuclear waste disposal Nuclear Waste • As a group activity complete research on individual renewable sources (wind, solar PV, HEP, tidal, geothermal) in preparation for a group debate on the most / least desirable options Renewables in economic and environmental terms. • Complete an audit of renewable potential in two contrasting countries http://www.energyblueprint.info/ • Understand the costs and benefits of large scale renewable developments by completing a cost-benefit analysis e.g. [PC] China's Three Gorges Dam or the proposed UK Severn Barrage.		

Content Topic B1: Energy Security		
Week 15 Energy security and the future	**Suggested activities/resources** • Recognize the possible need for radical energy alternatives in the future • Evaluate a range of radical options • Assess the contribution energy conservation can make to a sustainable energy future. ***End of topic assessment using the SAMs***	**Teaching points to note** [KI] Radical approaches may be needed to balance energy demand with environmental concerns
Aims and learning outcomes • Understand how carbon capture works and how it could make fossil fuel use more sustainable, by annotating a diagram of a proposed CCS system http://www.ccsassociation.org/what-is-ccs/ • Use a table to compare different transport alternatives e.g. diesel, hybrid, EV and Hydrogen fuel cell technologies using life cycle analysis Life cycle analysis • Evaluate trends in global per capita energy consumption to identify countries where energy intensity is falling World Bank and complete a spider diagram to identify ways in which home and business energy conservation could reduce overall energy demand.		

Content Topic B2: Water Conflicts		
Week 11 Water supply geography	**Suggested activities/resources** • Investigate the operation of the hydrological cycle • Consider the factors that determine local water supply (SF] • Explore the physical reasons for lack of water in some places • Assess the effect of human actions on water supply quantity and quality.	**Teaching points to note** [KI] Physical processes are important in water supply [KI] Water supply can be affected by human and physical changes
Aims and learning outcomes • Annotate a flow diagram of the global hydrological cycle to explain the size of stores and transfers, and the processes that move water from place to place Water cycle • Understand the influence, at a catchment scale, of geology, precipitation and surface processes on local water supply. • [SF] Use world maps to match areas of water supply shortage to the global climate circulation pattern (areas of High and Low pressure; ITCZ movement) • Understand how salt water encroachment (intrusion) can affect the availability of groundwater at the coast Saltwater and how variable rainfall can impact on water supply http://www.bom.gov.au/state-of-the-climate/ • Research the impact of humans on water supply Nat Geo including over abstraction from different water sources EU abstraction India Abstraction Aral Sea and pollution of water supplies by agriculture, sewage and industries e.g. use Youtube https://www.youtube.com/ to investigate water pollution in China Water pollution		

Content Topic B2: Water Conflicts		
Week 12 Water supply geography / Water insecurity	**Suggested activities/resources** • Investigate water demand in different countries, from different sources. • Examine trends in water demand • Use maps to analyse and explain the global pattern of water stress / scarcity • Define and explore economic water scarcity and water pricing	**Teaching points to note** [KI] Rising water demand is linked to development [KI] Physical and economic water scarcity have different causes
Aims and learning outcomes • Investigate water use in different countries by use (domestic, agriculture, industry) in order to understand pressures on water supplies, using an online data base such as Aquastat http://www.fao.org/nr/water/aquastat/main/index.stm; compare developed, developing and emerging countries • Define water stress and scarcity and explore the pattern of water shortages worldwide using maps Water scarcity UN water in particular countries / parts of countries with high water stress WRI water stress and the reasons for this. • Define economic water scarcity Economic map and understand how it relates to poverty in LDCs and is made worse by the high price of water in some locations e.g. urban slums Water costs		

Content Topic B2: Water Conflicts		
Week 13 Water insecurity	**Suggested activities/resources** • Consider the link between water and development [PC] • Examine the link between water and health • Examine situations where water is a source of conflict, especially in transboundary situations [PC]	**Teaching points to note** [KI] Water is a crucial component in economic and human development [KI] Water supply can be a source of conflict
Aims and learning outcomes • Identify the key drivers of water demand, and regional differences in trends Water demand Forbes article related to economic development (especially emerging countries) and demographic trends • [PC] research a case study of a water insecure area to understand how water supply problems can hinder development, but is also necessary for it e.g. the water crisis in parts of the Sahel or parts of India TED talk water • Analyse the link between water supply and health e.g. prevalence of water borne diseases, high infant mortality and low life expectancy using a online data set of development indicators http://data.worldbank.org/ http://www.unicef.org/wash/; use scattergraphs to plot renewable per capita water supply versus health indicators such as infant mortality. • Research, possibly in pairs, into [PC] case studies of water conflicts e.g. Ganges, Mekong, Nile and Colorado to identify sources of conflict (water sharing + other economic / political underlying issues; water stress) and the extent to which agreements can be reached for equitable use.		

Content Topic B2: Water Conflicts		
Week 14 Water conflicts and the future	**Suggested activities/resources** • Evaluation of large dams as a solution to water supply. [PC] • Evaluation of water transfer schemes [PC] • The pros and cons of desalinization • Water conservation to balance supply and demand.	**Teaching points to note** [KI] Major engineering schemes are used to manage water supply. [KI] Desalination and water conservation are alternative approaches.
Aims and learning outcomes • [PC] Research a case study e.g. the Three gorges dam to consider its costs and benefits in terms of water supply, and wider multi-use role TGD and contrast this with dams in countries at different levels of development e.g. Hoover Dam BBC dams • [PC] Evaluate the role of water transfers e.g. China's South-North transfer China SNT in terms of water supply and wider impacts , contrasted with water transfers in California / USA southwest California water • Map the countries which use desalination on a large scale Desalination to understand why it is used in some locations, and complete a table of its costs and benefits Desal pros and cons • Evaluate the role of water conservation and management in balancing supply and demand: Singapore can be used as an example: http://www.pub.gov.sg/water/Pages/singaporewaterstory.aspx		

Content Topic B2: Water Conflicts		
Week 15 Water conflicts and the future	**Suggested activities/resources** • Explore the use of intermediate technology as a solution to the water crisis in urban and rural areas. • Consider the value of international agreements over water supply ***End of topic assessment using the SAMs***	**Teaching points to note** [KI] Intermediate technology and water sharing can increase supply and reduce conflict
Aims and learning outcomes • Understand the scale of the water supply problem in the future, Future water shortages and the need for action especially in developing countries. • Research examples of different technologies that might improve water supply e.g. LifeStraw Lifestraw , Pumpkin Pumpkin Tank Tanks and Tube wells; recognize that each has advantages and disadvantages e.g. arsenicosis from Bangladeshi tubewells BGS Bangladesh • Understand the Berlin and Helsinki water sharing rules, but that these can prove difficult to implement e.g. the Mekong River MRC and Nile River Agreement Nile Basin		

Content Topic C1: Superpower Geographies		
Week 16 Superpowers and emerging powers	**Suggested activities/resources** • Exploring different ways of defining superpowers and ranking power using different measures • Spectrum diagram of hard to soft power • Timeline of superpower polarity from 1850 to the present day • Comparing colonial / imperial control to possible neo-colonial mechanisms	**Teaching points to note** [KI] Geopolitical power stems from a range of characteristics of superpowers. [KI] Patterns of power change over time and can be uni-, bi- or multi-polar.
Aims and learning outcomes • Understand the terms 'superpower' by researching and comparing different definitions to produce an agreed definition. • Use online databases to choose different measures of superpower status (http://data.worldbank.org/ CIA WF) e.g. total GDP, population, military size, number of global 500 TNCs in order to rank and compare superpowers and emerging powers. • Understand hard versus soft power by drawing a spectrum diagram to compare hard (military, sanctions), economic (trade, GDP, TNCs) and soft (media, diplomacy, brands and sport) power Soft power ; [PC] produce a spider diagram of the USAs major sources of economic, military Military comparison , cultural and political hegemony. • Research the British Empire British Empire to produce a map of colonies and identify key ways in which imperial power was maintained; divide up a timeline from 1850 into periods of uni-, bi- and multi-polar power. • Define neo-colonialism and evaluate the theory of Dependency in the context of indirect control of countries.		

Content Topic C1: Superpower Geographies		
Week 17 Superpowers and emerging powers / The role of superpowers	**Suggested activities/resources** • Comparison of BRICs and G20 power • Investigate the role of TNCs • Understand the role of global IGOs in power and geopolitics	**Teaching points to note** [KI] Emerging powers vary in their influence, which can change rapidly over time. [KI] Superpowers have a significant influence over the global economic system
Aims and learning outcomes : • Define the G20 G20 and BRICs BRICs and map these countries using a world outline map; produce a bar chart of the relative size of their GDPs and Population http://data.worldbank.org. • Understand the differences between India and China using a table to compare their economies (size, structure), populations (size, age structure), people (poverty, urbanisation) and political systems. • Research the emerging countries (BRICs and MINTs BBC MINTs) and compare their economic, demographic, political and military strengths and weaknesses using SWOT analysis; [SF] produce indices / rankings using large data sets (see above) to extract data F500 TNCs Country demography • [SF] Interpret inequality data in the form of Gini Coefficients WB GINI to understand that inequality and poverty may hold back some emerging powers • Understand the importance of TNCs to the economy and cultural influence of powerful countries through production and trade networks and technology (patents / royalties WIPO) • Research the role of IGOs and which powers have the most control through voting rights and funding: World Bank IMF WTO WEF		

Content Topic C1: Superpower Geographies		
Week 18 The role of superpowers	**Suggested activities/resources** • Examine the role of powerful countries in global actions and crises • Consider the importance of military alliances in geostrategy • Understand the global resource demands of powerful countries and the implications of this for global environmental problems; especially the rise of the global middle class in emerging countries.	**Teaching points to note** [KI] Superpowers and emerging nations play a key role in international decision making [KI] Global environmental concerns are disproportionately influenced by superpower actions.
Aims and learning outcomes • Understand how the UN, and the Security Council in particular http://www.un.org/en/sc/, takes action around the globe in terms of peacekeeping UNPeace and disaster response; annotate a world map of current peacekeeping missions to explain why the UN is involved. • Understand military alliances and map these to investigate global patterns http://www.nato.int/ ANZUS SCO and compare relative military strengths • Map the pattern of global trade blocs (NAFTA, EU, ASEAN) to understand how free trade promotes economic growth but also political and economic interdependence. • Research the global demand for resources from economic superpowers (EU, USA) and large emerging countries (China, India, Indonesia) Overconsumption Chatham House to understand pressures on food, energy and water especially from the growing global middle class Middle Class • [SF] Use scattergraphs and Spearman's rank correlation to explore the relationship between income per capita, total GDP, total carbon emissions and per capita carbon emissions Carbon total Carbon Pc to understand which countries contribute the most.		

Content Topic C1: Superpower Geographies		
Week 19 Superpower futures	**Suggested activities/resources** • Explore resource issues in the Arctic and South China Seas • Examine the system of intellectual property and how its abuse can strain trade relations • Evaluate the role of China in Africa [PC] • Explore the involvement of superpowers and emerging powers in the Middle East [PC]	**Teaching points to note** [KI] Global influence is contested in a number of different economic and geographical spheres. [KI] Developing nations have changing relationships with powerful countries.
Aims and learning outcomes • Understand the potential for oil and gas exploitation in the Arctic Guardian Arctic and possible conflict over competing claims to the Arctic seabed; draw a map of competing EEZ claims in the South China sea and understand how this raises regional tensions NYT China • Research the market in counterfeit goods and patent infringements which adds costs to TNCs and strains trade relations CNBC • Complete a SWOT analysis of China's investments in Africa in terms of the extent to which it benefits that continent: use a range of research sources with contrasting perspectives: http://www.chinaafricarealstory.com/ 5 Myths CAP Atlantic • Complete a timeline of Middle East conflict since 1960 to understand the main players in the regions instability, as well as the sides in most recent conflicts.		

Content Topic C1: Superpower Geographies		
Week 20 Superpower futures	**Suggested activities/resources** • Explore weaknesses in the EU and USA in economic and demographic terms • Understand the costs of maintaining superpower status ***End of topic assessment using the SAMs***	**Teaching points to note** [KI] Existing superpowers face ongoing economic restructuring, which challenges their power.
Aims and learning outcomes • Research the recent history of Detroit in the USA to understand the consequences of deindustrialization and economic restructuring NBC news • Study the issue of ageing populations Country demography in some EU countries and Japan, and how this can impact on future economic prosperity EU ageing • Investigate the budget of the USA (NASA, Military, Intelligence gathering) to understand the high costs of global power US 2015 budget and the difficulties of acting as a global policeman Youtube		

Content Topic C2: Bridging the Development Gap		
Week 16 The causes of the development gap	**Suggested activities/resources** • Comparing different ways of measuring development and comparing country development level • Examining global patterns of development, and differences within countries. • Using models and theories to aid understanding of development differences • Trade and its importance to development.	**Teaching points to note** [KI] Development progress can be measured in different ways [KI] There are a range of explanations for the development gap
Aims and learning outcomes • Understand the value of both single measures of development, and indices, by considering the advantages and disadvantages of different measures; use bar charts to compare different measures for a spectrum of countries http://hdr.undp.org/en/data. [SF] Combine 3 or 4 single measures to construct an index and comment critically on its usefulness. • Use world outline maps to map HDI and other variables in order to understand global patterns and consider the scale of the global 'gap'; investigate income differences with a country e.g. China China income • [SF] Explore inequality using Gini Coefficients WB GINI and income quintiles • Research Dependency, Modernisation and Core-Periphery Theory to understand how each can be used to explain development progress, or lack of it – as well as the limitations of each theory. • Understand the importance of trade in development as the engine of economic growth: use OEC to explore the economies of contrasting countries (e.g. UK, Thailand, Zambia)		

Content Topic C2: Bridging the Development Gap		
Week 17 The causes of the development gap / The consequences of the development gap	**Suggested activities/resources** • Governance as a key issue in terms of development progress • The role of government in promoting economic development in NICs [PC] • Examining quality of life in LDCs • Gender as a key issue in development	**Teaching points to note** [KI] Governments play a key role in development progress [KI] Disadvantaged groups exist in all societies
Aims and learning outcomes • [PC] Research the situation in failed states / protracted crises countries e.g. Haiti and Somalia to understand the impact of lack of governance Failed Protracted Crises UN Governance • [PC] Evaluate the factors that have led to development in NICs since the 1950s SK Taiwan and whether they can be repeated in developing countries • Define the term FDI and explore countries which receive FDI, and which don't UNCTAD FDI; draw a spider diagram of factors that attract FDI • Map the distribution of LDCs and identify their key social and economic characteristics and challenges UN LDC • Understand how gender inequality can impact on development UN GII and recognize global patterns of gender inequality Gapminder		

Content Topic C2: Bridging the Development Gap		
Week 18 The consequences of the development gap	**Suggested activities/resources** • Examining the causes and consequences of ethnic and religious disparity • Social unrest and its relationship to lack of development progress. • Investigating disparities in cities [PC] • Poverty reduction in emerging countries and its consequences for people and the environment	**Teaching points to note** [KI] Development disparities can lead to broader social and political problems [KI] Urban areas and NICs have made development progress but there are costs
Aims and learning outcomes • [PC] Use bar charts to visually illustrate disparities based on ethnicity in a country e.g. South Africa using census and other data South Africa • Research issues surrounding social unrest of repressed and discriminated minorities e.g. in Myanmar Myanmar ethnicity • Investigate an urban context, such as Mumbai / Dharavi to understand that low income urban areas have complex development faces: economic dynamism versus poor social and environmental quality BBC Dharavi Guardian Dharavi; understand why slums and gated communities can exists side by side in developing cities Brazil • Understand the impressive poverty reduction that has taken place in some countries http://www.gapminder.org/videos/poor-beats-rich/ since the 1990s China but that environmental and health issues have resulted in some cases Forbes China		

Content Topic C2: Bridging the Development Gap		
Week 19 Closing the gap	**Suggested activities/resources** • The pros and cons of different types of aid • Debt as a development issue, and the role of debt reduction • Bottom up / small scale local approaches to closing the development gap • Evaluating the success of large scale development projects	**Teaching points to note** [KI] Aid and debt are important is explaining development progress [KI] There are contrasting approaches to development, each with pros and cons
Aims and learning outcomes : • Defining different types of foreign aid (ODA) Worldvision ODA and using table to evaluate the strengths and weaknesses of each type, including the issue of tied aid OECD tied aid • Explore the issue of debt in developing countries and the extent to which it inhibits development CADTM and whether the HIPC initiative is a positive or negative development for countries undertaking it https://www.imf.org/external/np/exr/facts/hipc.htm • Critically evaluate a range of bottom up strategies for closing the gap, including Fair Trade http://www.fairtrade.org.uk/ TIME fairtrade and example of intermediate technology http://practicalaction.org/ • Assess the role of large, high cost, top down schemes in development e.g. railway development in Ethiopia Ethiopia railways or large HEP schemes USaid HEP		

Content Topic C2: Bridging the Development Gap		
Week 20 Closing the gap	**Suggested activities/resources** • Understanding the MDGs and variable progress between 2000 and 2015 • Exploring the past-2015 Development Agenda ***End of topic assessment using the SAMs***	**Teaching points to note** [KI] Global development agendas have had mixed success
Aims and learning outcomes • Understand the scale and scope of the 2000-2015 MDGs http://www.un.org/millenniumgoals/ and how some targets have been met while others have lagged behind Child Mortality • [PC] Examine progress towards the MDGs in one chosen country UNDP MDG Africa • Compare the Post-2015 Sustainable Development Goals to the previous MDGs https://sustainabledevelopment.un.org/?menu=1300		