Geography A Level - Personal Learning Checklist

Disease Dilemmas

1.What are the global patterns of disease and can factors be identified that determine these?	R	A	G
Define and understand the following classification for diseases: infectious and non-infectious, communicable and non-communicable, contagious and non-contagious, epidedic, endemic and pandemic.			
Describe and understand pattern of different diseases - global distribution of malaria, HIV, tuberculosis (TB), diabetes and cardio-vasular disease.			
Understand what is meant by disease diffusion and how diseases spread to new areas (Hägerstrand model) - include phases of diffusion, physical barriers, socio-economic barriers.			
Describe and explain global patterns of temperature, precipitation, relief and water sources and the link with patterns of disease.			
Know how physical factors can affect vectors of disease - e.g. mosquitoes in warm, humid areas close to water sources.			
Explain how seasonal variations affect outbreaks of disease - e.g. drought/monsoon.			
Discuss how climate change provides the conditions for emerging infectious diseases to spread to new places/hosts - e.g. West Nile virus, tsetse fly and tick seasons.			
Understand the condidtions needed for zoonotic infectious diseases to establish and spread from animals to humans - e.g. Bird flu, rabies.			
CASE STUDY - country experiences a hazard (e.g. earthquake) and the implications on a named disease (e.g. cholera/typhoid). To include: geographical area affected by hazard and effect on risk and outbreak of disease, environmental factors affecting spread of disease, human factors affecting spread of disease. Discuss the impacts on populations. Evaluate the strategies used to minimise the impacts of the named disease (national/international scales).			

2. Is there a link between disease and levels of development?	R	A	G
Discuss how rising SoL (access to food, water/sanitation etc) affect susceptibility to disease/influence a country's epidemiological transition.			
Contrast reasons why LIDCs have a higher prevalence for communicable diseases (diseases of poverty) compared to ACs with a higher prevalence of non-communicable diseases (diseases of affluence).			
CASE STUDY - country with air pollution - discuss the impact on incidences of cancers (e.g. lung, bladder). Evaluate the global and national solutions in dealing with this.			

3. How effectively are communicable and non-communicable diseases dealt with?	R	A	G
CASE STUDY - one communicable disease in LIDC or EDC - at a country scale. Describe causes of the disease (environmental/human). Describe and explain prevalence, incidence, patterns of the disease. Disuss socio-economic impacts. Evaluate direct/indirect strategies used by government, international agencies to mitigate against and respond to outbreaks.			
CASE STUDY - one non-communicable disease in AC or EDC - at a country scale. Describe causes of the disease (environmental/human). Describe and explain prevalence, incidence, patterns of the disease. Disuss socio-economic impacts. Evaluate direct/indirect strategies used by government, international agencies to mitigate against and respond to outbreaks.			

4. How far can diseaes be predicted and mitigated against?	R	A	G
Evaluate and understand the role of international organisations (e.g. WHO) in providing international strategies to combat disease (e.g. prediction, data-collection, research, support) and their work with agencies/governments.			
Identify and describe a disease outbreak at global scale (e.g. H1N1, SARs) - rate of spread and describe patterns of outbreak distribution.			
CASE STUDY - role of NGO - Describe and evaluate its role in dealing with a diease outbreak in one country (national and local scale).			
Describe the physical barriers that affect (positive/negative)mitigation and response efforts in dealing with diseases.			
Evaluate mitigation strategies (by government, international agencies) to combat global pandemics (e.g. HIV/AIDS) - including screening, funding of treatment, education.			

5. Can diseases ever be fully eradicated?	R	A	G
Describe and give examples of medicines from nature, habitats and conditions for growth (influence of soil type and climate).			
CASE STUDY - one medicinal plant - describe growing conditions, pattern of international trade. Evaluate its importance for disease and sustainable use.			
Discuss conservation issues about the international trade of medicinal plants (e.g. endangering species, erosion of genetic diversity, threats to ecosystems).			
CASE STUDY - one pharmaceutical transnational - describe scientific breakthroughs, patents, drug manufacturing. Desribe and explain global flows for distribution.			
Discuss strategies for eradication of disease (range of scales - global/national).			
Evaluate the impact of grassroots strategies in education of communities and evaluate the role of women in combating disease risk.			