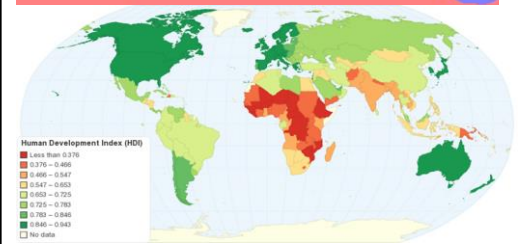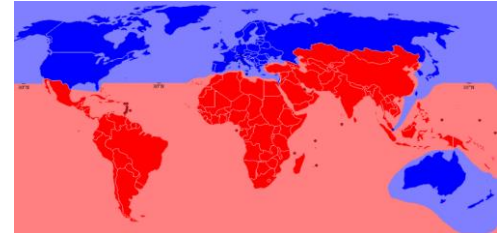**You need to know:**
- Core knowledge (Urban, Hazards & development)
- Development (indicators and mapping of development)
- Hazards (earthquakes, volcanoes, types of rock, terms for tropical storms)
- Urban environments (migration, population, slums)
- Year 7 content – desert location & climate, rainforest layers, rainforest plant adaptation, deforestation, map features, grid references (4 fig.)

Keywords:

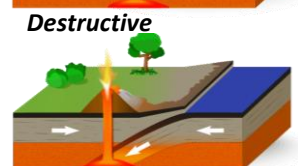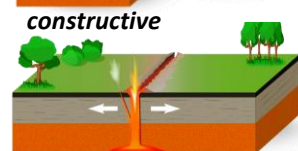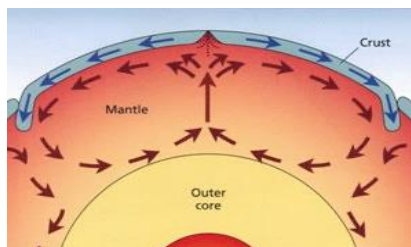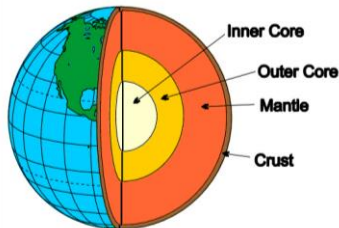|	
development indicator	primary effect
Brandt line	secondary effect
north-south divide	earthquake
social & economic	volcano
plate boundary	Migration
HIC, NEE and LIC	megacity
convection current	favelas

Development:
- Development is about the level of wealth of a country and the quality of life for the people living there.
- There are lots of ways to measure the development of a country – development indicators.
  - Examples of social indicators - include life expectancy, adult literacy rate, infant mortality rate, birth rate etc
  - Examples of economic indicators – GDP, employment rate, unemployment rate etc.
- Development can be mapped using the Brandt Line
  - A simple but old method showing a general north south divide, with the more developed countries north of the Brandt Line
  - It's only based on economic data and doesn't take into account NEEs
- Development can be mapped using the Human Development Index
  - The HDi combines more than one indicator (GDP, life expectancy and literacy rate), so it is both a social and economic indicator.
  - Countries end up with a number from 0 to 1 (closer to 1 means a higher level of development)
  - It is updated yearly and shows more detailed patterns about development


Human Development Index (HDI)

■ Less than 0.376
■ 0.376 – 0.466
■ 0.466 – 0.547
■ 0.547 – 0.653
■ 0.653 – 0.725
■ 0.725 – 0.783
■ 0.783 – 0.846
■ 0.846 – 0.943
□ No data

Classifying countries
HIC – high income country (e.g. UK)
NEE – newly emerging economy (e.g. India)
LIC – low income country (e.g. Kenya)

Inner Core
Outer Core
Mantle
Crust

Crust
Mantle
Outer core

conservative

constructive

Destructive

Collision

Hazards:
- Earth is made up of 4 layers (see diagram ⬅), each with their own characteristics
- The crust is broken into tectonic plates which move due to convection currents in the mantle. These occur due to super-heated magma rising in the mantle from near the outer core, spreading as it gets near the crust, which drags the plates very slowly. The magma gets a bit cooler and denser, so sinks back towards the outer core. This circular movement of heat is a constant cycle (see diagram ⬅)
- There are 4 type of plate boundaries (you need to know what happens at each)
  - Constructive – plates move apart allowing magma to be pushed to the surface through cracks in the crust. This creates volcanic islands (e.g. Iceland), earthquakes & volcanoes
  - Destructive – plates move together. The oceanic plate subducts (moves under) the continental plate creating earthquakes as friction builds and is then suddenly released. The subducting plate melts in the mantle creating a build-up of magma & gases which can cause explosive volcanic eruptions.
  - Collision – plates of the same density move together creating fold mountains (e.g, Himalayas) and earthquakes
  - Conservative – plates move alongside each other. As they do so friction can build between the plates – when this is released earthquakes occur (e.g. San Andreas fault, California)
- Activity around tectonic plates also links to the rock cycle - there are 3 types of rock
  - Igneous – formed from cooled and hardened molten rock (lave/magma)
  - Metamorphic – formed from other rocks that have ben exposed to extreme heat and pressure (but haven't melted)
  - Sedimentary – formed from sediment that has been compressed under the sea
- Earthquakes and volcanoes result in primary and secondary effects.
  - Primary effects occur at the time of event, directly due to the hazard (e.g. buildings collapse)
  - Secondary effects occur as a result of the primary effects and can be days, weeks, months and years after an event (e.g. homelessness).
- Tropical storms create hazardous wind, rain and storm surge. When winds reach 74mph they are called hurricanes, or cyclones, or typhoons depending on which part of the ocean they formed over. They need 27°C ocean water to occur.
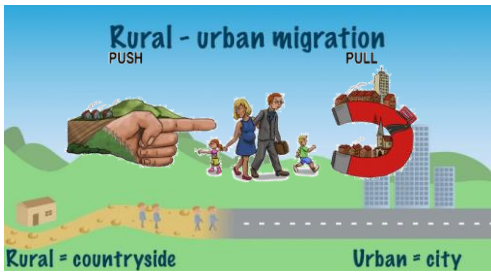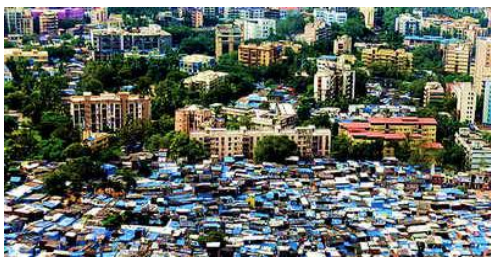
Urban environments:
- Settlements are any place where people live. Urban settlements are towns and cities. The reasons for the specific location of settlements has changed over time.
- Populations change because of birth rate, death rate and migration. This can create megacity locations where over 10 million people live within an urban area.
- Rural to urban migration is where people move from the countryside to cities. This is due to both push and pull factors
    - Push factors are the negatives about the place they currently live, making them want to leave
    - Pull factors are the positives about somewhere new, making people want to move there
    - REMEMBER, 'jobs' would not be a push or pull factor as this isn't specifically positive or negative. You would need to say 'higher paid jobs' or 'lots of jobs available' for a pull factor, and 'limited jobs' or 'low paid jobs' for a push factor.
- Many people migrate to Rio de Janiero from surrounding areas and this has led to huge growth of the city, including the development of slums.
    - Slums in Brazil are called favelas.
    - Slums/favelas are areas of poor quality housing (often made by the people themselves), with crowded conditions & a lack of proper services.
    - Rio's favelas provide both opportunities and challenges – you should be able to explain a range of these
    - Challenges include the lack of sanitation leading to poor health and living conditions. Plus, there is a high rate of drug crimes
    - Opportunities include the community spirit of people living in the slum (people are relative happy) and the opportunities for creativity

Year 7 content – To make the exam more 'realistic' we have included a few questions linking back to your learning in year 7. This is because when you do 2 year GCSE courses, you are examined at the end of the 2 years and could get tested on anything you learnt throughout the course. Therefore, revision of content from longer ago is important.

Rainforests
- They are found near the equator, so have an equatorial climate (hot, wet and humid) throughout the year.
- The largest is the Amazon in South America
- They have a layered structure – forest floor, lower canopy, canopy and emergent. Each of these have different characteristics
- Animals and plants have to be well adapted to survive
    - E.g. trees have waxy leaves and drip tips to help the water quickly roll off the leaf to prevent it getting weighed down with water & damaged
    - E.g. tree frogs have suction cups on their feet which helps them to grip onto leaves and remain in the canopy
- Deforestation is threatening rainforests – it is the large scale destruction of forest areas so the land and resources can be used (e.g. for farming)

Deserts
- Places which receive less than 250mm of rainfall per year
- You get hot deserts near the Tropic of Cancer & Tropic of Capricorn; cold deserts include the tundra found north of the arctic circle
- Hot deserts can reach 50°C in the day but can fall to below 0°C at night due to the lack of cloud cover – plants and animals have to adapt to the climate
- Cold deserts like the tundra are relatively treeless. They are cold all year, but in summer it can warm enough to melt the top layer of the permafrost, allowing small plants to grow, but for a short growing season.
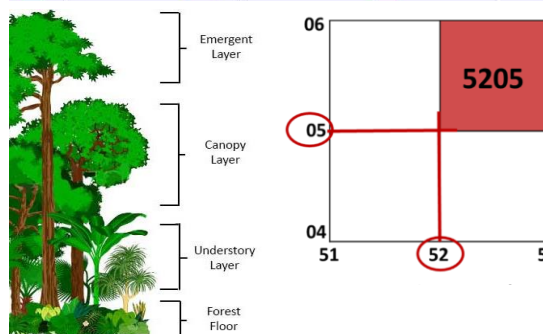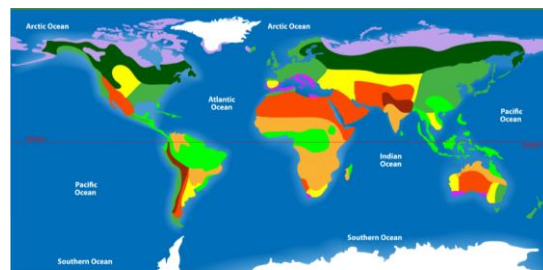
Map skills
You will have a few questions relating to an OS map. You should be able to identify human & physical features. You need to know 4 figure grid references (see diagram above).

Possible exam questions:
- State one social development indicator
- Explain what the Human Development Index shows
- Explain what the Brandt Line is
- Describe where you find volcanoes
- Explain why plates move
- Describe the difference between a constructive and destructive plate boundary
- Explain why people move to cities in LICs
- Explain the challenges people face in slums in LICs
- Describe how population has changed over time
- Define 'push factor'
- Explain how species are adapted to the rainforest

How should I revise?
- Learn core knowledge for urban environments, hazards and international development (there is a digital version on Google Classroom)
- Notes in your exercise book
- Practice answering exam questions (see box to the left)
- BBC bitesize – use the links to development, urbanisation, hazards, biomes & grid references
- https://www.bbc.co.uk/bitesize/subjects/zrw76sg

- Some people like to do revision mind maps