**Revision Sheet**

**Atmosphere**

**Global warming / Greenhouse Effect**

**Graph – Global temperatures.**



(Source: bbc.co.uk/scotland/learning/bitesize/higher/geography)

 When describing the variations on the graph you should be able to:

* Describe the general trend of the graph ( does it increase/ decrease / plateaux ).
* Describe the highest and lowest points on the graph and when this happens also include the overall range in temperature (max – min temp).
* Pick out any significant changes e.g. a sharp increase and the year this happens.
* What year does the graph start to climb above the norm?
* **Remember you must use figures and dates from the graph in your answer!!**

**Physical reasons for climate change**

* Solar energy – sun spot activity can increase global temperatures..
* Volcanic eruptions – an increase in atmospheric gases given out by a large eruption can change the amount of solar radiation which reaches the earth.
* Wobble, roll and stretch – the earths orbit changes affecting the amount of insolation reaching the earth.
* Changing oceanic circulation and land masses – warm ocean currents can change or stop which shuts of a heat supply to certain parts of the globe.

**Human Reasons for climate change**

* Increased fossil fuel burning – increased car ownership, cheap air travel, domestic heating, rapid growth of Chinese economy.
* Deforestation – logging burning and clearing tropical rainforests increases CO2.
* Increased methane – increased rice production from paddy-fields, increased numbers of flatulent cattle, more waste disposal sites.
* Increased Nitrous Oxides – car exhausts, fertilisers and deforestation.
* CFCs – found in solvents, refrigerators and foam production.

Remember - don’t just write a list, explain each point in turn.

**Consequences of Global Warming**

* Rise in Sea level – melting of ice caps.
* Strengthen coastal defences – high cost!
* Major problems for low lying countries e.g. Netherlands and Bangladesh.
* Natural vegetation zones may change. E.g. spread of desertification.
* Wildlife sensitive to temperature change.
* Worst effected areas would be developing countries who rely on single cash crops for their earnings if crops fail.