**Water Cycle Review notes 1-3**

PLEASE NOTE THAT THESE SECTIONS DO NOT ALWAYS FOLLOW THE BOOKLET CONTENT AND YOU WILL NEED TO REFER TO ALL THREE BOOKLETS TO COLLATE THE INFORMATION

**Systems and the Water Cycle**

**What are systems and why are why do Geographer’s use them?**

**What is the difference between open, closed and isolated systems?**

**Explain the concept of dynamic equilibrium.**

**What is positive feedback? Give 2 examples of positive feedback in the water cycle.**

**What is negative feedback? Give 2 examples of negative feedback in the water cycle.**

**Define the four major subsystems of the earth: Atmosphere, lithosphere, hydrosphere, biosphere. Make notes on the characteristics of each.**

**Global water stores and changes**

**Where is most water on earth stored? (Quote figures)**

**How much of the planet’s water is freshwater? What is the distribution of freshwater storage? (Quote figures)**

**What is the distribution of surface water and other freshwater? (Quote some figures)**

**Why is groundwater so important? Name some areas of the world where there are large groundwater stores.**

**What 3 forms does water on earth exist as? Explain in detail the processes of evaporation, condensation, melting, freezing, sublimation and deposition. What is latent heat and what role does it play in evaporation and condensation?**

**What impact will global warming have on stores in the cryosphere, hydrosphere, atmosphere and lithosphere? Include information on changes in glaciers and the calving of icebergs.**

**How has recent warming affected cryospheric stores? What will happen if warming continues?**

**Case Study: Greenland Ice Sheet.**

* **Produce an info sheet to explain what has happened to the amount of water on the ice sheet, how the lakes on the surface of the ice sheet contribute to further melting and what affect the meltwater is having on Greenland’s glaciers.**
* **Include a positive feedback loop.**

**The drainage basin system**

**What is a drainage basin? What is a watershed?**

**Draw a simple diagram of the drainage basin system and label the input, processes (flows), stores and outputs.**

**What effect do storms, farming, seasonal changes, deforestation and urbanisation have on the drainage basin system?**

**What is infiltration rate? What factors affect the rate of infiltration? Why is vegetation such an important factor?**

**What is the water balance? What is meant by evapotranspiration and potential evapotranspiration? Why is it important?**

**Draw and fully label the soil budget graph. What factors affect the shape of the budget graph?**