Unit 4 review

Chapter 8 & 9

**KNOW:**

The Earth’s layers

The composition of each layer

The theory of plate tectonics

Different boundaries

The Richter scale

Formation of different types of rocks

Layers of soil

Soil properties

Chemical and physical

Soil porosity

Different mining practices

Confined v unconfined aquifer

Causes and effects of eutrophic body of water

Ecological benefits of freshwater wetlands

Human activates that have impact flooding

Benefits and consequences of dams

Three major water usages global and percentages

Different types of irrigation

**QUESTIONS TO PONDER:**

What is the best type of soil to use?

What is cation exchange?

How is acid rain destructive to different types of rocks?

How are rocks formed?

What are the standards for toilets?

What is the soil material in each of the soil horizons?

How are some of the large bodies of water formed?

**Also study notes, outlines and vocabulary**

**You are responsible for all information not just material on this review!!!**

**Key ideas**

**Chapter 8**

* The earth formed approximately 4.6 billion years ago.
* The elements and minerals that were present when the planet formed are all that we have
* The Theory of plate tectonics stats that the Earth’s lithosphere is constantly moving
* The plates move apart, together, or slide past each other
* Volcanoes and earthquakes occur at plate boundaries
* The rock cycle is the formation and destruction of rock
* The three types of rocks are igneous, sedimentary, and metamorphic
* Soil is important as a place for plant growth, as a habitat for other organism, and as a recycling system for organic waste
* Soils help filter and purify water
* Soil can form from the breakdown of rock and the decomposition of organic matter
* Sand, silt, clay determine soil texture
* Overuse of land, forestry and other human activities are degrading the soil
* Silicon and oxygen are the two most abundant elements in the Earth’s crust
* There are two types of mining: surface and subsurface

**Chapter 9**

* 97% of water on Earth is saltwater
* Freshwater (not in the form of ice and glaciers) is found in groundwater, surface water (rivers, lakes, ponds) and the atmosphere.
* Humans have altered the flow of rivers with levees, blocked the flow with dams, diverted water from rivers and lakes and removed salt from saltwater to make fresh water
* 70% of the world’s freshwater is used to irrigate crops
* Agriculture , industry and household are the major water users
* Water experts predict that as populations grow, conflicts over water will increase
* Water conservation is needed in areas where water is rare.
* Examples of water conservation methods are low flow toilets, planting crops that do not need as much water, more efficient washing machines, more efficient manufacturing