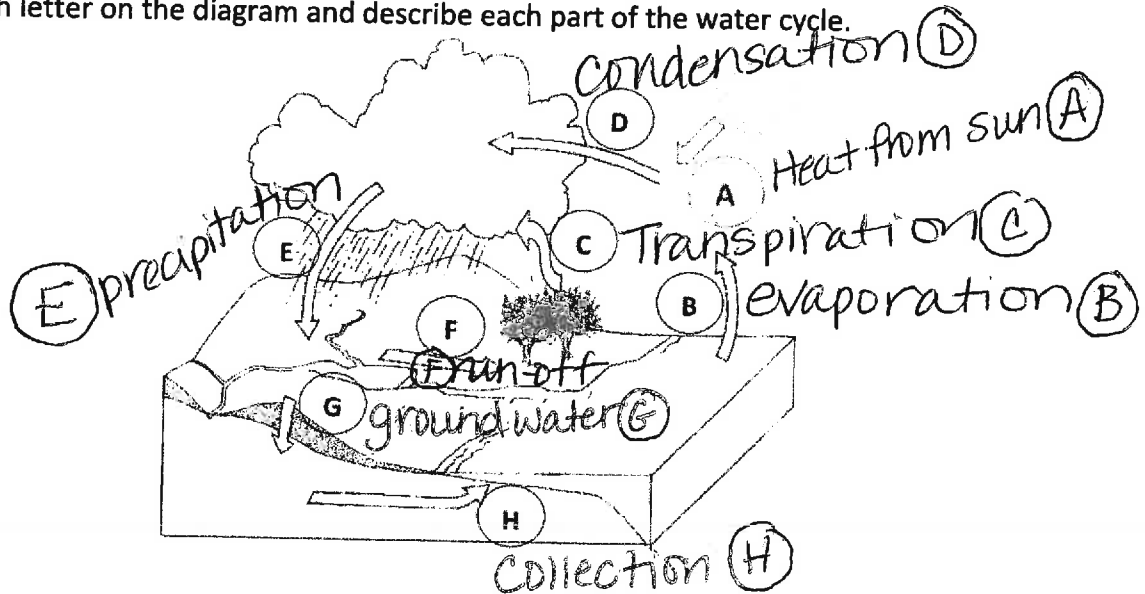


Earth's Systems ~ Review Concepts

Concept #1

The roles of the sun and the force of gravity in the water cycle process in Earth's systems.

1. Label each letter on the diagram and describe each part of the water cycle.



2. Where does most precipitation go?

To the ocean

3. Describe how clouds are formed.

Warm temperatures change a liquid to a gas.

4. Has the amount of water on the earth stayed about the same, increased or decreased? Explain your answer.

Same - closed system

5. What is deforestation and what role does it play in the water cycle?

Deforestation = cutting down trees & not replanting them. Deforestation eliminates transpiration

6. What role does gravity play in the water cycle?

The force of gravity causes water to fall & collect into bodies of water on the ground & on the surface

Concept #2

The cycling of Earth's materials and the flow of energy that drives this process.

7. What is convection of the Earth's interior?

Hot interior causes cycling of Earth's rocks.

8. What causes convection of Earth's materials?

Hot interior

9. Does the Sun play a role in the cycling of Earth's surface? If yes, what role does it play?

Yes - weathering + erosion

10. What is density?

How compact / heavy a substance is.

11. What are the differences of the densities of each layer of the earth?

Gravity pulls on denser materials, so denser materials are at the center of the earth. The core is denser than the crust.

12. How are sedimentary rocks formed?

From erosion

13. How are metamorphic rocks formed?

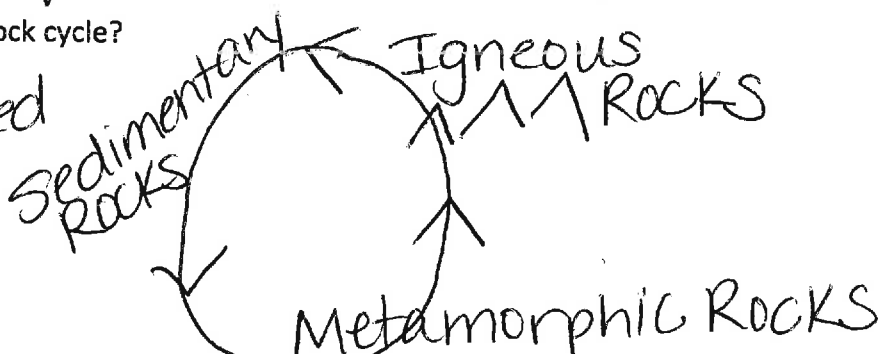
Heat + pressure

14. How are igneous rocks formed?

Hot, liquid rock, or magma ^{COOLS &} solidifies

15. What is the rock cycle?

* It may not happen exactly the same each time.



Concept #3

There is uneven distributions of Earth's mineral, energy, and groundwater resources on our planet.
This is a result of past and current geoscience processes.

16. What are the three types of fossil fuels?

Coal, oil, natural gas

17. Of the three types of fossil fuels, which one is the harshest on our environment?

Coal

18. How are fossil fuels formed?

Buried remains of ancient organisms.

19. Burning fossil fuels affect precipitation. What affect does this have on our environment?

- ① Releases acids that create chemical changes to rock.
- ② Acid shock can cause fish to die.
- ③ It can cause ocean + soil to become more acidic.

20. Give examples of renewable resources.

Wind, solar, geothermal

21. Why does it take longer to increase renewable resource usage in comparison to nonrenewable resource usage?

Non-renewable resources take years to replenish.
Renewable resources have trouble creating the same amount of power.

22. What effect do humans have on nonrenewable resources?

We are depleting them.

23. Give examples of how the hydrosphere and the geosphere interact with each other.

Waves eroding rocks on a beach.