

Science 8

Text: Discovering Science 8

Unit 1: Water Systems on Earth

Chapter One, "The Water Cycle Plays A Vital Role on Earth"

Note:

Students are encourage to review all material as part of an appropriate study schedule. The textbook, Discovering Science 8 is the main source of information. All other material are supplementary.

Terms to Know:

Aquatic	Hydro	Atmosphere	Hydrosphere
lithosphere	Water Cycle	Evaporation	Condensation
Precipitation	Salinity	Density	Freezing Point
desalinization	Oceanographer	Crevasse	Drainage Basin
Glacier	Global Warming	Gravity	Ground Water
Iceberg	Run-off	Cryosphere	Continental Divide

- 1.) Describe how water around the world is distributed.
- 2.) Be able to Explain the water cycle by drawing and labeling a diagram of the water cycle with the following features:
 - Evaporation
 - Transpiration
 - Condensation
 - Precipitation
 - Run-off
 - filtration
 - Collection
- 3.) Outline the states of matter for water:
 - Solid - Iceberg, snow, hail, ...
 - Liquid - Ocean, sea, lake, pond, river, stream, rain, ...
 - Gas - clouds, fog, mist, ...
- 4.) Explain the main difference between Ocean water and Fresh water.
 - Salinity (Salt content)
 - Density
 - Freezing Point

- 5.) Explain why ocean water in various locations on the Earth different salt levels of content?
 - Equatorial Regions - High level of evaporation
 - Polar Regions - Severe freezing zones
 - Outlets - Fresh water outflow - dilution

- 6.) Explain where salt comes from in the oceans.
 - Salt deposit from the lithosphere of the earth. Runoff water washes it to the oceans.
 - Under water volcanos (Pacific Ring of Fire).

- 7.) Discuss how salinity affects freezing point, density and buoyancy of water.

- 8.) Provide a list of fresh water sources.
 - Lakes, ponds and wetlands
 - Streams and rivers
 - Ground Water
 - Glaciers
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- 9.) Discuss the role of global warming on:
 - Glaciers melting -
 - ▶ Water level - Coastline water elevation
 - ▶ Organism habitat impacted
 - Ecosystems changing
 - Ozone layer ??? Pollution???

- 10.) Outline and explain factors affecting run-off:
 - 1.) The nature of ground material
 - 2.) The amount of rain
 - 3.) The length of time it rains
 - 4.) The slope of the land
 - 5.) The amount of vegetation
 - 6.) The amount of development in the area