

What Is Earth/Environmental Science?

EARTH SCIENCE – 4 Branches

1. _____ → The study of the Earth
 - Physical Geology – _____
 - Historical Geology – _____
2. _____ – The study of fresh water and salt water (Oceanography)
3. _____ – The study of the atmosphere, weather, & climate
4. _____ – The study of the universe

ENVIRONMENTAL SCIENCE

- **Environmental Science** – the study of the impact of humans on the environment
- **Goal** – To understand and _____
 - Two types of interactions between humans and the environment:
 1. How we _____ natural resources
 2. How our actions _____
- **Multiple Sciences**
 - _____ – the study of how living things interact with each other and with their environment
 - Ex: Ex: Biology, Earth Science, Physics, Chemistry, _____, Economics, etc...

A VIEW OF EARTH – Earth’s Major Spheres

- **Geosphere** – “Round Stone” – Earth’s core, mantle & crust
 - Lithosphere – _____
 - Asthenosphere – _____
- **Hydrosphere** – all of the water on Earth
 - Continuously _____
 - _____ salt, 3% _____
- **Atmosphere** - Thin, gaseous envelope _____
 - Sustains _____ on Earth
 - 100 km (~600 miles) thick, but 90% is _____ in the 1st _____ km (~ _____ miles))
- **Biosphere** - Includes all life on Earth
 - Extends from the _____ up to the _____

EARTH SYSTEM SCIENCE – The effects of humans on our planet

- **Earth is a System** - any size group of _____ that form a complex whole.
 - Two types of systems:
 1. _____ (EX: car's cooling system)
 2. _____ (EX: most natural systems)
- Which type is our planet? → _____
- All _____
 - What are Earth's two energy sources?
 1. _____
 2. _____
- People & the Environment – our _____ produce _____ in all of the parts of Earth's system.

EARTH'S MAIN ENVIRONMENTAL PROBLEMS

1. _____

- **Renewable Resources**: _____ over a short period of time

EXAMPLES:

- **Nonrenewable Resources**: May take _____

EXAMPLES:

2. _____ – undesired change in air, water, or soil that adversely affects the health, survival, or activities of humans or other organisms

3. **Loss of** _____ – the number and variety of species that live in an area