1.4 Earth System Science
What is a System?

A system can be any size group of interacting parts that form a complex whole.

Example:

Hydrologic (or water) System
Tectonic System
Climate System
What is a System?

There are two types of systems:

Open

Closed

The Earth system is powered by energy from two sources:

Sun

Earth’s interior
Sun Energy

Energy from the SUN drives external processes that occur:
in the Atmosphere
in the Hydrosphere
at the Earth’s surface
Earth’s Internal Energy

The Earth’s internal heating system powers internal process that produce:

Volcanoes
Earthquakes
Mountains
Human Impact

Humans are also a part of Earth’s system.

Our actions produce changes in all of the other parts of the Earth system.
Assignment

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