

Which Earth Sphere(s)?



- 1 Identify the sphere(s) this photo would be in and explain why.
- 2 Identify 3 types of interactions that might occur here.
- 3 Identify 3 types of interactions that humans might have here.
- 4 Identify potential animal and plant life that might live here.

Potential Answers:

Atmosphere: interactions can take place on a very small scale, such as between two molecules, or on a much larger scale, such as between two storms.

1. Condensation: Water vapor in the atmosphere is constantly evaporating, or turning into a gas. When the air becomes saturated with water vapor, it can no longer hold any more, and the water vapor will condense, eventually forming clouds.
2. Precipitation: When the air is saturated with water vapor and can no longer hold it, it will turn into liquid droplets, which is known as precipitation. This can take the form of rain, snow, sleet, or hail.
3. Evaporation: Evaporation is the opposite of condensation. Water vapor in the air will evaporate, or turn into a gas, when the air is heated. This is why you often see steam rising from the ground on a hot day.
4. Air Pressure: The atmosphere is made up of layers of different gases. The pressure of the air can change depending on the type and amount of gases present. For example, high pressure indicates that there are more molecules in the air, making it heavier and denser.
5. Wind: The wind is a result of air pressure differences. When the air pressure is higher in one area, the air will move from the area with higher pressure to the area with lower pressure. This movement of air is called wind.
6. Radiation: Sunlight is a form of radiation that comes from the sun. This radiation is absorbed by the atmosphere, which helps to keep the Earth warm.
7. Clouds: Clouds are formed when tiny water droplets or ice crystals in the atmosphere come together and form a large mass of water vapor. Clouds can be used to measure the amount of moisture in the atmosphere.

Human Interactions:

1. Pollution being released from cars and factories.
2. People flying in planes and helicopters.
3. People launching rockets and satellites.
4. People studying the atmosphere with balloons and kites.
5. People sending signals through the air with radio waves.
6. People creating clouds with cloud seeding.
7. People burning off excess vegetation with controlled burns.