

**inner core**—the molten core of the Earth.

**insolation**—the rate of delivery of solar radiation per unit of horizontal surface.

**interbasin transfer**—a system by which water is transported very long distances from its source through aqueducts or pipelines.

**ionosphere**—a region of the Earth's atmosphere where ionization caused by incoming solar radiation affects the transmission of radio waves. It extends from a height of 70 km (43 miles) to 400 km (250 miles) above the surface.

**jet stream**—a high-speed, meandering wind current, generally moving from a westerly direction at speeds often exceeding 400 km (250 miles) per hour at altitudes of 15 to 25 km (10 to 15 miles).

**land degradation**—when soil becomes water-logged and then dries out, and salt forms a layer on its surface.

**La Niña**—a cooling of the ocean surface off the western coast of South America, occurring periodically every 4 to 12 years and affecting Pacific and other weather patterns.

**limnetic zone**—the surface of open water; the region that extends to the depth that sunlight can penetrate. Organisms that are residents in this zone are short-lived and rely on sunlight to carry out photosynthesis.

**littoral zone**—begins with the very shallow water at the shoreline. Plants and animals that reside in the littoral zone receive abundant sunlight. The end of this zone is defined as the depth at which rooted plants stop growing.

**lithosphere**—the outer part of the Earth, consisting of the crust and upper mantle, approximately 100 km (62 miles) thick.

**loamy**—soil composed of a mixture of sand, clay, silt, and organic matter.

**mantle**—the layer of the Earth between the crust and the core.

**mesosphere**—the portion of the atmosphere from about 30 to 80 km (20 to 50 miles) above the Earth's surface, characterized by temperatures that decrease from 10°C to -90°C (50°F to -130°F) with increasing altitude.

**meteorologist**—scientist who reports and forecasts weather conditions.

**monoculture**—the cultivation of a single crop on a farm or in a region or country; a single, homogeneous culture without diversity or dissension.

**monsoon**—a wind system that influences large climatic regions and reverses direction seasonally.

**O layer**—the uppermost horizon of soil. It is primarily made up of organic material, including waste from organisms, the bodies of decomposing organisms, and live organisms.

**Physical (mechanical) weathering**—any process that breaks rock down into smaller pieces without changing the chemistry of the rock; typically wind and water.

**plate boundaries**—the edges of tectonic plates.