Nearly one third of the Earths land surface is desert. Deserts are dry lands with little rainfall. They support only sparse plants and a limited population of people and animals.

These regions are called deserts because they are dry. They may be hot; they may be cold. They may be regions of sand or vast areas of rocks and gravel covered with little plants. But deserts are always dry.

Deserts are natural laboratories. We can study the interactions of wind and sometimes water on the dry

surfaces of planets. They contain valuable mineral deposits that were formed in the environment or that were exposed by erosion. Because deserts are dry, they are ideal places for human artifacts and fossils to be preserved. Deserts are also fragile environments. The misuse of these lands is a serious and growing problem in parts of our world.

There are many definitions of deserts and their classification. Most classifications are based on different factors These factors include rainfall, temperature, and humidity.

Dry areas created by global circulation patterns contain most of the deserts on the Earth. The deserts of our world are not restricted by latitude, longitude, or elevation. They occur from areas close to the poles down to areas near the Equator. Deserts are not confined to Earth. Except for the poles, the entire surface of Mars is a desert. Venus also may support deserts.

The worlds great deserts were formed by natural processes over long intervals of time. During most of these times, deserts have grown and shrunk independent of human activities. But human activities have started to play a more important role.