

## How Is Soil Formed?

### Note-taking Guide - Answer Key

---

*freezes, oxygen, sand, weathering, pores, warm, years, carried, rocks, 70,000, gravity, pieces, water, clay, sized, same, expands*

---

Soil is formed when rocks are broken down into smaller pieces. This happens through a very slow process called weathering.

The broken-down materials are carried by wind, water, and ice until they finally come to rest because of gravity.

The most common type of weathering occurs when water enters small cracks and pores in a rock.

In winter, the water in these cracks freezes to become ice. Water expands when it freezes, and the force of the expansion breaks the rock.

In summer, the rocks get warm and expand. These changes in temperature can also cause rocks to break into pieces. Rocks break into different sized pieces forming sand, silt, or clay.

Sand particles are larger than silt or clay, and silt particles are larger than particles of clay.

All soil is not the same. Over 70,000 kinds of soil have been found in the United States alone.

Sometimes, water, oxygen, and other elements in the atmosphere react with the rocks, changing them and breaking them down into small pieces. These pieces are called clay and are too small to be seen with the naked eye.

Hundreds, thousands, or even millions of years are needed for the rocks to be broken down by weathering.