

Sedimentary Rocks



Calico Rock sandstone

shell limestone

© 2014 Encyclopædia Britannica, Inc.

Figure 1: Calico Rock sandstone and shell limestone are examples of sedimentary rock.

Introduction

Sedimentary rock is one of three types of rock found on Earth. The others are called igneous and metamorphic. Igneous and metamorphic rocks are the most common rock types in Earth's crust. Sedimentary rock is the most common rock type found at its surface.

How Sedimentary Rock is Formed

Sedimentary rock can be formed in several ways. Some is formed when rocks of any kind are worn away by rain, wind, and other elements. Through a process called erosion tiny fragments of the original rock, along with dissolved minerals, are carried away to another site. There they may combine with other materials, such as mud. This settled matter is called sediment. As layers of sediment build up over thousands of years, they are compressed, or squashed, and become bonded together. If the fragments are too big to be compressed, the spaces between the fragments are filled in by the dissolved minerals, which make a kind of cement when they harden.

Sedimentary rock can also be formed when the shells of sea creatures fall to the floor of the sea after the creatures die. When the shells form a thick enough layer they become compressed and form rock.

In some places where there are shallow bodies of water another kind of sedimentary rock may be formed. In these cases, if the surrounding air is very dry the water may evaporate, or dry up, leaving behind minerals that harden into rock.



Figure 2: Layered sandstone has been eroded to form a canyon in southern Utah. Sandstone is a sedimentary rock formed of tiny grains of sand that have been compressed or cemented into rock.

Types of Sedimentary Rock

Sedimentary rocks can be put into groups according to the way they are created and the size of the fragments that they contain. The types that form from particles that are worn away from another rock include conglomerates, sandstones, and mudstones. The different names tell what kind of fragments they contain. For

example, conglomerates are made of larger particles with minerals between them acting as cement to hold them together. Sandstones are made from grains of sand that each measure between 0.002 and 0.08 inch (0.06 and 2 millimeters). Mudstones have tiny fragments that are even smaller than this.

Limestones contain the shells of sea creatures that are tightly packed together. Rocks made from minerals include gypsum and halite.

Citation (MLA)

"Sedimentary rock." *Britannica School*, Encyclopædia Britannica, 3 Dec. 2018.
school.eb.com/levels/middle/article/sedimentary-rock/476316. Accessed 28 Jan. 2019.

Citation (APA)

Sedimentary rock. (2019). In *Encyclopædia Britannica*. Retrieved from
<https://school.eb.com/levels/middle/article/sedimentary-rock/476316>