

Parent Material: Rock

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Fire-forged, pressure-formed, or slowly layered over time... then weathered and crushed! There is an endless cycle of formation and reformation underfoot. Take a walk outdoors and what is under your feet? Cross a meadow... can you feel the spongy soil beneath your feet? Is there a stone wall lining the meadow? Walk a well-trod path... can you feel the compacted soil? Do you see any rocks in the path? Hike a mountain trail. Do you see



any rock outcrops or cliffs? Walk a beach. What is underfoot? Rocks contribute to the land as they break down over time - eroded by the force of wind and water and cracked and crumbled by extreme heat and cold. The sand at the beach was formed by the eroding of rock over thousands, and perhaps millions of years. In the sand you will also find broken bits of shells and other hard materials that all continue to be broken down by the wind, ocean waves, and weather. Likewise, rock is the “parent material” of soil. As rock breaks down it forms the basis of soil, releasing minerals and mixing with organic matter such as plant and animal remains. What we think of as solid ground is really a combination of rock and once-living matter that make up soil, and all the plants and creatures that are rooted, burrowing, tunneling or living there.



Interesting Facts

Igneous – means fire-formed. Igneous rocks form by the cooling and solidification of once molten hot magma or lava.

Metamorphic means changed in form. Any rock can be turned into a metamorphic rock through extreme pressure and /or temperature.

Sedimentary rocks form by the layering of sediments, fragments of eroded or weathered rocks

Activities for Children & the Young at Heart

1. Take hikes in search of different rock types and formations. [View an online map and get geologic guides.](#)
2. Keep a rock journal. Note and draw or photograph the different kinds of rock and rock outcrops you see.
3. Make a list of all the ways that animals use rocks. Compare your list with how people use rocks.
4. Make a drawing of the Earth, as if you cut a ¼-section out. Label the Core, Mantle and Crust. What do you think they are made of? Write down your thoughts, then find out.

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