

Mountain Building: Paper Peaks

The Earth's crust is not one solid layer. The crust is broken into several tectonic plates that float on top of the *mantle*, the layer of half-molten rock beneath the Earth's surface. The floating plates continuously change the shapes of continents, islands, and oceans, though they do so at the rate of only about one inch each year. The slow movement of two plates towards each other crumples the edges, pushing up the crust and creating mountains. All the great mountain ranges on Earth were formed by colliding plates. Some of the oldest rocks on the planet, located at the bases of these mountains, have been pushed upward in the folding processes. In this activity you will see how mountains are formed.

Materials

Several sheets of newspaper

Activity

1. Place the unfolded newspaper sheets on the floor.
2. Place the palms of your hands about one foot apart on the newspaper.
3. Slowly push your hands, and the paper, together.

Follow-Up Questions

1. In this activity, what do your hands represent? What does the newspaper represent?
2. As you push your hands together, what happens to the paper between your hands?
3. How does this motion model mountain building?