

Environmental Science AMI 2

Trenches and Mountains

The plates of the Earth's crust may bump into each other, or collide. As they collide, one plate may be forced under the other. This plate gets pushed down into the hot mantle, where the crust melts. When one plate gets pushed down under another beneath the sea, a trench forms between them. A trench is a deep, long valley in the ocean floor.

Sometimes two colliding plates pile up against each other on land. This is how some mountain ranges are formed.

Colliding plates can form trenches in the ocean floor or mountain ranges on land.

Mountains build up very, very slowly. Over millions of years, the plates push against each other. As they push, the land gets shoved upward, making mountains. The Alps in Europe were formed this way. So were the Andes in South America and the Himalayas in Asia. Mount Everest, in the Himalayas, is 29,028 feet above sea level. It is the highest point on Earth.

Sometimes, instead of two plates pushing into each other, they slide past each other. This is true of the Pacific and North American plates. They meet along the western coast of North America. The Pacific plate moves about 2 inches each year in the northwest direction.

Many earthquakes occur along this coast. Each time there is a sudden slip between the plates, an earthquake occurs.

1. What is a trench?

2. What can colliding plates form?

3. How are mountain ranges formed?

4. What is the highest point on earth?

5. What causes an earthquake to occur?
