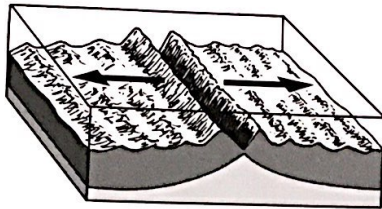


Review and Reinforce

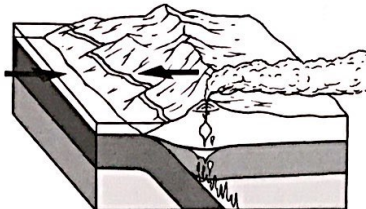
The Theory of Plate Tectonics

Understanding Main Ideas

Label each diagram by writing the type of plate boundary it shows.



1. _____



2. _____



3. _____

Answer the following questions on a separate sheet of paper.

4. Describe what happens when (a) two plates carrying oceanic crust collide, (b) two plates carrying continental crust collide, and (c) a plate carrying oceanic crust collides with a plate carrying continental crust.
5. Explain what force caused the movement of the continents from one supercontinent to their present positions.

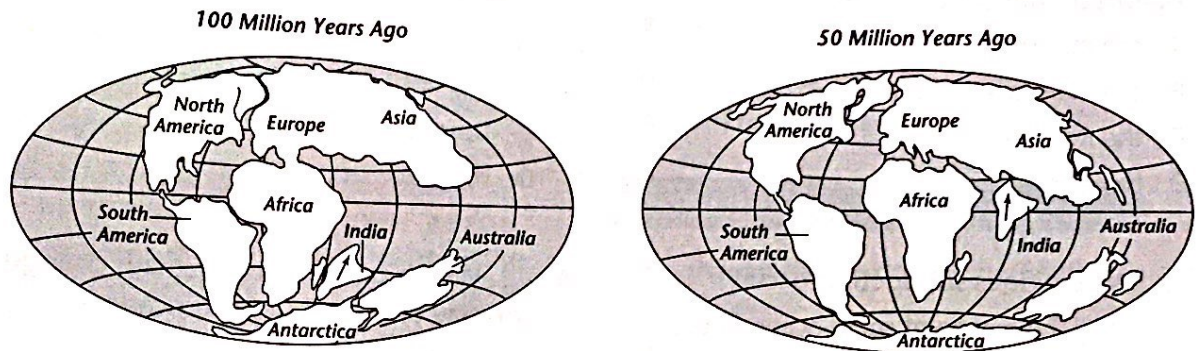
Building Vocabulary

Fill in the blank to complete each statement.

6. At a(n) _____, plates come together.
7. Breaks in Earth's crust where rocks have slipped past each other are called _____.
8. The lithosphere is broken into separate sections called _____.
9. A(n) _____ is a deep valley on land that forms along a divergent boundary.
10. The geological theory that states that pieces of Earth's crust are in constant, slow motion is called _____.
11. At a(n) _____, plates slip past each other.
12. Plates move apart along a(n) _____.

Sea-Floor Spreading

Study the map and read the passage. Then use a separate sheet of paper to answer the questions that follow.



The Birth of the Himalayas

The greatest challenge for mountain climbers is Mt. Everest, whose peak rises 8,872 meters above sea level. This is the highest mountain in the world, though many mountains around it are almost as high. Mt. Everest is in the Himalayas, a series of massive ranges that extends 2,500 kilometers across South Asia north of India. The Himalayas cover all or part of the countries of Tibet, Nepal, and Bhutan.

A climber on the high slopes of Mt. Everest would probably be surprised to learn that the region was relatively flat about 40 million years ago. It was then that two continental plates collided. The plate carrying India had been moving northwards for millions of years. The oceanic crust in front of it was slowly subducted under the Eurasian plate. But when the two continents collided, subduction stopped because the plate carrying India did not sink into the mantle. Instead, it pushed crust upward and downward. The Himalayas were one result. Thus, the Himalayas are actually pieces of plates broken and lifted up because of the collision. Another result of this collision was the movement of China eastward, as the movement of India northward pushed the Eurasian plate in front of it. The collision is still occurring today. In fact, the Himalayas are growing in elevation at a rate of about 1 centimeter per year.

1. What are the Himalayas?
2. What was the area of the Himalayas like 40 million years ago?
3. How did the movement of plates create the Himalayas?
4. What else resulted from the collision of those plates?
5. What type of plate boundary exists today along the Himalayas?
6. If the Himalayas continue to grow in elevation at their present rate, how tall will Mt. Everest be in another one million years?