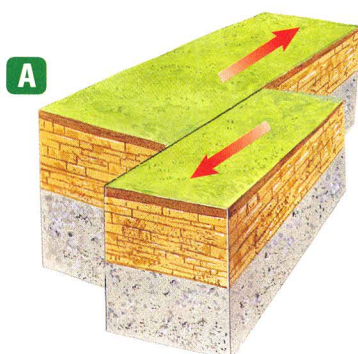


Figure 5

A Shear forces push on rock in opposite—but not directly opposite—horizontal directions. When they are strong enough, these forces split rock and create strike-slip faults. Little vertical movement occurs along a strike-slip fault. **B** The North American Plate and the Pacific Plate slide past each other along the San Andreas Fault, a strike-slip fault, in California.



Strike-Slip Faults At a **strike-slip fault**, shown in **Figure 5A**, rocks on either side of the fault are moving past each other without much upward or downward movement. **Figure 5B** shows the largest fault in California—the San Andreas Fault—which stretches more than 1,100 km through the state. The San Andreas Fault is the boundary between two of Earth's plates that are moving sideways past each other.

✓ Reading Check *What is a strike-slip fault?*

Section 1 Assessment

1. What is an earthquake?
2. The Himalaya in Tibet formed when two of Earth's plates collided. What type of faults would you expect to find in these mountains? Why?
3. In what direction do rocks above a normal fault surface move?
4. Why is California's San Andreas Fault a strike-slip fault?
5. **Think Critically** Why is it easier to predict where an earthquake will occur than it is to predict when it will occur?

Skill Builder Activities

6. **Forming Hypotheses** Hypothesize why the chances of an earthquake occurring along a fault increase rather than decrease as time since the last earthquake passes. **For more help, refer to the Science Skill Handbook.**
7. **Using Graphics Software** Use a graphics program to make models of the three types of faults—normal, reverse, and strike-slip. Add arrows to show the directions of movement along both sides of each type. **For more help, refer to the Technology Skill Handbook.**