

# Shake It!

## Procedure

- 1. Collaborate** Work with a partner. Measure the largest face of each wood block. Cut the sandpaper to fit that face and wrap it around the sides of the block.
- 2. Use Models** Large earthquakes are common in regions where plates slide past each other. You can use wood blocks to represent tectonic plates. Practice sliding the two wood blocks past each other. Use the smooth faces of the blocks.
- 3. Hypothesize** Discuss with your partner how you think the presence of the sandpaper on the blocks will change the way they slide past each other. Record your hypothesis on the lines below.

---

---

---

- 4. Use Models** Try sliding the blocks past each other again, this time using the sandpaper faces. Apply pressure to squeeze the plates together while you move them past each other. Record your observations on the lines below.

---

---

---

## Conclusion

Write the answers to the questions below.

1. **Analyze Data** Explain how sandpaper-covered blocks better represent the action at plate boundaries than would smooth blocks.

---

---

---

2. **Communicate** Using your model, explain how you think earthquakes are caused when pressure builds up at the edges of moving plates.

---

---

---

---

## Investigate More!

**Design an Experiment** What other questions do you have about earthquakes that can be addressed by using your model? Try using different materials on the faces of the plates to model different rock types that occur at plate boundaries.