

Experiment: Centre of Gravity

Every object has a spot that is called the centre of gravity. Try this experiment to find the centre of gravity of a ruler.



What You Do

1. Balance the ruler on your finger. (Move your finger right or left to find the spot where the ruler balances.) This spot is the ruler's centre of gravity.



- Mark the centre of gravity with a small piece of masking tape.
 Write "3 cm" on the masking tape.
- **3.** Place an eraser 3 cm from the end of the ruler and tape it in place.



4. Repeat steps 1 and 2. This time, mark the centre of gravity with a piece of masking tape with "6 cm" written on it.







"Experiment: Centre of Gravity"—Think About It!

- **1.** The ruler had a different centre of gravity in each test. Use the drawings of rulers on page 54. Mark the centre of gravity you found each time.
- **2.** What would happen if two erasers were taped to one end of the ruler? Would the centre of gravity be in the same place? Explain your thinking.

3. A circus acrobat does a balancing act. She balances plates on a pole. Mark where you think the centre of gravity is on the pole. Draw the acrobat holding the pole.



Try It!

Tape an eraser over the 15 cm mark on the ruler. Where do you think the centre of gravity will be? Try balancing the ruler. Was your prediction correct?