





10 Transparency 10-1 Worksheet

Force, Distance, and Work

- **1.** What force acts on the object when it has been moved 4.0 m?
- **2.** How far has the object been moved when the force on it is 200.0 N?
- **3.** Explain the shape of the line on the graph.

4. Which formula is used to calculate work when a constant force is exerted on an object?

- 5. How much work is done in moving the object 6.0 m from the source to 8.0 m from the source?
- **6.** Look at the information on the graph about the object as it is moved 6.0 m from its source to 10.0 m from its source.
 - **a.** How much work is done in moving the object?
 - **b.** How did you know what force to use?
 - **c.** What did you have to assume about the force that acts over this distance?
- 7. How much work is done in moving the object the 10.0-m distance shown on the graph?