Force, Distance, and Work

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## 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.
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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?
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c. What did you have to assume about the force that acts over this distance?
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7. How much work is done in moving the object the $10.0-\mathrm{m}$ distance shown on the graph?
