Name Date Class

SECTION 3 Reinforcement

The Third Law of Motion

Directions: *Use the illustrations to answer the following questions.*

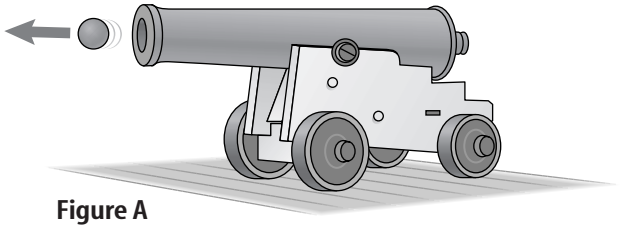

Figure A

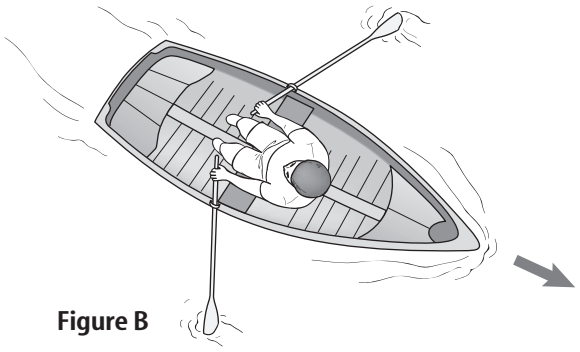

Figure B

1. Draw an arrow on Figure A to show the direction the cannon will move when the cannonball is fired.
2. Draw arrows on Figure B to show the direction the oars must move to propel the boat forward.
3. Does the arrow you drew on Figure A represent an action force or a reaction force?

_____

4. Do the arrows you drew on Figure B represent an action force or a reaction force?

_____

5. If the force that propels the cannonball forward is 500 N, how much force will move the cannon backward? Explain. _____

_____

_____

_____

Directions: *Solve the following problems.*

6. What is the momentum of a 2-kg toy truck that moves at 10 m/s?

_____

7. What is the momentum of a 2000-kg truck that moves at 10 m/s?

_____

8. Which truck has more momentum? Why? _____

_____

_____

_____

Meeting Individual Needs