

Guided Reading Chapter 6 Sections 1 & 2

1. Only _____ has the ability to change motion.
2. Restate Newton's First Law of Motion.
3. _____ forces are those that act on an object causing the net force to be something other than zero.
4. Objects with more _____ are harder to move and have more _____.
a) mass, inertia b) weight, inertia c) mass, acceleration
5. List three big ideas of Newton's Second Law of Motion.
6. The second law connects force, _____, and motion.
7. _____ is defined as any change in speed or direction.
a) Velocity b) Speed c) Acceleration
8. Sketch Figure 6.5, which explains the metric unit called the "Newton."
9. Acceleration is proportional to force, meaning that if force _____, acceleration _____.
a) increases, decreases b) increases, increases c) decreases, decreases
10. The acceleration of an object is always in the _____ direction as the applied force.
a) same b) opposite

11. Objects with greater mass have _____ acceleration.

a) more

b) less

c) no

12. Write the equation used to calculate acceleration.

13. Answer the "Solve It" questions in the sidebar, about Newton's Second Law.

14. Summarize Newton's Second Law by drawing the three diagrams of the man pushing the cart in the text. Make sure to include the equations, arrows, and make bold the correct variable when you write them.

15. Newton's second law considers _____ forces acting on an object in motion.