

Skills Worksheet

Directed Reading B

Section: What Is a Force? (pp. 344–349)

1. In science, a push or a pull exerted on an object is known as a(n) _____.
2. All forces have two properties: _____ and _____.
3. The SI unit used to express force is called a(n) _____.

FORCES ACTING ON OBJECTS

4. Forces always act on _____.
5. Give two examples of objects on which you exert forces when you are doing your schoolwork.

6. Give one example of a force that does not cause an object to move.

COMBINED EFFECT OF FORCES

7. The combination of all forces acting on an object is called _____.
8. How do you calculate the net force if two or more forces act in the same direction?

9. How do you find the net force when two forces act in opposite directions?

Directed Reading B *continued*

BALANCED FORCES: NO CHANGE IN MOTION

10. What must the net force be equal to in order for the forces on an object to be balanced?

11. A hanging light does not move because the force of gravity pulling down is balanced by the force of _____ in the cord pulling up.

UNBALANCED FORCES: VELOCITY CHANGES

12. Forces are unbalanced when the net force on an object is NOT equal to _____ newtons.

13. What type of force is needed to cause a static object to start moving?

14. Give an example of an object that continues to move when an unbalanced force is removed.

15. Give an example of an object that moves in a direction different from the direction of an unbalanced force acting on it.
