## Date

## What Are Forces?



Which of the following objects will have the greatest change in motion?

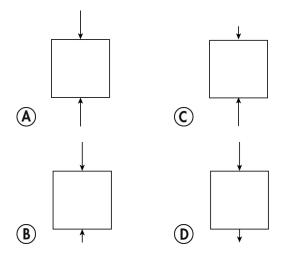
- $(\mathbf{A})$ A small force is applied to an object with a large mass.
- A small force is applied to an object **(B)** with a small mass.
- $(\widehat{\mathbf{C}})$  A large force is applied to an object with a large mass.
- **(D)** A large force is applied to an object with a small mass.
- 2 Raoul threw a ball into the air and watched it go up for a long time. Then it started to fall back toward him. What force caused the ball to return to the ground?
  - $(\mathbf{F})$ friction

motion

 $(\mathbf{G})$ gravity wind

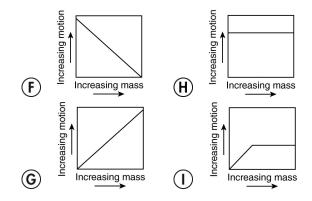


Arrows represent the forces applied to an object. A longer arrow means a greater force. Which object will move upward?



Lesson 1 Quiz

4 When an unbalanced force is applied to an object, the object moves in the direction of the force. Which graph shows how the same force will affect objects that have different masses?





Look at the following illustration.



Two boys are about to use the same force to push a parent and a child. Which describes what will happen?

- $(\mathbf{A})$ The parent will swing higher.
- The parent will accelerate faster. (B)
- The child will accelerate faster. (C)
- The parent and the child will  $(\mathbf{D})$ accelerate at the same rate.