# Operation Airdrop Pre-Assessment – Answer Key

## Pre-Activity Assessment

1. You kick a soccer ball. How do you get the ball to move?  
   a. Friction  
   b. Speed  
   **c. Force**  
   d. Telekinesis  
   **Rationale:** A force is placed on the object, in this case the (soccer ball) which causes the soccer ball to move.

2. What force is used to sharpen your pencil?  
   a. Push  
   b. Pull  
   **Rationale:** When you are actively sharpening a pencil you are using a force that pushes two objects closer.

3. When you pop a balloon that has been filled with air or water what happens to the air or water inside of it?  
   a. It is pushed in  
   b. **It is pulled out**  
   **Rationale:** If you fill a balloon with air or water you are forcing the objects together, but when a balloon pops or breaks, the objects are now forced to move away or be pulled away from one another.

4. Which of the following are objects that do not fall to earth?  
   a. Airplanes and birds  
   b. **Stars and planets**  
   c. The sun  
   **Rationale:** Stars and planets are pulled by gravity, but do not fall to earth.

5. How much gravity an object has depends on?  
   a. Weight  
   b. **Mass**  
   c. Speed  
   d. Acceleration  
   **Rationale:** Mass is the quantity of matter in an object.