

## Brain Building Broadcast: Myth Busters- Pendulum Swing

Watch the video located at any one of the following addresses:

<http://goo.gl/Wddlk>

<http://vimeo.com/54962660>

<http://www.youtube.com/watch?v=43w1TyrSql8&feature=youtu.be>



After carefully watching the video, answer the following questions:

1. (Multiple-Choice) What is the main myth Mr. Bingaman and Ms. Wong want to bust?
  - a. If you push away a pendulum and move forward, it will come back and hit you in the face.
  - b. If you let go of a pendulum and move forward, it will come back and hit you in the face.
  - c. If you push away a pendulum and stay still, it will come back and hit you in the face.
  - d. If you let go of a pendulum and stay still, it will come back and hit you in the face.
2. (Multiple-Choice) Which statement is **TRUE** when the box is at 100% gravitational energy?
  - a. The box is moving.
  - b. The box also has kinetic energy.
  - c. The box is above the reference point.
  - d. The box has no height.
3. (Multiple-Choice) What happens to the gravitational energy when the box falls?
  - a. The gravitational energy disappears.
  - b. The gravitational energy becomes kinetic energy.
  - c. The gravitational energy increases.
  - d. The gravitational energy remains constant.
4. (Multiple-Choice) When is a pendulum moving the **FASTEST**? **Select 2 correct answers.**
  - a. When the pendulum is at its lowest point.
  - b. When the pendulum is at its highest point.
  - c. When the pendulum has 100% kinetic energy.
  - d. When the pendulum has 100% gravitational energy.
5. (Multiple-Choice) When is a pendulum moving the **SLOWEST**? **Select 2 correct answers.**
  - a. When the pendulum is at its lowest point.
  - b. When the pendulum is at its highest point.
  - c. When the pendulum has 100% kinetic energy.
  - d. When the pendulum has 100% gravitational energy.