

1. Which object requires direct contact to exert a force?

- (A) a planet
- (B) a spring
- (C) a magnet
- (D) a lightning bolt

2. The weight of an object on earth is a measure of \_\_\_\_\_?

- (A) the gravitational force surrounding the object
- (B) the mass of the object being weighed
- (C) the gravity exerted by the earth
- (D) the force exerted on the object by the earth

3. Which statement about gravity is untrue?

- (A) The force of gravity always pulls objects downward.
- (B) A single object produces no force of gravity.
- (C) A gravitational field extends in all directions.
- (D) The force of gravity only pulls, never pushes.

4. Your mass on earth \_\_\_\_\_.

- (A) decreases the further you go into outer space
- (B) has a weaker gravitational field around itself in outer space
- (C) remains the same value in outer space
- (D) is maximal over the equator where the earth has a slight bulge

5. Which statement is untrue?

- (A) A moving mass is surrounded by a gravitational field.
- (B) A moving electrical charge is surrounded by an electrical field.
- (C) A moving magnet is surrounded by a magnetic field.
- (D) A stationary electrical field is surrounded by an electrical field.

6. Which statement is true?

- (A) Weight is properly measured in kilograms.
- (B) Mass is properly measured in grams.
- (C) In the American system, pounds are a measure of mass.
- (D) In the American system, a slug is a measure of weight.

7. Which statement about magnetic fields is untrue?

- (A) The north and south magnetic poles of the earth are close to, but not right underneath, the north and south poles of the earth.
- (B) The instrument that detects the earth's magnetic field is a compass.
- (C) You can't have a north pole without a south pole, or a south pole without a north pole.
- (D) Magnetic field lines extend out in all direction