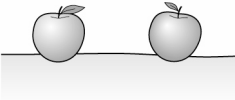


***InterActions* Unit 3 Cycle 2 Sample Quiz**

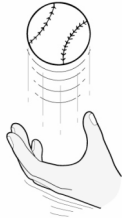
REMEMBER exams are given for the last cycle in a unit. They are comprehensive. So practice taking the Unit 3 Cycle 1 quiz again along with this practice exam. This practice exam only asks questions about Unit 3 Cycle 2.

Use your Scientists' Consensus Ideas sheets for assistance.

1. The gravitational interaction is caused by
 - a. Earth's magnetic field.
 - b. Earth's rotation
 - c. Earth's atmosphere.
 - d. The interaction between two masses.

2. Two apples are sitting near each other on the ground. There is a gravitational interaction
 - a. between the two apples that keeps them apart.
 - b. between the two apples that causes them to move toward each other.
 - c. between the two apples, but you don't notice it because it is so small.
 - d. only between the earth and each apple. The apples do not have a gravitational interaction between them.

3. Earth orbits the Sun because there is a
 - a. gravitational pull from the Sun on the Earth. The Earth is pulled toward the Sun, rather than going off in a straight line.
 - b. gravitational pull from the Sun on the Earth. The Sun pulls the Earth in the direction of the Earth's orbital path.
 - c. gravitational push from the Sun on the Earth. The Sun pushes the Earth away so it does not crash into the Sun.
 - d. strong magnetic interaction between the Sun and the Earth. The gravitational interaction between the Sun and the Earth is small.

4. Weight is another word for
- the force exerted by a planet on an object
 - the mass of an object
 - the density of an object
 - the interaction between an object and the a planet's rotation.
5. Imagine you throw a ball up in the air. Assume there is no drag interaction. As the ball moves upward there
- is a downward force exerted on the ball by the Earth.
 - is an upward force exerted on the ball by the Earth.
 - is the upward force from the hand even though are no longer touching.
 - are no forces acting on the ball.
- 
6. Imagine you throw a ball up in the air. Assume there is no drag interaction. As the ball moves upward
- it speeds up.
 - it slows down.
 - it moves with a constant speed.
 - its speed cannot be described without more information.
7. The variables that affect the gravitational interaction between two objects are:
- masses and directions of motions of the objects
 - masses and speeds of the objects
 - masses and distance between the objects
 - distance between and directions of motions of the objects
 - distance between and speeds of the objects

8. As a space ship of constant mass moves farther away from Earth, the strength of the gravitational interaction between the Earth and the space craft
- increases.
 - decreases
 - stays the same.
 - there is not enough information to answer.
9. A flat sheet of paper is dropped from the top of a building. Assume the force exerted on the paper by the Earth is the same strength as the force from the drag interaction. The paper
- slows down.
 - speeds up.
 - starts slowing to a stop.
 - moves at a constant speed.
10. You throw a ball up in the air. Neglect the drag interaction. As the ball is coming down it
- slows down.
 - speeds up.
 - starts slowing to a stop.
 - moves at a constant speed.
11. A light year is
- the amount of light that strikes Earth in a year .
 - the amount of light the sun gives off in a year.
 - the distance light travels in a year.

12. You put a block in a tank of water. The density of the block is greater than the density of water. The block will

- a. float .
- b. sink.
- c. Remain where you put it.