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## STUDY GUIDE

## Effects of Gravity

In the blank at the left, write the letter of the term that correctly completes each statement.

1. Every object in the universe exerts a force on every other object. This force is called $\qquad$ .
a. friction
b. gravity
2. The measure of the force of gravity on an object is the object's $\qquad$ .
a. weight
b. inertia
$\qquad$ 3. The amount of gravitational force between two objects depends on their $\qquad$ .
a. color and density
b. mass and distance
$\qquad$ 4. Weight is measured in units called $\qquad$ .
a. Newtons
b. seconds
$\qquad$ 5. The greater an object's $\qquad$ the stronger the gravitational force on it.
a. mass
b. velocity
$\qquad$ 6. Mass is measured in units called $\qquad$ -.
a meters and kilometers
b. grams and kilograms
$\qquad$ 7. A scale uses the principle of $\qquad$ to measure how much something weighs.
a. acceleration
b. balanced forces
$\qquad$ 8. Earth exerts a stronger gravitational force than the moon because $\qquad$ has more mass.
a. the moon
b. Earth
3. The masses of your hand and your notebook are quite small, so the force of attraction between them is
$\qquad$ .
a. strong
b. weak
$\qquad$ 10. An object transported from the surface of Earth to the surface of the moon has its weight $\qquad$ .
a. increased
b. decreased
$\qquad$ 11. $\qquad$ doesn't change with changes in gravity.
a. Mass
b. Weight
4. The $\qquad$ mass an object has, the more that object weighs.
a. more
b. less
5. On Earth, gravity exerts a(n) $\qquad$ force on your body.
a. upward
b. downward
$\qquad$
$\qquad$
$\qquad$

## Reinforcement

## Effects of Gravity

Write answers to the following questions on the blank lines provided.

1. What is gravity? $\qquad$
$\qquad$
2. What are two things that the amount of gravitational force between two objects depends on? $\qquad$
$\qquad$
3. Why does Earth exert a stronger gravitational force than the moon? $\qquad$
4. If an object weighs 40 N on Earth would it weigh more than 40 N on the moon? Explain your answer. $\qquad$
$\qquad$
$\qquad$
5. If an object has a mass of 26 g on Earth, would its mass be less than 26 g on the moon? Explain your answer. $\qquad$

Circle the picture in each set below that shows the greater gravitational force between the two objects.


