

Science - Study Guide

Name _____



Comprehension

Matter of Fact



Fill in the bubble next to the correct answer.

1. Which statement is true about gravity?
 - (A) Gravity doesn't exist on small planets or moons.
 - (B) Gravity has nothing to do with an object's mass.
 - (C) Gravity decreases as distance from the center of mass increases.
 - (D) Gravity only works if you are touching something.
2. Which statement is true about tides?
 - (A) Spring tides only happen in the spring.
 - (B) The lowest tides happen during a full or a new moon.
 - (C) Tides are caused by Earth's orbit around the sun.
 - (D) Tides are caused by tsunamis.
3. In order to be a planet, an object must be round, orbit the sun, and _____.

(A) control other objects in its region	(C) rotate around its axis
(B) shine at night	(D) have inertia
4. Why don't the planets in our solar system crash into each other?

(A) Gravity forces them apart.	(C) They move too fast.
(B) Laws of motion don't apply in space.	(D) Gravity and inertia are balanced.
5. Weight is determined by _____.

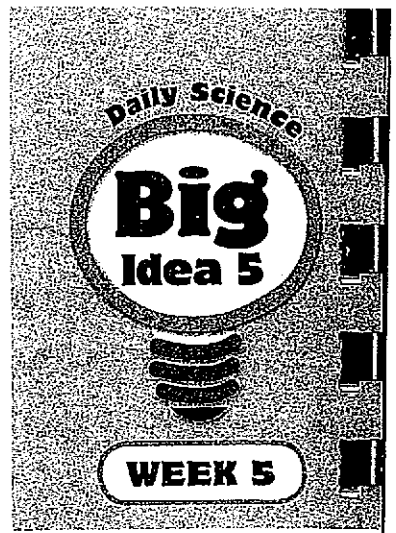
(A) mass alone	(C) gravitational force alone
(B) mass and gravitational force	(D) gravitational force and inertia
6. The bulge at Earth's equator is due to _____.

(A) gravitational force	(C) centrifugal force
(B) an elliptical orbit	(D) a buildup of dust and gas

Name _____



Comprehension Take the Heat



Fill in the bubble next to the correct answer.

1. What are three ways heat can move between objects?
 (A) energy, wavelengths, evaporation
 (B) radiation, conduction, convection
 (C) insulators, conductors, condensers
 (D) absorption, microwaves, condensation
2. _____ is the measure of the kinetic energy of a substance's molecules.
 (A) condensation
 (B) radiation
 (C) temperature
 (D) latitude
3. Hurricanes transfer thermal energy by means of _____.
 (A) convection and heat of condensation
 (B) conduction and convection
 (C) radiation and conduction
 (D) heat of condensation and radiation
4. Why were the first microwave ovens sometimes referred to as "radar ranges"?
 (A) They could detect radio signals.
 (B) They were invented by James Radar.
 (C) They used radar to cook food.
 (D) Microwave ovens and radar systems both use microwaves.
5. Which feature of a thermos does *not* limit heat flow?
 (A) its insulators
 (B) the vacuum inside it
 (C) its shiny surface
 (D) its cup
6. The state of matter in which water molecules move the fastest is _____.
 (A) solid
 (B) ice
 (C) gas
 (D) liquid

Name _____



Comprehension

Ignite Your Curiosity



Fill in the bubble next to the correct answer.

- Which of these is a chemical property of metal?
 - It reacts with oxygen to form rust.
 - It is hard and shiny.
 - It can conduct electricity.
 - It has a very high boiling point.
- Which of these is *not* a way to keep food from oxidizing?
 - storing it in an airtight container
 - adding antioxidants
 - adding carbonation
 - sealing it securely in plastic wrap
- In a chemical reaction, _____.
 - reactants form mixtures
 - CO₂ gas dissolves
 - new substances are formed
 - the freezing point is lowered
- Which of these is *not* a product of combustion?
 - heat
 - light
 - smoke
 - wood
- The electrochemical reaction in a car battery _____.
 - produces rust
 - is reversible
 - stops electric current
 - is irreversible
- Which of these is *not* true about soda?
 - It is a compound.
 - It has a lower freezing point than water.
 - It is a sugar-water solution.
 - It is carbonated.