Grade: Middle School



## **Diagnostic Assessment**

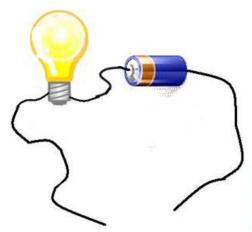
## **Integrated Sciences**

- 1. A student dissolved 50 grams of sugar into 1,000 grams of water. What is the mass of the sugar water solution?
  - a) 950 grams
  - b) 1,000 grams
  - c) 1,050 grams
  - d) 1,500 grams
- 2. Fossils are evidences of organisms that lived long ago. Which of these would most likely form a fossil?
  - a) Fish
  - b) Spider
  - c) Earthworm
  - d) Sea nettle
- 3. Natural processes shape the surface of earth. Most canyons are formed by
  - a) Ice
  - b) Plants
  - c) Steady winds
  - d) Moving water
- 4. A company collects cans for recycling. Some cans are made of Plastic, and some are made of iron. Which of the following is the best way to separate the two types of cans?
  - a) Heat the iron cans until they melt
  - b) Use scissors to cut the cans
  - c) Use a magnet to pick up the iron cans
  - d) Float the cans in water
- 5. Which two forms of energies are released from the flame of a burning candle?
  - a) Electrical and mechanical
  - b) Chemical and electrical
  - c) Light and heat
  - d) Heat and chemical
- 6. Identify the renewable resource of energy from following
  - a) Wood
  - b) Coal
  - c) Oil
  - d) Wind

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- 7. An insect that produces waves in the water also produces waves in the air. What do these air vibrations produce?
  - a) Sound
  - b) Light
  - c) Oxygen
  - d) Heat
- 8. A student plans to make this light bulb glow. All of these objects can be used to complete the circuit **EXCEPT** —



- a) a copper coin
- b) a plastic comb
- c) a metal clip
- d) an iron nail

- 9. High and low tides on Earth are due to the \_\_\_\_\_
  - a) gravitational pull of the moon
  - b) Earth's revolution
  - c) Earth being tilted
  - d) presence of the other planets
- 10. The change from day to night and night to day is considered
  - a) an unpredictable change
  - b) a rotating change
  - c) a natural and cyclical change
  - d) a natural but irregular change

## Fill in the blanks:

11.	The Sun, the moons and the nine planets form the
12.	The Earth revolves around the Sun once every days.
13.	Owls and bats, which sleep in the day and are active during the night, are called
14.	We measure the temperature using a and the unit of measurement is
15.	The most abundant gaseous element in the earth's atmosphere is .

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## **Answer key**

- 1. (c): add the masses of the sugar and the water
- 2. (a): most soft bodied species decompose before they are able to form any fossil
- 3. (d): Moving water in seas and rivers form canyons
- 4. (c): iron is easily attracted to magnets
- 5. (c)
- 6. (d): Windmills are used to capture wind energy
- 7. (a)
- 8. (b): a plastic comb is not a good conductor of electricity
- 9. (a)
- 10. (c)
- 11. Solar system
- 12. 365¼ days
- 13. Nocturnal birds
- 14. Thermometer/ Celsius
- 15. Nitrogen

