

# Water Ag Mag - Vocabulary

## Making Connections through Analysis

### Part I.

**Directions:** Use the words in the word bank to correctly fill in the passage.

Word Bank		
cloud	ground	sun
cycle	rivers and lakes	water

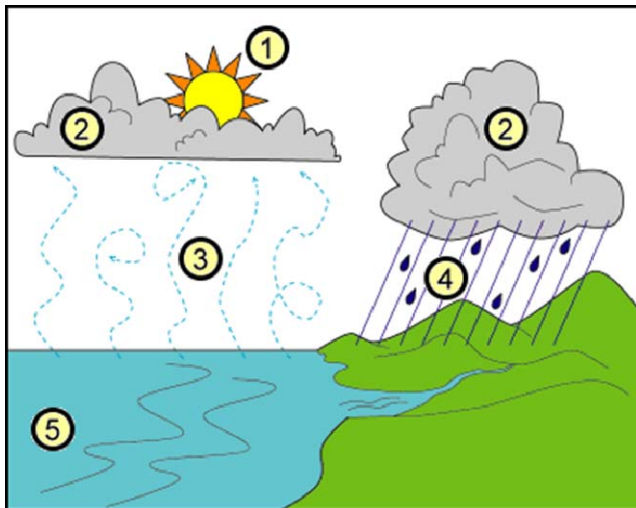
### The Water Cycle

The 1. \_\_\_\_\_ evaporates water from lakes and oceans. As the air rises, it cools. The water vapor condenses into tiny droplets of 2. \_\_\_\_\_. The droplets crowd together and form a 3. \_\_\_\_\_. Wind blows the cloud towards the land. The tiny droplets join together and fall as precipitation to the 4. \_\_\_\_\_. The water soaks into the ground and collects in 5. \_\_\_\_\_. The 6. \_\_\_\_\_ that never ends has started again!

### Part II.

**Directions:** Place the correct word from the word list below in the blank that corresponds with the correct step in the water cycle.

The Ocean      Clouds      Evaporation      Precipitation      Sun



1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

# Water Ag Mag - Math - Algebraic Expressions

**Directions:** Choose the best answer.

**1**

Evaluate  $9c + 14d$ , if  $c = 4$  and  $d = 3$ .

- A 23
- B 50
- C 78
- D 83

**2**

At first measure, a lake has a depth of 5 feet 6 inches. A large rainstorm occurs and the lake is measured again and is 7 feet 3 inches in depth. One week later, the lake is measured again and it is now 6 feet 9 inches deep. How many more inches of water are there now than on day 1?

- A 12 inches
- B 18 inches
- C 21 inches
- D 31 inches

**3**

A gallon of bottled water usually costs \$1.29. If a gallon of bottled water is on sale for \$1.09, how much would you save if you bought 10 gallons of water on sale?

- A  $(\$1.29 - \$1.09) \times 10 = s$
- B  $(\$1.29 + \$1.09) \times 10 = s$
- C  $(\$1.29 \div \$1.09) \times 10 = s$
- D  $(\$1.29 \times \$1.09) \times 10 = s$

**4**

If  $a = 3$ ,  $b = 9$ , and  $c = 5$ , evaluate the following equation.

$$6b + 4c + 7a$$

- A 11
- B 31
- C 68
- D 95

# Water Ag Mag - Math - Algebraic Expressions

Directions: Choose the best answer.

**5**

A biker started out with 72 ounces of water. He drank 14 ounces of water after riding 8 miles and 21 more ounces of water after riding 12 more miles. How many ounces did the biker have left after his ride?

- A  $72 + (14 - 21) = w$
- B  $72 - (8 - 21) = w$
- C  $72 - (14 + 21) = w$
- D  $72 + (8 + 12) = w$

**6**

If  $k = 9$  and  $z = 13$ , evaluate the following equation.

$$(k \times z) + (k + z)$$

- A 64
- B 387
- C 188
- D 279

**7**

If  $m = 4$ ,  $s = 3$ , and  $g = 2$ , evaluate the following equation.

$$3g + 5m + 6s$$

- A 40
- B 14
- C 35
- D 43

**8**

If  $b = 3$ ,  $a = 2$ , and  $q = 6$ , evaluate the following equation.

$$13a - 5b + 9q$$

- A 83
- B 65
- C 95
- D 63

# Water Ag Mag - Reading Passage

“The Water Cycle”

Taken from *Life Science* by Prentice Hall

How could you determine whether life has ever existed on another planet in the solar system? One piece of evidence scientists look for is the presence of water. This is because water is the most common compound in all living cells on Earth. Water is necessary for life as we know it.

Water is recycled through the water cycle. The water cycle is the continuous process by which water moves from Earth’s surface to the atmosphere and back. The processes of evaporation, condensation, and precipitation make up the water cycle.

The process by which molecules of liquid water absorb energy and change to the gas state is called evaporation. In the water cycle, liquid water evaporates from the Earth’s surface and forms water vapor, a gas, in the atmosphere. Most water evaporates from the surfaces of oceans and lakes. The energy for evaporation comes from the sun.

Some water is also given off by living things. For example, plants take in water through their roots and release water vapor from their leaves. You take in water when you drink and eat. You release liquid water in your wastes and water vapor when you exhale.

What happens next to the water vapor in the atmosphere? As the water vapor rises higher in the atmosphere, it cools down. When it cools to a certain temperature, the vapor turns back into tiny drops of liquid water. The process by which a gas changes to a liquid is called condensation. The water droplets collect around particles of dust in the air, eventually forming clouds.

As more water vapor condenses, the drops of water in the cloud grow larger and heavier. Eventually the heavy drops fall back to Earth as a form of precipitation—rain, snow, sleet, or hail. Most precipitation falls back into oceans or lakes. The precipitation that falls on land may soak into the soil and become groundwater. Or the precipitation may run off the land, ultimately flowing into a river or ocean once again.

## Water Ag Mag - Reading Passage

**Directions:** Read each question and choose the best answer.

1

The most common compound in all living things on Earth is \_\_\_\_\_.

- A Carbon Dioxide
- B Sodium Chloride
- C Water
- D Nitrogen

2

What event comes immediately after evaporation in the water cycle?

- A Condensation
- B Precipitation
- C Respiration
- D Evaporation

3

The process of water turning into a gas state is called \_\_\_\_\_.

- A Condensation
- B Precipitation
- C Evaporation
- D Respiration

4

Water is \_\_\_\_\_ through the process of the water cycle.

- A Filtered
- B Recycled
- C Lost
- D Enhanced

## Water Ag Mag - Reading Passage

**Directions:** Read each question and choose the best answer.

5

The process by which water moves from the Earth's surface to the atmosphere and back is called the \_\_\_\_\_.

- A Life cycle
- B Reproduction cycle
- C Rain Cycle
- D Water Cycle

6

Where does the energy for evaporation in the water cycle come from?

- A Land
- B Sun
- C Machinery
- D Water

7

Clouds are formed by droplets of \_\_\_\_\_ collecting around particles of dust in the air.

- A Water
- B Roots
- C Leaves
- D Sand

8

Humans release water vapor when we \_\_\_\_\_.

- A Breathe in
- B Drink
- C Exhale
- D Sneeze



### Extended Response—WATER

Waterways around the world play an important role in the industry of agriculture. Discuss specific ways in which the waterways around the world impact agriculture. Think about imports and exports, irrigation and transportation and the impact each of these has on agriculture.