

ORANGE PUBLIC SCHOOLS
OFFICE OF CURRICULUM AND INSTRUCTION
OFFICE OF SCIENCE

GRADE 3 SCIENCE

Pre-Assessment

Unit 2



School Year 2014-2015

Directions for Grade 3 Pre-Assessment

The Grade 3 Pre- Assessment is made up of multiple choice questions, constructed response questions and performance questions.

Read each question carefully, including diagrams and/or graphs.

Work as rapidly as you can without sacrificing accuracy. Do not spend too much time puzzling over a question that seems too difficult for you. Answer the easier questions first; then return to the harder ones. Try to answer every question, even if you have to guess.

Where necessary, you may use scratch paper for your work. Do not use the margins of the test booklet to do scratch work.

FOR ALL QUESTIONS, YOU MUST RECORD ALL OF YOUR ANSWERS ON THE TEST BOOKLET.

WATER

Pre-Assessment

Name
Date

1. • What happens to the level of the water in the straw when the water in the bottle is *heated*?

(Circle the one best answer.)

- A. The water level goes down.
- B. The water level stays the same.
- C. The water level goes up.

- Why does this happen?



2. • Which of these processes is involved in causing rain?

(Circle the one best answer.)

- A. evaporation
- B. condensation
- C. both evaporation and condensation

- Explain your answer.

WATER

Pre-Assessment

Name _____

3. Jack and Jill went up the hill to fetch a pail of water. Jack fell down and broke his crown,

And Jill came tumbling after.

If the pail of water spilled on the hill, which direction did the water flow?

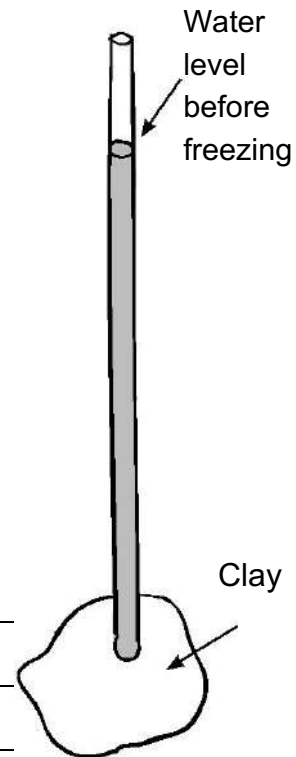
4. Shanna stuck one end of a clear straw into a ball of clay. She filled the straw part way with water and marked the water level. She then placed the straw setup in the freezer.

- Which statement describes the level of the water (ice) in the straw after it froze?

(Circle the one best answer.)

- A. The water level went down when the water froze.
- B. The water level stayed the same when the water froze.
- C. The water level went up when the water froze.

- Explain why you chose that answer.



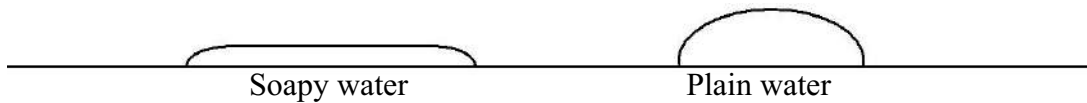
WATER

Name

Pre-assessment

5. What is precipitation?

6. Look at the two pictures of drops on a flat, waterproof surface. The drop on the left is soapy water, and the drop on the right is plain water.



- a. What causes the plain water to look like it does?

- b. What causes the soapy water to look like it does?

7. On a rainy day, Juan noticed that some raindrops moved down the window more rapidly than others.

Drops



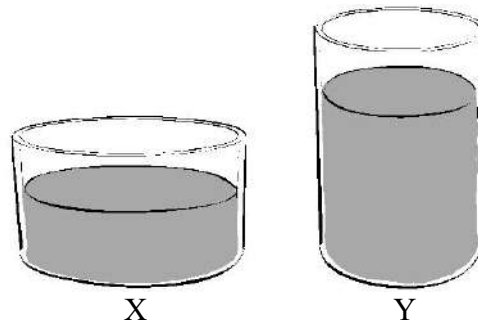
- Put an X through the drop you think moved the slowest.
- Circle the drop you think moved the fastest.

WATER

Pre-Assessment

Name _____

13. Ted poured the *same amount of water* into two small containers, X and Y. He placed them together where they would not be disturbed.



After several days, all of the water had evaporated from one of the containers. The other container still had some water. _____

Which container, X or Y, was empty?

Explain why the water in that container evaporated more quickly than the water in the other container.

- c. Look at the picture of a block of wood in a cup of water.

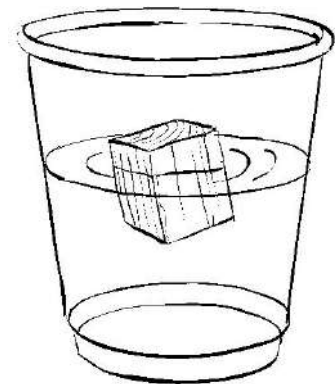
Which statement below is true?

(Circle the one best answer.)

- A. The block of wood is less dense than the water.
B. The block of wood is the same density as the water. C.

The block of wood is denser than the water.

- What is your evidence?



WATER

Name

Pre-Assessment

10. a. Draw and label a picture of the general water cycle. Be sure to label all changes.

b. Name three places that a water particle can be found on Earth other than in a body of water such as a lake, river, or ocean.

(1) _____

(2) _____

(3) _____

WATER

Name _____

Pre-Assessment

11. Explain why, when water freezes, the ice floats on water instead of sinking.

12. Joanna's glasses "steamed up" when she went into the bathroom after her sister finished her shower.

- What was the "steam"? _____

- What caused the "steam" to form on her glasses?

13.
 - Does water do the same thing on all surfaces? _____

- Explain your answer.

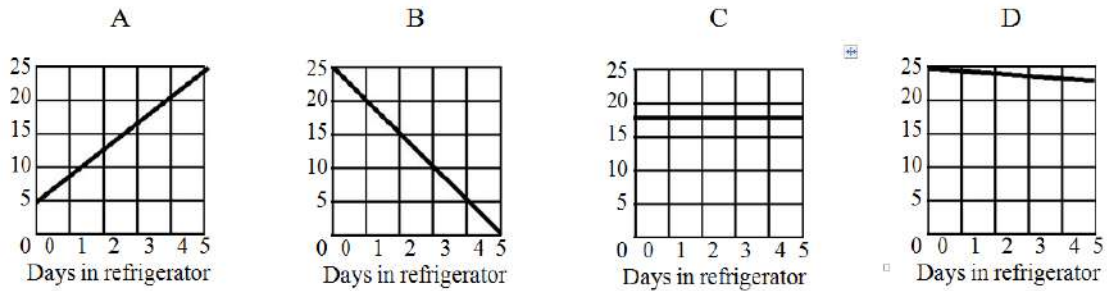
WATER

Name _____

Pre-Assessment

14. Mei put an uncovered glass of water in the refrigerator. Each day she measured and recorded the water left in the glass. Which graph shows what probably happened?

(Circle the one best answer.)



15. Hanna did an investigation to find out if adding salt to water would change the time it takes water to freeze. Her data table is shown below.

Solution	Time to freeze (minutes)	
	Trial 1	Trial 2
100 mL water	55	52
100 mL water + 10 g salt	75	70
100 mL water + 20 g salt	115	120

According to the table,

(Circle the one best answer.)

- A. water cools at a rate of 4°C per minute.
B. water takes less time to freeze when salt is added.
C. the more salt added, the longer the solution takes to freeze.
D. the time for freezing water does not change no matter how much salt is added.