

ORANGE PUBLIC SCHOOLS  
OFFICE OF CURRICULUM AND INSTRUCTION  
OFFICE OF SCIENCE

# **GRADE 3 SCIENCE**

## **Unit 2**

## **I-Check 2**



School Year 2014-2015

# Directions for Grade 3 I-Check Assessment

The Grade 3 I-Check 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.

21ab. List the following types of water in order, from least dense to densest.

warm water

cold water

ice

least dense

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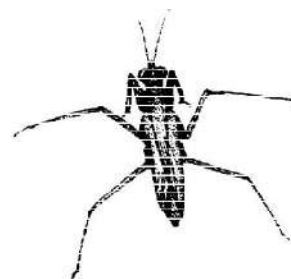
\_\_\_\_\_

densest

\_\_\_\_\_

22. Water striders are insects that are able to “stand” on water, move about, and capture prey without sinking. What property of water allows water striders to stay on top of water?

\_\_\_\_\_



23. What science word describes what happens when water soaks into another material like a paper towel? \_\_\_\_\_

# I-CHECK

Name \_\_\_\_\_

## Investigation 2—Hot Water, Cold Water

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24. Oil, water, and corn syrup are layered in a tall, thin container. All are at the same temperature.

- What does the layering tell you about the density of the oil compared to the corn syrup?

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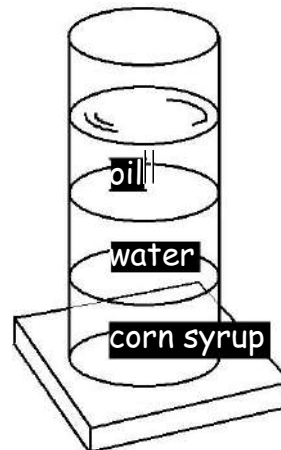
- Describe the evidence that supports your answer.

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25. Matthew's mother left two plastic bottles in the trunk of their car. One was full of water, and the other was empty. The temperature dropped below  $0^{\circ}\text{C}$  that night. When his mother opened the trunk the next afternoon, she discovered the bottle with the water had cracked.

Explain why the bottle with the water cracked but the empty bottle did not.

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# I-CHECK

Name \_\_\_\_\_

## Investigation 2—Hot Water, Cold Water

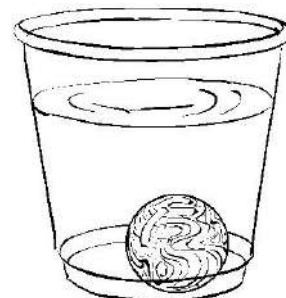
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26. Pete put a marble in a cup of water as shown in the picture.

- Which statement about the marble and the water is true?

*(Circle the one best answer.)*

- A. The marble is less dense than the water.
- B. The marble has the same density as the water.
- C. The marble is denser than the water.



- What is your evidence?

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27. • What happens to the level of the water in the straw when the water in the bottle is *cooled* (but *not frozen*)?

*(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?

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# I-CHECK

Name \_\_\_\_\_

## Investigation 2—Hot Water, Cold Water

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28. Donna put two cups of water in the freezer. There was 50 mL of water in cup 1 and 25 mL of water in cup 2. Which sentence below describes what will be the *same* for both cups?

*(Circle the one best answer.)*

- A. The temperature at which the water freezes.
- B. The time it takes for the water to freeze.
- C. The volume of frozen water in each of the cups.
- D. The mass of the frozen water in each of the cups.

29. Mateo had two blocks that were the same size. He dropped each block into a container of water.

Why did block 1 float and block 2 sink?

*(Circle the one best answer.)*

- A. Block 1 contained more air bubbles than block 2.
- B. Block 2 absorbed more heat than block 1.
- C. Block 1 weighed more than block 2.
- D. Block 2 is made of a different material than block 1.

