

Student's Name \_\_\_\_\_

## THINKING WITH SCIENCE

### Observation Quiz

#### Lesson 2 (Eggs E and F)

1. To find out whether the result is caused by a difference in the eggs or the liquids, we:
  - A. add salt to Liquid E.
  - B. switch the eggs between Liquid E and Liquid F.
  - C. weigh the eggs.
  - D. taste the liquids.
  
2. If the first experimentation question reads, "If you put Egg E into Liquid F, will it float?", the second experimentation question would:
  - A. reverse the letters and substitute the word "sink" for "float".
  - B. reverse the letters in the first question.
  - C. ask if Egg E is less dense.
  - D. ask if Egg F is more dense.
  
3. If the following questions have been asked about E:  
    "Does E contain any water?" (Yes)  
    "Does E contain any salt?" (Yes)  
    "Does E contain any sugar?" (Yes)  
  
    Then, the next question to ask about E is, "Does E contain \_\_\_\_\_ water, salt, and sugar?"
  - A. more
  - B. only
  - C. less
  - D. much
  
4. What is the control question for, "Does E contain any sugar?"
  - A. Does E contain only sugar?
  - B. Does F contain any sugar?
  - C. If you put more sugar in E, would the eggs float?
  - D. How much sugar is in E?
  
5. In this focus, Liquid E contained more salt, and F contained more:
  - A. sugar
  - B. water
  - C. of an unknown substance.
  - D. None of the above.

## Quiz on Lessons 2, continued.

6. Suppose that the following question were asked, and the following answer given:  
"If you removed all of the salt from F, would the eggs still float in it?" (No)

This question and answer prove that:

- A. the salt has something to do with the eggs floating.
  - B. the salt has nothing to do with the eggs floating.
  - C. the sugar must be making the eggs float.
  - D. the sugar has nothing to do with the eggs floating.
7. The eggs float better in Liquid F because it is:
- A. denser.
  - B. saltier.
  - C. heavier.
  - D. thicker.
8. Liquid F contains a greater - - - - - of salt and sugar.
- A. amount.
  - B. bulk
  - C. weight.
  - D. total
9. Why might this experiment not work if you tried it at home?
- A. your salt might be different.
  - B. not all eggs have the same density.
  - C. not all tablespoon measurers are the same size.
  - D. your sugar might be different.

Students's Name ANSWER KEY

**OBSERVATION QUIZ FOR "THINKING WITH SCIENCE"**

Quiz for Lesson 2

Quiz Number \_\_\_\_\_

1. A ☒ B C D E
2. ☒ A B C D E
3. A ☒ B C D E
4. A ☒ B C D E
5. ☒ A B C D E
6. ☒ A B C D E
7. ☒ A B C D E
8. A B C ☒ D E
9. A ☒ B C D E
10. A B C D E
11. A B C D E
12. A B C D E
13. A B C D E
14. A B C D E
15. A B C D E
16. A B C D E
17. A B C D E
18. A B C D E
19. A B C D E
20. A B C D E