

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

## THINKING WITH SCIENCE

### Observation Quiz

#### Lesson 13 (The Volcano)

1. Why is this focus called "The Volcano"?
  - A. It explodes.
  - B. The red rises like a volcano.
  - C. The green doesn't explode.
  - D. The green flows like lava.
2. How did we know that the red was less dense than the colorless?
  - A. It rises.
  - B. It's red.
  - C. It looks hot.
  - D. The colorless had no color.
3. How did we find out that the green was more dense than the colorless?
  - A. We noticed that it was green.
  - B. We noticed that it looked cold.
  - C. We turned it over.
  - D. We examined it in the bottle.
4. What word does an experimentation question always start with?
  - A. Only
  - B. Does
  - C. If
  - D. When
5. The word "tentative" to describe a conclusion means what?
  - A. Temporary.
  - B. Complete.
  - C. Long.
  - D. Short.
6. If a conclusion can be called "good", that means:
  - A. It is temporary.
  - B. It tells you how to set up the focus.
  - C. It isn't final.
  - D. It isn't complete.

7. The control question for "Does the red contain any water?" would be:
- A. Does the red contain only water?
  - B. Does the green contain only water?
  - C. Does the red contain any food coloring?
  - D. Does the green contain any water?
8. Why do we program our space probes to look for water on other planets?
- A. We want to know whether there could be life there.
  - B. We want to know whether humans could survive there.
  - C. We want to know whether there is any hydrogen there.
  - D. We want to know whether there would be water to drink if we went there.
9. How did we find out that the red and green food colorings had the same density.
- A. We performed a mental experiment.
  - B. We mentally switched the colors.
  - C. We put the red in the green bottle and the green in the red bottle.
  - D. All of the above.
10. A controlled variable in this experiment was:
- A. water.
  - B. food coloring.
  - C. identical bottles.
  - D. All of the above.
11. Why did the ancient camel caravans travel so far to obtain salt?
- A. It preserves food.
  - B. They had too much of it.
  - C. It makes food taste better.
  - D. None of the above.
12. When is something valuable?
- A. If you want it, but don't have it.
  - B. When you have a lot of it.
  - C. When you have it, and want more of it.
  - D. None of the above.
13. A chemical name for water is:
- A. dihydrogen monoxide.
  - B. CO<sub>2</sub>
  - C. O<sub>2</sub>H
  - D. oxygen hydride

14. Why was the green more dense than the colorless?
- A. It was green.
  - B. It flowed like lava.
  - C. It had more salt.
  - D. It sank.
15. A comma in a sentence means that there is a:
- A. period.
  - B. pause
  - C. question
  - D. space
16. What is a common example of density layering?
- A. fresh water floats on salt water.
  - B. a good salad dressing has 4 layers.
  - C. pure ocean water is found near the bottom.
  - D. All of the above.
17. The big island that is just north of the Olympic Peninsula is:
- A. Whidbey
  - B. Canada
  - C. Sekiu
  - D. Vancouver
18. Each kind of fish likes a specific:
- A. food
  - B. salt content
  - C. temperature
  - D. All of the above.
19. If there are no salmon where your bait is located, then probably:
- A. You won't catch any salmon.
  - B. No fish will strike your bait.
  - C. They are somewhere else.
  - D. You should reel in your line.
20. What kind of water do halibut prefer?
- A. salty
  - B. very salty
  - C. slightly salty
  - D. fresh

Students's Name Answer Key

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

Quiz for Lesson 13

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