Student's Name _____
THINKING WITH SCIENCE
Observation Quiz
Lesson 20 (Volcano 2)

1. How do we know that the red is less dense than the colorless?
   A. because it is red.
   B. because it rises.
   C. because it is colored.
   D. because it doesn't sink.

2. How did we find out that the green was more dense?
   A. we turned it over.
   B. we put red food coloring into it.
   C. it didn't rise.
   D. none of the above.

3. An experimentation question always begins with what word?
   A. does
   B. only
   C. if
   D. why

4. How did we know the green was more dense.
   A. it was green
   B. it sank
   C. it was colored
   D. none of the above

5. A conclusion can be called "reliable" if what is true?
   A. it is supported by the data.
   B. it is not refuted by the data
   C. neither of the above.
   D. both of the above.

6. The control question for "Does the red contain any water?" is:
   A. Does the red contain only water?
   B. Does the green contain any water?
   C. Both of the above.
   D. neither of the above.

7. What word best fits in the following blank: "Does the red contain ____ food coloring and water?"

A. red
B. only
C. pure
D. none of the above

8. How did we find out that the red and green food coloring had the same density?

A. We put some red food coloring in the colorless.
B. We put some green food coloring in the colorless
C. We switched the food coloring mentally.
D. We weighed them.

9. What did the two experiments prove?

A. the density of the red and green food coloring was the same.
B. the food coloring didn't affect the results.
C. the food coloring didn't matter.
D. all of the above.

10. What do we program our space probes to look for on other planets?

A. food coloring
B. water
C. rocks
D. oxygen

11. If you get 3 containers of water from the same faucet, and they are different in one way, what would that way be?

A. temperature
B. minerals
C. salts
D. color

12. When the word "medium" is used in a sentence, it usually means what?

A. in the middle
B. not hot and not cold
C. all the way
D. scarce

13. Where do hot fluids rise?

A. In cold substances.
B. In cold fluids of the same type.
C. In cold water
D. In cold mercury

14. When does heat rise?

A. always
B. sometimes
C. when the surrounding air is cold
D. never

15. When you are talking about hot fluids rising in cold fluids, why do you have to add the phrase "of the same type"?

A. because some fluids are more dense than other fluids.
B. because no two substances have the same density.
C. because solids don't rise in fluids.
D. none of the above.

16. Why doesn't the rule about hot substances rising in cold substances not apply to solids?

A. solids can't flow.
B. solids are too dense.
C. solids aren't dense enough.
D. none of the above

Students's Name Answer Key

OBSERVATION QUIZ FOR "THINKING WITH SCIENCE"

Quiz for Lesson 20 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