

Student's Name _____

THINKING WITH SCIENCE

Observation Quiz

Lesson 17 (The Changing Weight)

1. The difference in the weights in trials A,B,C and D is caused by:
 - A. the sinkers
 - B. the fluids
 - C. the nails
 - D. the scale
2. All liquids and gases can be called:
 - A. substances
 - B. fluids
 - C. neither of the above
 - D. both of the above
3. Why is the scale called a "reverse" scale?
 - A. because the numbers on it are reversed.
 - B. because you have to add nails to cup A.
 - C. because you have to subtract nails from 600.
 - D. all of the above.
4. How could you easily tell that the sinker weighed less in B than in A?
 - A. the A end of the scale was up before more nails were added.
 - B. it took more nails to make the scale go down with B.
 - C. both of the above.
 - D. neither of the above.
5. The manipulated variable in this focus was:
 - A. the fluids
 - B. the jars
 - C. the sinker
 - D. none of the above.
6. Which of the following is not a state of matter?
 - A. solid
 - B. gas
 - C. plasma
 - D. liquid

7. Which of the following is not one of the three main components of air?
- A. carbon monoxide
 - B. nitrogen
 - C. oxygen
 - D. carbon dioxide
8. What is the most abundant gas in air?
- A. oxygen
 - B. nitrogen
 - C. carbon dioxide
 - D. carbon monoxide
9. Which of the following would kill you if you drank a cupful?
- A. hydrochloric acid
 - B. rubbing alcohol
 - C. Clorox
 - D. all of the above.
10. What do we program our space probes to look for on other planets?
- A. rocks
 - B. mercury
 - C. oxygen
 - D. water
11. Which of the following does Drano not dissolve?
- A. protein
 - B. carbohydrate
 - C. fat
 - D. all of the above.
12. Why is a "trap" required in all drain pipes?
- A. to keep mice out.
 - B. to keep sewer gases out.
 - C. to keep rats out.
 - D. to keep water out.
13. The main difference between fluids A,B,C and D that caused the different weights is:
- A. evaporation
 - B. thickness
 - C. density
 - D. weight

14. If a conclusion is supported by the data and not refuted by the data, we can call it:
- A. reliable
 - B. tentative
 - C. complete
 - D. final
15. Eggs float in:
- A. tap water
 - B. alcohol
 - C. salt water
 - D. all of the above.
16. Things weigh more in fluids that are less:
- A. dense
 - B. thick
 - C. heavy
 - D. clear
17. Why do air bubbles go upward in any liquid?
- A. they like to float.
 - B. they have less gravity.
 - C. they are less dense.
 - D. liquids are dense.
18. Why did the test subject weigh only 5 pounds after 1 hour in Lake Drano?
- A. because Lake Drano was more dense.
 - B. because Lake Drano dissolved everything except his skeleton.
 - C. because Drano doesn't dissolve carbohydrates.
 - D. because he was not cooperative.
19. Why did the test subject weigh less in Puget Sound than in Clear Lake?
- A. Puget Sound is salty.
 - B. Clear lake is fresh water.
 - C. Puget Sound is more dense than Clear Lake.
 - D. all of the above.
20. To "refute" a conclusion means:
- A. to prove it true.
 - B. to prove it false.
 - C. to confirm it.
 - D. to change it.

Students's Name

Answer Key

OBSERVATION QUIZ FOR "THINKING WITH SCIENCE"

Quiz for Lesson

17

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