

Name: _____

Date: _____

FIFTH GRADE-SCIENCE (SCIENCE5_3)

1.

Use the table below to answer this question.

Weight of Paper Airplane	Time of Flight
10 grams	15 seconds
15 grams	11 seconds
20 grams	8 seconds
25 grams	5 seconds
30 grams	3 seconds

Bob's science class was studying flight using a paper airplane. Paper clips were added to the plane to change the weight. Which conclusion is supported by the data in the table?

- A. Lighter planes stay up for less time.
- B. Lighter planes stay up longer.
- C. The weight of the plane makes no difference.
- D. Heavier planes stay up longer.

2. Which of the following is the BEST way to find much of the information astronomers have learned about the solar system?

- A. Write to a university astronomer.
- B. Look up "solar system" on the Internet.
- C. Buy a large reflecting telescope.
- D. Read the astrology column in the newspaper.

3.

Use the table below to answer this question.

Rock Sample	Rocks Scratched by		
	Fingernail	Penny	Paper Clip
Rock 1	yes	yes	yes
Rock 2	no	no	yes
Rock 3	no	yes	yes
Rock 4	no	no	no

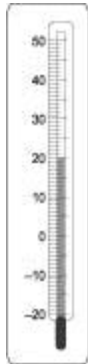
The rock soapstone is named for the fact that it feels like a bar of soap. Its hardness is about the same as soap. Which of the rocks described above could have been soapstone?

- A. Rock 1
- B. Rock 2
- C. Rock 3
- D. Rock 4

4. Which instrument should you use to measure temperature?



- A.
- B.



- C.



- D.

5. When students enter the classroom on a day when the teacher is doing a demonstration, the first thing they should do is

- A. sit in their seats and wait for the teacher to give instructions.
 - B. go to the demonstration desk and clean up what was left from the previous class.
 - C. examine the lab equipment carefully and come up with a creative hypothesis.
 - D. perform a quick practice of the demonstration before the teacher starts class.
-
6. Grass plants 2 cm tall were planted and then grown under different light conditions. The heights of the plants after one week are shown below.

Light	Height of Plants After One Week
Blue and red light	10 cm
Green light	5 cm
Sunlight	8 cm
Darkness	3 cm

What do the results show?

- A. The plants in the darkness grew fastest.
 - B. The plants in the sunlight grew as fast as the ones in blue and red light.
 - C. The plants in green light grew as fast as the ones in the darkness.
 - D. The plants in blue and red light grew faster than the ones in green light.
-
7.
Use the table below to answer this question.

Cause of Death	Deaths per 100,000 People
Heart Disease	281
Cancer	205
Stroke	59
Lung Disease	39
Accidents	35
Pneumonia	31
Diabetes	22
Liver Disease	10

According to the table, which is the most accurate statement?

- A. More people die of cancer than heart disease.
- B. Almost twice as many people die of stroke than pneumonia.
- C. Accidents are the greatest cause of death.
- D. About the same number of people die of lung and liver diseases.

8. Joanne wanted to know how far she could throw a ball. She threw it ten times and measured the distance each time. She always got a different measurement. Which of the following will give her the MOST accurate answer?

- A. choose the longest throw
- B. choose the shortest throw
- C. average all ten throws
- D. average the best throws

9. A scientist notices that a living organism changes color when it is exposed to a lower temperature. The scientist is making

- A. an inference.
- B. a hypothesis.
- C. a conclusion.
- D. an observation.

10.

Use the table below to answer this question.

Time of Day	Grams of Water Lost
7–8 A.M.	180
9–10 A.M.	206
11–Noon	222
1–2 P.M.	233
3–4 P.M.	225
5–6 P.M.	210
7–8 P.M.	192
9–10 P.M.	98
11–Midnight	88

Jane measured how much water a plant lost from 7:00 in the morning until midnight. The table shows how much water the plant lost during the different hours. What can you

infer from the table?

- A. Plants lose more water during daylight hours.
 - B. Plants do not lose water after midnight.
 - C. Plants lose more water in the morning than in the afternoon.
 - D. Plants lose the most water from 11:00 A.M. to noon.
-

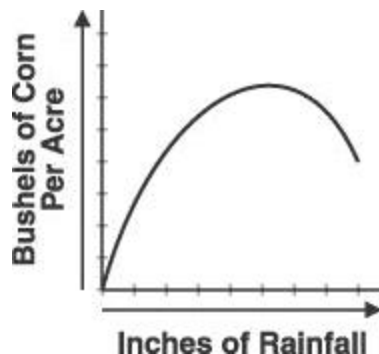
11. Dan thinks the boys in his school are taller, on the average, than the girls. Rose thinks the girls are taller. What would be the BEST way to find out who is right?

- A. Ask a teacher who knows all of the students in the school.
 - B. Measure the heights of all the boys and girls in the school.
 - C. Look in the encyclopedia for the average heights of people of various ages.
 - D. Take a survey of what the other boys and girls in the school think.
-

12. Which is NOT a measure of volume?

- A. 5 L
 - B. 10 mL
 - C. 15 cm³
 - D. 20 kg
-

13. Which of the following is the BEST conclusion that can be made from this graph?



- A. The more rain there is, the better the corn will grow.
 - B. Corn needs rain to grow, but too much rain is harmful.
 - C. Different kinds of corn need different amounts of rain to grow best.
 - D. Corn can grow well even if there is no rain.
-

14. If an important experiment you are doing has an unexpected result, your next step should be to

- A. do a different experiment.
 - B. change the result to what you expected.
 - C. carefully repeat the same experiment.
 - D. publish the unexpected result.
-

15. In science class Sally spilled an unknown chemical on her hand. What should she do?

- A. wipe it off on her clothes
- B. try to identify the chemical
- C. wash her hand thoroughly
- D. wait for the chemical to dry

16. Use the table below to answer this question.

Parts of Tongue Responsible for Tastes

	Salt	Sweet	Bitter	Sour
Tip	X			
Across the back			X	
Midway back on the left and right sides				X
Near the tip on the left and right sides	X			

Which diagram correctly illustrates where the flavors of certain foods are tasted on the tongue?



A.



B.



C.



D.

17. Alice did an investigation to see if exercise affected the number of times her heart beat in 15 seconds. In her investigation she took her pulse after doing jumping jacks. The table below shows what she found.

Number of Jumping Jacks	Number of Heartbeats in 15 Seconds
0	20
5	26
10	28
15	32
20	36

From her investigation, Alice can conclude that the number of heartbeats

- A. decreases as exercise increases.
- B. increases as exercise increases.
- C. stays the same as exercise increases.
- D. is not related to the amount of exercise.

18.

Use the pictures below to answer this question.



Pot A

- One radish seed
- Garden soil
- 100 mL rainwater each day



Pot B

- One radish seed
- Garden soil
- 100 mL rainwater with vinegar each day



Pot C

- One radish seed
- Garden soil
- 100 mL rainwater with 10 grams salt each day

What is the variable in this experiment?

- A. type of seed planted

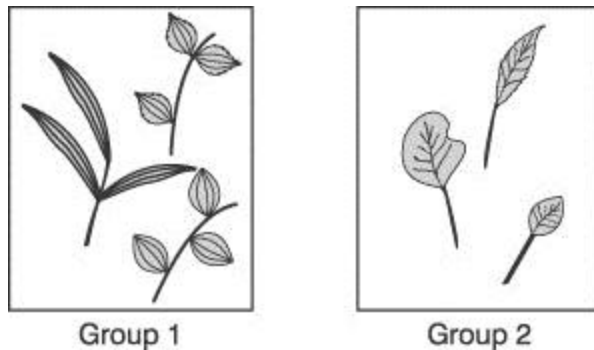
- B. type of water used
- C. amount of water used
- D. soil type

19. Frances counted the number of ants that left an anthill at different times of the day. She recorded the time and the number of ants for five minutes every hour. Which question was Frances trying to answer?

- A. What type of food do ants like best?
- B. How many ants are in an anthill?
- C. What time of day are ants most active?
- D. Where do ants go to find their food?

20.

Use the pictures below to answer this question.



Which two characteristics were used to sort the leaves into two groups?

- A. pattern of veins and number of leaves on each stem
- B. shape of leaves and length of stem
- C. size of leaves and number of leaves on each stem
- D. pattern of veins and shape of leaves

21.

Use the table below to answer this question.




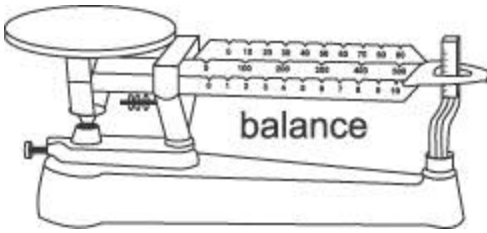
Seeing Light in the Ocean

Depth (in feet)	Light
1000	Visible by human eye
2000	Visible by instruments
3000	Pitch dark
4000	Pitch dark

What is the deepest you can go and still see by using instruments?

- A. 1000 feet
- B. 2000 feet
- C. 3000 feet
- D. 4000 feet

22. What would be the best tool to use when measuring the distance that a ball bounces after being dropped from different heights?

- A.  magnifying glass
- B.  beaker
- C.  meterstick
- D.  balance

23.

Use the table below to answer this question.

Salt	Composition (%)
Sodium	30.4
Magnesium	3.7
Calcium	1.16
Chloride	55.2
Sulfate	7.7

Which is the most abundant dissolved material in ocean water?

- A. sodium
 - B. magnesium
 - C. calcium
 - D. chloride
-

24.

Use the list below to answer this question.

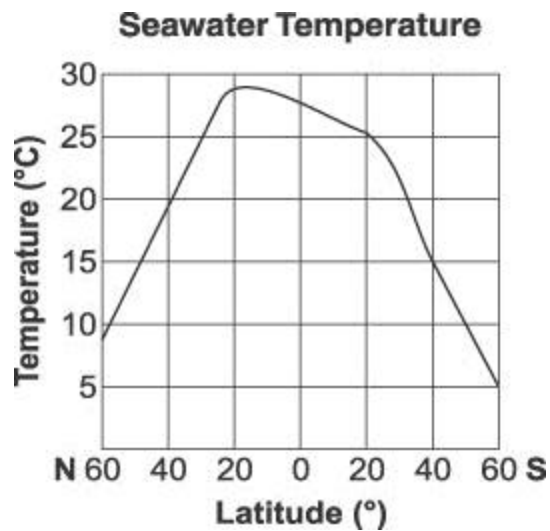


Which three things have the most in common?

- A. air, fish, frog
 - B. fish, frog, snake
 - C. frog, snake, soil
 - D. snake, soil, water
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25.

Use the graph below to answer this question.



The ocean temperature is warmest between

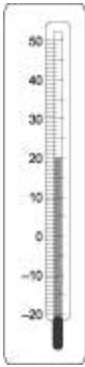
- A. 40° and 20° north latitude.
- B. 20° and 0° north latitude.
- C. 0° and 20° south latitude.
- D. 40° and 60° south latitude.

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FIFTH GRADE-SCIENCE(SCIENCE5_3)

(Answer Key)

- 1. Lighter planes stay up longer.
- 2. Look up "solar system" on the Internet.
- 3. Rock 1
- 4.



- 5. sit in their seats and wait for the teacher to give instructions.
- 6. The plants in blue and red light grew faster than the ones in green light.
- 7. Almost twice as many people die of stroke than pneumonia.
- 8. average all ten throws
- 9. an observation.
- 10. Plants lose more water during daylight hours.
- 11. Measure the heights of all the boys and girls in the school.
- 12. 20 kg
- 13. Corn needs rain to grow, but too much rain is harmful.
- 14. carefully repeat the same experiment.
- 15. wash her hand thoroughly

16.



17. increases as exercise increases.

18. type of water used

19. What time of day are ants most active?

20. pattern of veins and number of leaves on each stem

21. 2000 feet

22. 
meterstick

23. chloride

24. fish, frog, snake

25. 20° and 0° north latitude.