

Science AMI DAY 4- Hughes

Basic Process Skills

Questions 1–4: Read each statement. If the statement is an observation, write “O” on the line at the left. If the statement is an inference, write “I” on the line at the left.

1. I hear a dog barking.
2. In two weeks, there will be snow on the ground.
3. The temperature today is 4°C.
4. I smell smoke coming from the pile of wood.

Questions 5–8: Write the letter of the correct answer on the line at the left.

5. Which of the following is an observation that can be made from the illustration at the right?
 - a. Bird A had to fly a great distance to find food.
 - b. Bird A is carrying a worm in its mouth.



6. Which of the following is an inference that can reasonably be made from evidence in the illustration?
 - a. The hole in the tree contains a nest.
 - b. Birds A and B do not have enough food to eat.

7. Which of the following is a quantitative observation?
 - a. Bird A’s beak is 35 mm long.
 - b. Bird B eats worms.

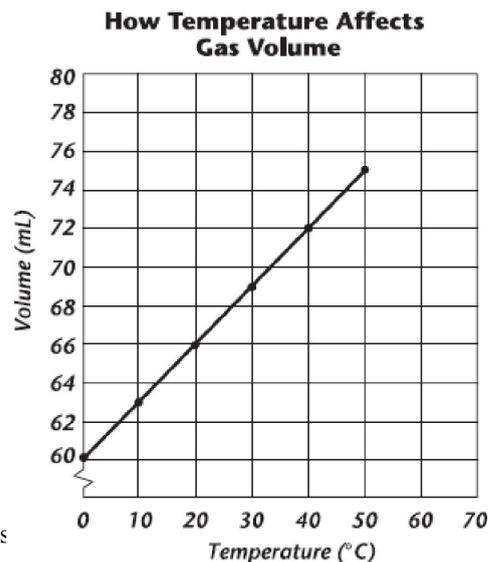
8. Which of the following statements about observations is true?
 - a. Only scientists can make accurate observations.
 - b. Observations always involve gathering evidence through the

senses.

Questions 17–18: Read the paragraph below and examine the graph. Then answer each question on the line at the left.

A scientist heated an expandable rubber container. As the container was heated, the gas inside expanded. The scientist measured the container’s size at every temperature increase of 10 degrees and then graphed the data as shown at the right.

17. Determine the size of the container when the temperature is 25°C.



18. Predict what the container size would be if the temperature were 60°C.

Questions 19–25: Use the following student notes to match the correct information from Column 2 with each item in Column 1. Write the letter of the correct answer on the line at the left.

I investigated yeast, tiny organisms that give off carbon dioxide gas as they grow. In two bottles, I put 2 mL of yeast, 5 mL of sugar, and water. In Bottle A, I used 250 mL of cold water (20°C). In Bottle B, I used 250 mL of warm water (40°C). I attached a balloon to each bottle. After five minutes, I observed bubbles forming on the surface inside both bottles, and the balloons on both bottles expanded. The balloon on Bottle B became about twice as large as the balloon on Bottle A.

| Column 1 Sections of a Lab Report | Column 2 Information to Use in a Lab Report |
|---|--|
| <p>19. Problem or Question</p> <p>20. Hypothesis</p> <p>21. Materials</p> <p>22. Procedure</p> <p>23. Observations</p> <p>24. Analysis</p> <p>25. Conclusion</p> | <p>a. If you increase the water temperature, then the yeast will give off more gas.</p> <p>b. After five minutes, Balloons A and B expanded. Balloon B expanded more than Balloon A.</p> <p>c. Yeast give off more gas at higher temperature.</p> <p>d. What factors help yeast to grow?</p> <p>e. Balloon B became bigger than Balloon A, so that means that the yeast in Balloon B gave off more gas.</p> <p>f. Combine the yeast, sugar and water in a bottle. Put a balloon on the bottle.</p> <p>g. Yeast, sugar, warm and cool water, containers, timer</p> |