

Study Island

Copyright © 2015 Edmentum - All rights reserved.

Scientific Investigations

1. Diego has learned that the Earth wobbles on its axis in a certain pattern. He predicts that this pattern will repeat every 20,000 years.

Which of the following ways would be the best way to test Diego's prediction?

- ☐ A. observe the movement of other planets
 - ☐ B. make observations in nature
 - ☐ C. make a model
 - ☐ D. conduct a controlled experiment
-

Lab Tools & Safety

2. Daniel was not listening when the teacher discussed fire safety procedures. He was wearing a loose-fitting shirt, and his sleeve accidentally caught fire from the Bunsen burner.

Which of the following safety equipment would be best to use following this scenario?

- ☐ A. fire extinguisher
 - ☐ B. eye wash
 - ☐ C. fire blanket
 - ☐ D. apron
-

Organizing, Analyzing & Communicating Data

3. The average annual snowfall values for four different cities are shown in the table below.

Average Annual Snowfall

City	Snowfall (inches)
Green Bay	47.7
Bristol	46.8
Buffalo	93.6
Kalamazoo	68.8

Which of the following conclusions could be made from this data?

- ☐ A. It snows more in Green Bay than in Buffalo on average.
 - ☐ B. It snows less in Green Bay than in Kalamazoo on average.
 - ☐ C. It snows more in Kalamazoo than in Buffalo on average.
 - ☐ D. It snows less in Buffalo than in Bristol on average.
-

Scientific Investigations

4. A scientific question

- ☐ A. involves things that are measurable.
 - ☐ B. is testable.
 - ☐ C. produces repeatable investigations.
 - ☐ D. all of these
-

Scientific Investigations

5. Sam lives in the city of Springdale and is interested in how the climate in his city compares to the climate in Ecuador. Which of the following is a testable question that could help him make this comparison?

- ☐ A. Are average yearly temperatures in Ecuador greater than in Springdale?
 - ☐ B. Do high pressure systems prefer forming in Ecuador compared to in Springdale?
 - ☐ C. Is the climate in Ecuador better than the climate in Springdale?
 - ☐ D. Are thunderstorms in Ecuador as scary as thunderstorms in Springdale?
-

Lab Tools & Safety

6. Technology Enhanced Questions are not available in Word format.

Lab Tools & Safety

7. Jodie is studying the sleeping habits of various types of animals. She wants to know how long each type of animal sleeps during the day.

Jodie puts each of the animals in a cage with food, water, and light. However, she cannot stay to watch the animals all day.

Which of the following tools would be most helpful to Jodie's experiment?

- ☐ A. a triple beam balance
 - ☐ B. a tape recorder
 - ☐ C. a video camera
 - ☐ D. a metric ruler
-

Organizing, Analyzing & Communicating Data

8. April was given 4 liquid substances to identify based on their densities. She measured the mass and volume of each substance and recorded her data in the table on the left. The data table on the right provides a list of known densities for common substances to compare.

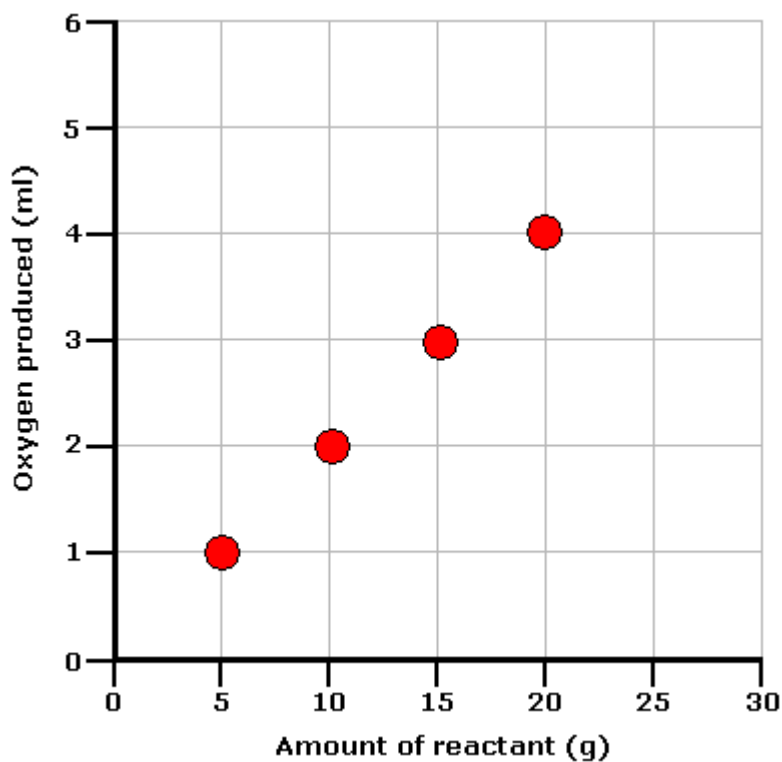
April's Data			Known Densities	
Substance	Mass (g)	Volume (mL)	Substance	Density (g/mL)
Substance 1	5.00	5.00	Mercury	136
Substance 2	680.	5.00	Iodine	4.93
Substance 3	3.95	5.00	Water	1.00
Substance 4	24.7	5.00	Ethanol	0.789

By calculating the densities based on the information provided, April can conclude that _____ is ethanol.

- ☐ A. Substance 3
 - ☐ B. Substance 4
 - ☐ C. Substance 1
 - ☐ D. Substance 2
-

Organizing, Analyzing & Communicating Data

9. The production of oxygen from a reactant in a chemical reaction is shown in the graph below.



The graph shows the volume of oxygen produced as a function of the amount of reactant consumed. If the trend continues, how much oxygen will be produced when 25 g of the reactant is consumed?

- ☐ A. 4.0 ml
 - ☐ B. 1.5 ml
 - ☐ C. 3.0 ml
 - ☐ D. 5.0 ml
-

Lab Tools & Safety

10. The picture below shows a laboratory tool being used to measure a physical property of a liquid.



What property is the lab tool being used to measure?

- ☐ A. mass
 - ☐ B. viscosity
 - ☐ C. length
 - ☐ D. temperature
-