

Name _____
Date _____
Homeroom _____

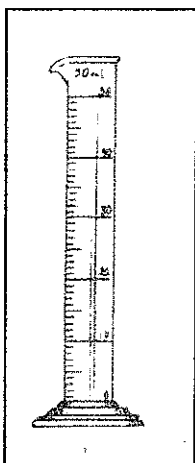
Science
Methods of Science Test
Retake

Methods of Science Unit Test-Retake

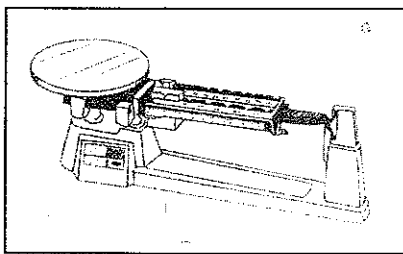
Multiple Choice. Choose the *best* answer to answer the question or complete the statement.

- _____ Which of the following might be the **materials' list** for an experiment?
A. Data tables and graphs
B. Meters, liters, and kilograms
C. Plastic containers, soil, and plants
D. Temperature, light, and time
- _____ Which of the following applies to **sample size**? It is usually best to have _____.
A. a small sample size
B. only one trial
C. a greater sample size
D. a trial for yourself only
- _____ Name the **control** in the flower demonstration.
A. The flower in plain water.
B. The plain flower.
C. The flower in blue water.
D. The blue flower.
- _____ Which of the following is an example of **quantitative data**?
A. The volume is 31.5 mL.
B. Double Bubble has the most sugar.
C. Your hand had the greatest volume.
D. Laffy Taffy is blue.
- _____ For a Hypothesis to be valid (or supported), it must be
A. testable
B. supported by evidence
C. made into law
D. both (A) and (B)
- True/False. Is the following hypothesis correct for the teddy graham lab?
If I observe ten teddy bear cookies then I will record some of them have arms up while some of them have arms down because the web site showed these characteristics.
- True/False. Does the following hypothesis need to be corrected?
If I add water to the petri dish of Gobstoppers then I will see a color change.

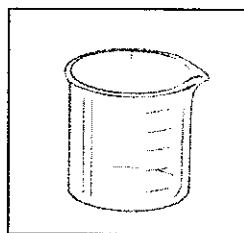
Identify the following lab equipment.



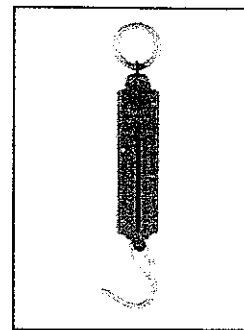
A



B



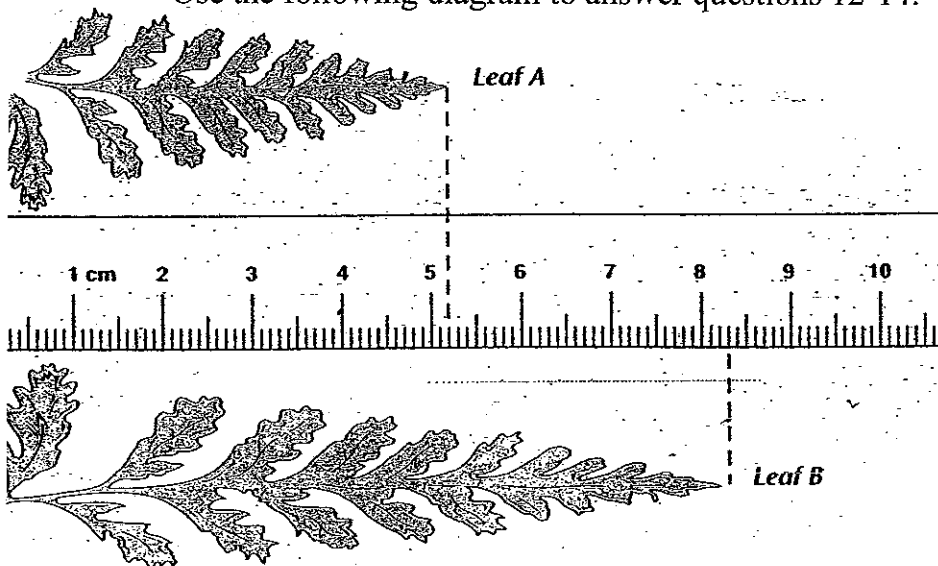
C



D

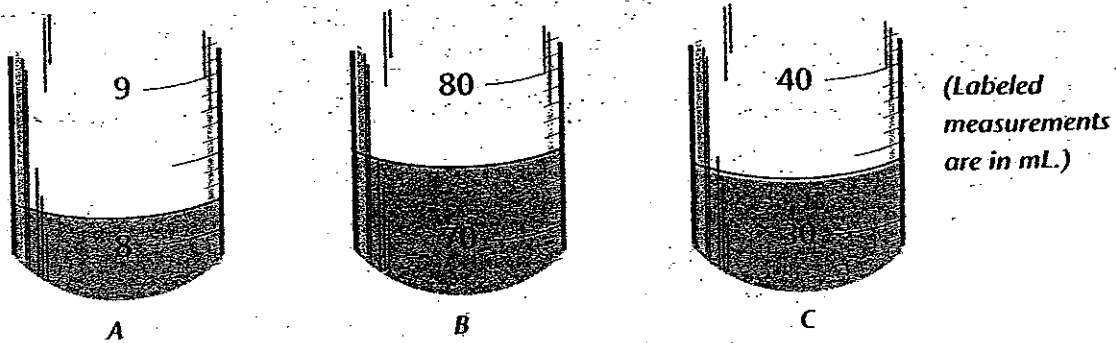
8. _____ What letter object is a graduated cylinder?
9. _____ Which piece of equipment do you use to measure mass?
10. _____ What letter object is a beaker?
11. _____ What letter object is a spring scale?

Use the following diagram to answer questions 12-14.



12. How many centimeters (cm) long is Leaf A?
A) 5.4cm B) 52cm
C) 5.2cm D) 54cm
13. How many centimeters (cm) long is Leaf B?
A) 8.3cm B) 83cm
C) 8.6cm D) 86cm
14. How many centimeters (cm) **longer** is Leaf B than Leaf A?
A) 8.3cm B) 52cm
C) 31cm D) 3.1cm

Use the following diagrams to answer questions 15 & 16.



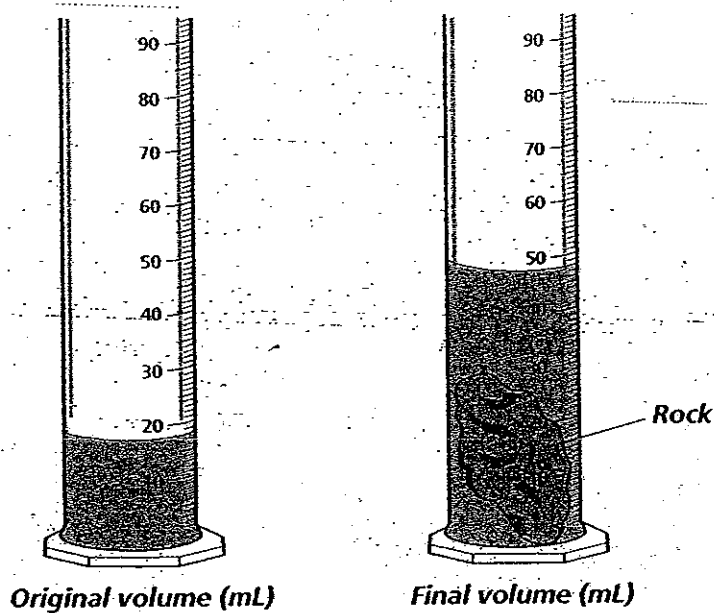
15. What is the volume of the water in graduated cylinder A?

- A) 8.4ml B) 8.2ml
C) 82ml D) 84ml

16. What is the volume of water in graduated cylinder B?

- A) 7.5ml B) 34ml
C) 73ml D) 75ml

Use the following diagrams to answer questions 17 & 18.



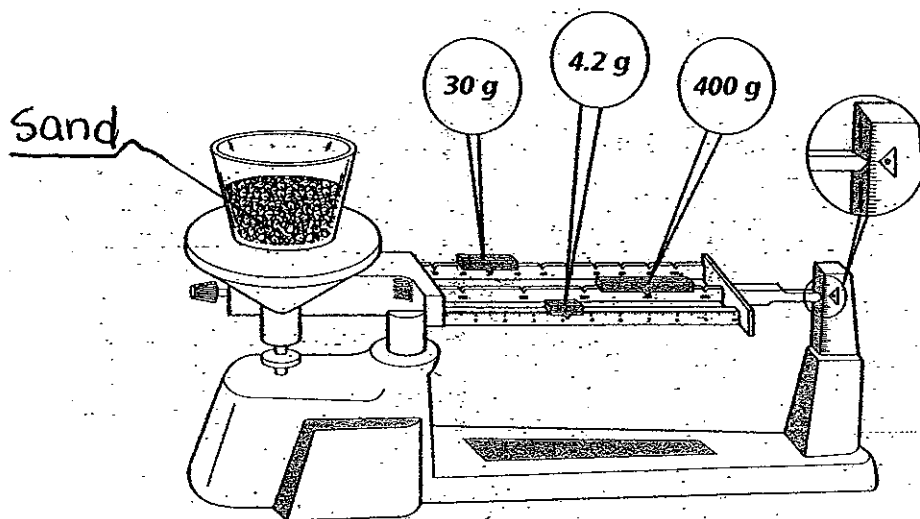
17. What is the volume of the **water plus the rock**?

- A) 48ml B) 4.8ml
C) 18ml D) 1.8ml

18. What is the volume of the **rock alone**?

- A) 30ml B) 48ml
C) 38ml D) 18ml

Use the following diagram to answer questions 19 & 20.



19. What is the mass of the cup and sand together?

- A) 400g B) 404.2g
C) 430g D) 434.2g

20. If the mass of the cup is 7.5 grams, what is the mass of the sand?

- A) 426.7g B) 441.7g
C) 434.2g D) 400.0g

Matching. Match the term to the best description. Use each term only **once**.

21. _____ One option at this stage is to write a **lab report**.
22. _____ At this stage you **research** the topic.
23. _____ At this stage you follow the **procedure** exactly.
24. _____ At this stage you **modify your hypothesis** if needed.

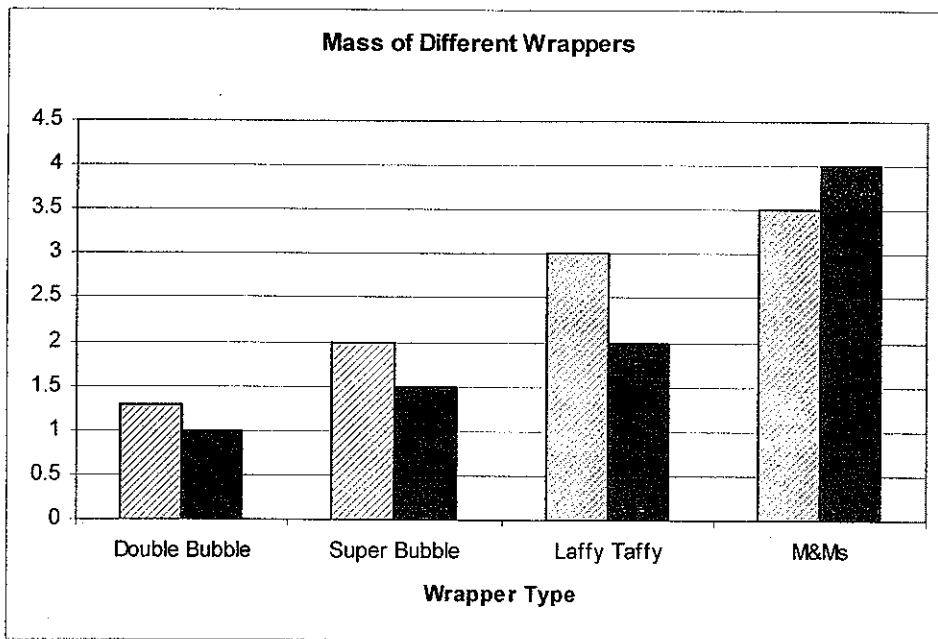
- | |
|------------------------|
| A. Draw Conclusions |
| B. Collect Information |
| C. Collect Data |
| D. Share Results |
| E. Conduct Experiment |

Match the best **metric system unit**.

25. _____ The mass of a car.
26. _____ How much liquid is in a large bottle of soda.
27. _____ The distance from Albany, NY to Albany, GA.
28. _____ Your height.

- | |
|---------------|
| A. Kilometers |
| B. Kilograms |
| C. Grams |
| D. Liters |
| E. Meters. |

Use the graph to answer questions 29-32.



29. Name one thing missing in the above graph.

- A) Title
- B) Y axis label
- C) Data
- D) X axis Label

30. Name one thing missing in the above graph.

- A) Zero
- B) Key
- C) Title
- D) Independent Variable

31. Which wrapper type had the smallest mass for both trials?

- A) Double Bubble
- B) Super Bubble
- C) M&M
- D) Laffy Taffy

32. Which wrapper type had the greatest difference between both trials?

- A) Double Bubble
- B) Super Bubble
- C) M&M
- D) Laffy Taffy

Metric Conversions. Answer the following questions on the metric system.

Use the chart below with the units of the metric system to answer 33-37.

Kilo	___(A)___	Deka	<u>Base Units:</u> Meter ___(B)___ Liter	Deci	___(C)___	Milli
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33. What prefix belongs in position A?

- A) Gram B) Meter
C) Hecto D) Centi

34. What base unit belongs in position B?

- A) Gram B) Kelvin
C) Volume D) Centi

35. What prefix belongs in position C?

- A) Meter B) Hecto
C) Centi D) Joule

36. Convert 98.5 Liters (L) to Kiloliters (kL).

- A) 0.0985kL B) 98500.0kL
C) 0.985kL D) 98.5kL

37. Convert 412.0 Meters (m) to Millimeters (mm).

- A) 0.412mm B) 412000.0mm
C) 4.12mm D) 412.0mm