

Name:

Class:

Date:

Activity 7.5A: Measuring Lab Worksheet

Materials Needed

- Items for measuring (pens, scissors, markers, books, or pieces of scrap wood or metal cut to different lengths)
- Tape measure or ruler

Instructions

Pair up with a fellow student. Your teacher will provide several labeled groups (A–F) of materials from which you and your partner are to select items for measuring.

1. With your partner, collect one item from each of the labeled material groups.
2. Individually, measure the length of each item to the nearest $1/16$ ". Enter a description of each item and its measurement in the worksheet.

A. Item A Description

Answer:

Measurement

Answer:

B. Item B Description

Answer:

Measurement

Answer:

C. Item C Description

Answer:

Measurement

Answer:

D. Item D Description

Answer:

Measurement

Answer:

E. Item E Description

Answer:

Measurement

Answer:

F. Item F Description

Answer:

Measurement

Answer:

3. Compare your initial measurements to your partner's. If your measurements differ for any of the items, measure the materials again until you come to a consensus. Convert your measurements to sixteenths.
4. Perform the following calculations and write your answers in the spaces provided.

A. What is the length of $A + B$?

Answer:

B. What is the length of $C + D$?

Answer:

C. What is the length of $E + F$?

Answer:

D. What is the length of all six items (A through F) if they were placed end to end?

Answer:

5. Perform the following calculations and write your answers in the spaces provided.

A. Subtract the length of your shortest item from your longest item.

Answer:

B. Add the lengths of A through E, then subtract the length of F.

Answer:

6. Perform the following multiplication calculations and write your answers in the spaces provided.

A. What would be the total length of six pieces of item A laid end to end?

Answer:

B. What would be the total length of four pieces of item B and five pieces of item D laid end to end?

Answer:

7. Perform the following division calculations and write your answers in the spaces provided.

Answer:

A. Divide the length of item G into three equal pieces. How long is each piece?

Answer:

B. Divide the length of item E into $\frac{1}{2}$ " pieces. How many $\frac{1}{2}$ " pieces are there? Is there an equal number of pieces?

Answer:

8. Was it more difficult to add, subtract, multiply, or divide the measurements? Explain your answer.

Answer:

9. Give a real-world example of a time when someone might need to add measurements.

Answer:

10. Give a real-world example of a time when someone might need to subtract measurements.

Answer:

11. Give a real-world example of a time when someone might need to multiply measurements.

Answer:

12. Give a real-world example of a time when someone might need to divide measurements.

Answer: