Measuring Using Fractional Units

A. Choose the Correct Answer:

1. If a rope is 1 meter long and you cut $\frac{1}{4}$ meter from it, how much is left?

a) $\frac{1}{4}$ meter
b) $\frac{3}{4}$ meter
c) $\frac{1}{2}$ meter
d) 1 meter

2. Which of the following measurements represents a fractional unit?

a) 5 cm
b) 3 m
c) $\frac{1}{2}$ m
d) 8 mm

3. If a glass holds 1 liter and you drink $\frac{3}{4}$ liter, how much is left?

a) $\frac{1}{4}$ liter
b) $\frac{3}{4}$ liter
c) 1 liter
d) $\frac{1}{2}$ liter

4. Which of these is the correct representation of half a kilogram?

a) 1 kg
b) 100 g
c) $\frac{1}{2}$ kg
d) 2 kg

5. Which fraction best represents 25 cm out of 1 meter?

a) $\frac{1}{2}$
b) $\frac{1}{4}$
c) $\frac{3}{4}$
d) $\frac{1}{3}$

B. Write the Missing Terms to Complete the Sentences:

1. Measuring cups often use _____ to show parts of a whole liter.
2. A ruler can be used to measure _____ parts of a centimeter.
3. $\frac{1}{2}$ kg means _____ kilogram.
4. When a measurement is not whole, we can use a _____ to show part of it.
5. If you cut $\frac{1}{3}$ meter from a 1-meter ribbon, _____ meter remains.

C. Figure out the answers to these questions:

1. Draw a measuring scale and show 0, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, and 1meter marks.
2. Write a real-life situation where you use fractional units while cooking.
3. A pencil is $\frac{3}{4}$ the length of a ruler. If the ruler is 30 cm, how long is the pencil?

4. You poured $\frac{1}{2}$ liter of milk into a jug that can hold 1 liter. How much more milk can it hold?
5. A fabric is 5 meters long. You cut $\frac{2}{5}$ of it. How much fabric is left?
6. Explain how a weighing scale can help measure using fractions.
7. List three measuring tools that allow fractional measurements.
8. Use a number line to represent 0, $\frac{1}{3}$, $\frac{2}{3}$, and 1 liter.

D. Mark each sentence with a True (✓) or False (✗):

1. Fractions are not useful in measuring physical quantities. ☐
2. $\frac{1}{2}$ meter is more than $\frac{1}{4}$ meter. ☐
3. $\frac{3}{4}$ liter is less than one whole liter. ☐
4. Fractions help in measuring exact amounts in real life. ☐
5. A full kilogram can never be expressed using fractions. ☐

E. Challenge yourself with these questions:

1. Measure a table with a tape and record its length in fractional meters.
2. A pipe is 2 meters long. You cut $\frac{3}{4}$ meter from it. How much is left?
3. Find three examples of items at home that show measurements in fractions.
4. Draw a 1-liter bottle and shade $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{3}{4}$ parts in different colors.
5. Your water bottle holds 750 ml. If you drink $\frac{1}{2}$ of it, how much is left?
6. **Compare:** Which is greater $\frac{2}{3}$ liter or $\frac{3}{4}$ liter? Explain why.
7. Create a recipe that includes at least three ingredients with fractional quantities.
8. If a clock shows $\frac{1}{4}$ past 2, what time is it? Explain how it relates to fractions.
9. A wooden stick is 1 meter long. Mark and label $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{6}$ on it.
10. Explain why measuring with fractions is more accurate than estimating with whole numbers.