Word Problems: Measurement Conversions

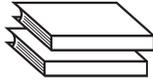**Materials:** Measurement conversion word problem cards

1. Work with a partner. Choose five problems that you will both solve.

2. Solve the word problems independently. For each problem:

   a) write an equation with a symbol for the unknown number
   b) convert like measurement units within the given measurement system
   c) carry out the operation in the equation to solve the problem
   d) check your work and consider whether your answer is reasonable
   e) answer the question in a complete sentence

3. After completing five problems share your work with a partner. Using mathematical vocabulary explain how you solved each problem.

4. Repeat with another five problems from the set.

A box containing 4 identical books weighs 5kg. If the weight of the box is 600g, what is the weight of each book?

A

A. A box containing 4 identical books weighs 5kg. If the weight of the box is 600g, what is the weight of each book?

B. I bought 10 bananas. Each banana weighed 50 grams. If the price for bananas was $6.50 per kilogram, how much did I pay?

C. Tina went to the store to buy three liters of orange juice for a party. The store only sold orange juice in 250ml cartons. How many 250ml cartons did Tina need to buy?

D. Sarah bought a 1kg bag of cherries at the market and ate 175g of them on the way home. How many grams of cherries did Sarah have left by the time she got home?
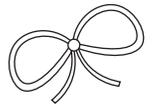
E. Paul weighed a pumpkin and found that it had a mass of 9kg. He cut the pumpkin and gave his friend a 500g piece. How many grams of pumpkin did Paul have left to make pumpkin soup?
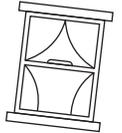
F. Tony cut a five-meter ball of string into four equal sized lengths. How many centimeters long was each length of string?

G. A window cleaner takes 3 hours to wash 30 windows on a building. All the windows are the same size. About how many minutes does the window cleaner take to wash each window?

H. Marcus read his library book from 3:15-4:45p.m. His sister, Laura read her library book from 4:30-6:15p.m. Who read for longer? How many minutes longer?

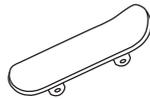A ham is put in the oven at 9:20a.m. and removed at 11:35a.m. How many minutes did the ham take to cook?

I

A science class begins at 1:30p.m and ends at 3:00p.m. How many minutes long is the science class?

M

Sarah cut a 20cm length of ribbon to attach to the tail of her kite. How many millimeters long is the ribbon?

J

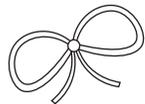A box contains 4 jars of tomato sauce. The total mass of all the jars is 6kg. What is the mass, in grams, of each jar?

N

On the weekend Ben plans to ride his skateboard 2km to his friend's house. How many meters will Ben ride his skateboard?

K

I need to mail a box of apples to my mother. The box cannot exceed a mass of 5kg. If each apple has a mass of 200g, what is the maximum number of apples I can send?

O

I cut a 1.5 meter length of string into 3 equal lengths. How many millimeters long is each piece of string?

L

Sam poured a two-liter carton of apple juice into cups that each held 250ml. How many cups did he fill?

P