

Converting units of mass and capacity

CURRICULUM ALIGNMENT

MEA.MSR.4a

determine and calculate units of measurement in fractional and/or decimal form to solve practical problems.

NUM.PVT.4

investigate how decimals and percentages (and fractions) can be compared, ordered and expressed in related terms.

INTERACTIVES Unit Converter · challenge, display

WHAT THIS LESSON TEACHES

1 kilogram is 1000 grams and 1 litre is 1000 millilitres. The prefix 'kilo' always means a thousand so you multiply or divide by 1000 to convert.

→ A 2 kg bag of flour weighs 2000 g.

→ A 0.5 litre bottle holds 500 ml of juice.

MODEL THIS ON THE BOARD

CONVERT 4200 G TO KILOGRAMS

- 1 Write 4200 g.
- 2 Divide by 1000 because $1 \text{ kg} = 1000 \text{ g}$.
- 3 Move the digits three places right: 4.2 kg.

ANSWER KEY

a) 0.5 kg

b) 4.2 kg

c) 600 ml

Q1: 2 kg

Q2: 300 g

Q3: 1.5 L

Q4: 3.75 L

Q5: 0.5 kg

a) Always — Because 1 kg equals exactly 1000 g.

b) Always — Multiply by 1000 to change litres to millilitres.

c) Never — You always divide when going from small to large.

d) Never — The 1000 rule is always needed for these units.