

L.O: I am learning to convert kilograms to grams and kilometres to metres and vice versa.

Today you will learn to convert measurements. We will focus on kilometres and kilograms, units of length and mass which we will convert (or change) into metres and grams. You will learn to apply the correct formulas required to convert one measurement into another.

Answer the questions on the separate worksheet that comes with this assignment. Answers are provided for you to self-mark your work before you submit it to the teacher for checking.

Starter

Which unit would be best to measure...

distance walked to and from school

weight of a pencil

length of a carpet

weight of a man

grams

kilograms

metres

kilometres



Today we are looking at **kilograms** and **kilometres**. The word “**kilo**” found in both these measurements is derived from the Greek word for “thousand”

Kilometres

Kilometres are used to measure long distances (distances that you would walk or take a mode of transport for).

There are 1,000 metres in a kilometre.

Therefore we need to multiply and divide by **1,000** to convert between metres and kilometres.

To convert from metres to kilometres, we DIVIDE by 1,000.

$$8,000 \div 1,000 = 8 \quad 8,000\text{m} = 8\text{km}$$

$$6,284 \div 1,000 = 6.284$$

$$6,824\text{m} = 6.824\text{km}$$

To convert from kilometres to metres, we MULTIPLY by 1,000.

$$7 \times 1,000 = 7,000 \quad 7\text{km} = 7,000\text{m}$$

$$3.219 \times 1,000 = 3,129$$

$$3.129 \text{ km} = 3,129\text{m}$$

Let's Practise

Match the equivalent measurements.

5,095m

6,104m

5,950m

5,905m

6,140m

6.14km

5.95km

5.905km

6.104km

5.095km

Kilograms

Kilograms are used when weighing people, animals or heavy objects.

There are 1,000 grams in a kilogram.

Therefore we need to multiply and divide by **1,000** to convert between grams and kilograms.

To convert from grams to kilograms, we DIVIDE by 1,000.

$$6,000 \div 1000 = 6 \quad 6,000\text{g} = 6\text{kg}$$

$$5,289 \div 1000 = 5.289$$

$$5,289\text{g} = 5.289\text{kg}$$

To convert from kilograms to grams, we MULTIPLY by 1,000

$$3 \times 1,000 = 3,000 \quad 3\text{kg} = 3,000\text{g}$$

$$2.68 \times 1,000 = 2680$$

$$2.68\text{kg} = 2,680\text{g}$$

Let's Practise

Match the equivalent weights.

6,702g

8,480g

6,072g

8,408g

6,720g

8.408kg

6.072kg

6.72kg

6.702kg

8.48kg

If you need more practise, check out these online lessons before starting the tasks.

<https://www.thenational.academy/year-5/maths/to-convert-between-units-of-length-year-5-wk3-3>

<https://www.thenational.academy/year-5/maths/to-convert-between-grams-and-kilograms-year-5-wk4-2>

Now go to the worksheet for today's tasks and choose your challenge!