## Metric units and abbreviations

## Grade 4 Measurement Worksheet

Study the metric conversion chart, and then solve the word problems below.

| kilo- | hecto- | deca- | base unit | deci- | centi- | milli- |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kilometer (km) | hectometer (hm) | decameter (dam) | meter (m) | decimeter (dm) | centimeter (cm) | millimeter (mm) |
| kilogram (kg) | hectogram (hg) | decagram (dag) | gram (g) | decigram (dg) | centigram (cg) | milligram (mg) |
| kiloliter (kl) | hectoliter (hl) | decaliter (dal) | liter (I) | deciliter (d) | centiliter (cl) | milliliter (ml) |

To convert a smaller unit to a bigger unit, move the decimal point to the left or divide.

To convert a bigger unit to a smaller unit, move the decimal point to the right or multiply.

1. David ran 4 km . How many meters did he run?
2. Mary bought $3,000 \mathrm{~g}$ of flour for her baking. How many kilograms of flour did she buy?
3. Francine used 38 cm of red ribbon for her project. How many millimeters of ribbon did she use?
4. Grace poured $2,000 \mathrm{ml}$ of juice into a jar. How many liters of juice did she pour?
5. Kenny harvested 12 kg of potatoes in his farm. How many grams of potatoes did he harvest?

## Answers

| kilo- | hecto- | deca- | base unit | deci- | centi- | milli- |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kilometer (km) | hectometer (hm) | decameter (dam) | meter (m) | decimeter (dm) | centimeter (cm) | millimeter (mm) |
| kilogram (kg) | hectogram (hg) | decagram (dag) | gram (g) | decigram (dg) | centigram (cg) | milligram (mg) |
| kiloliter (kl) | hectoliter (hl) | decaliter (dal) | liter (I) | deciliter (d) | centiliter (cl) | milliliter (ml) |

To convert a smaller unit to a bigger unit, move the decimal point to the left or divide.

To convert a bigger unit to a smaller unit, move the decimal point to the right or multiply.

1. David ran 4 km . How many meters did he run? 4000 m
2. Mary bought $3,000 \mathrm{~g}$ of flour for her baking. How many kilograms of flour did she buy?

3 kg
3. Francine used 38 cm of red ribbon for her project. How many millimeters of ribbon did she use?
4. Grace poured $2,000 \mathrm{ml}$ of juice into a jar. How many liters of juice did she pour?
5. Kenny harvested 12 kg of potatoes in his farm. How many grams of potatoes did he harvest?

