

## Converting Units of Mass



- I can convert between units of mass.



## Success Criteria

- I can convert from kilograms to grams by multiplying by 1000.
- I can convert from grams to kilograms by dividing by 1000.
- I can convert and order mixed units of mass.


## Closest to a Kilogram

The aim of the game is to get closest to a kilogram.

$$
1 \mathrm{~kg}=1000 \mathrm{~g}
$$



## Kilograms to Grams

There are 1000 grams in 1 kilogram. How many grams are there in


What calculation do we need to do to convert from kilograms to grams?

We need to multiply the number of kilograms by 1000 . grams in the same mass as kilograms.

## $1-7$ <br> What's the Mass?



## $1-9$ <br> What's the Mass?




## $1-9$ <br> What's the Mass?

? What is the combined mass of three baskets of apples? 9 kg
How would you write this in grams? 9000 g


## What's the Mass?

## ? What is the combined mass of 2 baskets of apples and 2 bags of flour? <br> How would you write this in grams? 10 000g



## What's the Mass?

3
What is the combined mass of 1 basket of apples, 2 bags of sugar and 3 bags of flour?

11kg

## ? How would you write this in grams? 11000 g



What's the Mass? Mixed Units

Sometimes, mass is given in mixed units: kg and g .

How could we convert these measurements into grams?

We need to multiply the kilogram measurement by 1000, then add on the gram measurement.

$$
1 \mathrm{~kg} 300 \mathrm{~g}=1000 \mathrm{~g}+300 \mathrm{~g}=1300 \mathrm{~g}
$$

What's the Mass? Mixed Units

Write the following in grams:
a) $2 \mathrm{~kg} \mathrm{450g} 2450 \mathrm{~g}$
b) $3 \mathrm{~kg} \mathrm{700g} 3700 \mathrm{~g}$
c) 5 kg 250 g 5250 g
d) 6 kg 800 g 6800 g
e) 7 kg 210 g 7210 g


Converting Grams to Kilograms
Convert these grams measurements into kilograms:
a) 8000 g

8 kg
b) 4800 g 4 kg 800 g
c) 6400 g 6 kg 400 g
d) 4000 g 4 kg
e) 7250 g 7 kg 250 g
f) 9840 g 9 kg 840 g

Ordering Mixed Units
Order these mass measurements from the lightest to heaviest:

| 850 g | 2400 g | $3 \mathrm{~kg} \mathrm{450g}$ | $4 \mathrm{~kg} \mathrm{100g}$ | 5 kg | 7 kg |
| :--- | :--- | :--- | :--- | :--- | :--- |



Use your cracking conversion skills to complete this activity sheet.


## The Answer Is...

If the answer is 2500 g , write two questions for which this could be the answer.


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