Lockdown	
Date	
Subject/s	**Maths**
Learning Objective	To convert units of weight

			SA	TA

Success Criteria ✓! 📋	I know there are 1000g in 1kg			
	I can multiply and divide by 1000 using or visualising a place value grid			
Support	Independent Adult Support ( ) Group Work			

Pre-task:

Convert these units:

178kg = _____g

2.5kg = _____g

_____kg = 5695g

_____kg = 259g

Mass
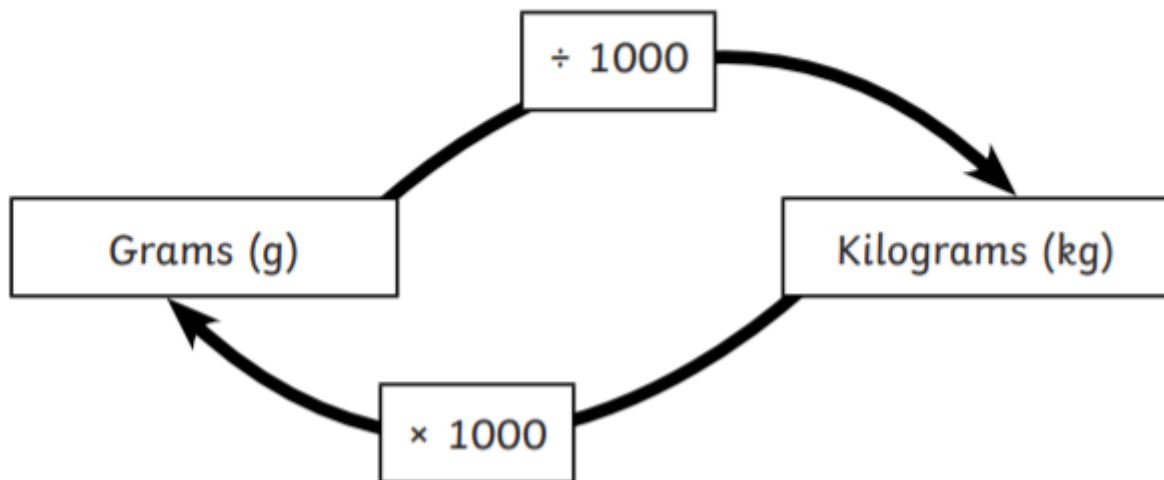
Decimal Place Value Chart

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones		tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths
M	HTh	TTh	Th	H	T	O	•	t	h	th	tth	hth	m
							•						
							•						

1.	Kilograms	Grams
	0.252	
	0.633	
	0.191	
	0.721	
	0.725	
	0.71	
	0.583	
	0.595	
	0.625	
	0.244	

2.	Kilograms	Grams
	6.371	
	5.079	
	3.213	
	7.418	
	4.402	
	5.781	
	3.897	
	2.446	
	5.861	
	6.963	

3.	Kilograms	Grams
		266
		69
		231
		985
		867
		333
		967
		620
		459
		371

4.	Kilograms	Grams
		9594
		7865
		7426
		7702
		6916
		1742
		7511
		9753
		3061
		2098

5.	Kilograms	Grams
		819
		236
	0.292	
	0.448	
		148
	0.876	
	0.529	
		403
		356
	0.2	

6.	Kilograms	Grams
		3593
	7.793	
	7.791	
		2718
		3079
	1.193	
		3191
	2.257	
	4.568	
		1722

Kilograms	Grams
0.252	252
0.633	633
0.191	191
0.721	721
0.725	725
0.71	71
0.583	583
0.595	595
0.625	625
0.244	244

2.

Kilograms	Grams
6.371	6371
5.079	5079
3.213	3213
7.418	7418
4.402	4402
5.781	5781
3.897	3897
2.446	2446
5.861	5861
6.963	6963

3.

Kilograms	Grams
0.266	266
0.069	69
0.231	231
0.985	985
0.867	867
0.333	333
0.967	967
0.62	620
0.459	459
0.371	371

4.

Kilograms	Grams
9.594	9594
7.865	7865
7.426	7426
7.702	7702
6.916	6916
1.742	1742
7.511	7511
9.753	9753
3.061	3061
2.098	2098

5.

Kilograms	Grams
0.819	819
0.236	236
0.292	292
0.448	448
0.148	148
0.876	876
0.529	529
0.403	403
0.356	356
0.2	200

6.

Kilograms	Grams
3.593	3593
7.793	7793
7.791	7791
2.718	2718
3.079	3079
1.193	1193
3.191	3191
2.257	2257
4.568	4568
1.722	1722

Problem Solving and Reasoning

Prove it!

True or false?

If you convert any amount of grams to kilograms, then it will never have a digit in the ones column. E.g. $76\ g = 0.076\ kg$

Use it!

A parcel weighs 439 grams. How much would 27 parcels weigh? Give your answer in kilograms.

Use it!

To bake buns for a party, Keeley used these ingredients:

- 600 g caster sugar
- 0.6 kg butter
- 18 eggs (792 g)
- $\frac{3}{4}$ kg self-raising flour
- 10 g baking powder

What is the weight of the unbaked products?
Give your answer in kilograms.

Use it!

Each nail weight 3.85 g

There are 24 nails in a packet.

What would the total mass of 60 packets be in kilograms?

How many packets would you need if you wanted $\frac{1}{2}$ kg of nails?

How many grams of nails would be left over?

Use it!

Laura buys 3,500 grams of potatoes and 1,500 grams of carrots.

78p per kg

£1.46 per kg

She pays with a £5 note.
How much change does she get?

Show all of your woring out

Answers
False because 1,001 g would be 1.001 kg etc.
11.853kg 439 x 27 = 11853 11853 divided by 1000 = 11.853
2.752kg 600 + 600 + 792 + 750 + 10 = 2752
5.544 kg 6 packets (554.4 g) 55.4 g left over
Laura receives 8 p change. 78 x 3 = 234 + 39 (1/2 78) = 273p (£2.73) 1.46 divided by 2 = 0.73 1.46 + 0.73 = £2.19 £2.73+£2.19 = £4.92 £5.00-£4.92 = 0.08

Further Challenge

What's My Weight?

The picture shows four equal weights on one side of the scale and an apple on the other side.

What can you say that is true about the apple and the weights?

If the apple weighs 180g, how heavy must one weight be?

If the apple weighed 375g, how heavy would one weight be?

If the apple was a giant one and weighed a full kilo and the weights were each 250g, what would the scale look like? How do you know? Can you prove it?

Further Challenge 2

Baby's Weight

Weighing the baby at the clinic was a problem. The baby would not keep still and caused the scales the wobble. So I held the baby and stood on the scales while the nurse read off 78kg. Then the nurse held the baby while I read off 69kg. Finally I held the nurse while the baby read off 137kg. What is the combined weight of all three (in kg)?