Homework/Extension
Step 1: Kilograms and Kilometres

National Curriculum Objectives:

Mathematics Year 5: (5M5) Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Complete conversion tables, converting kilometres to metres; kilograms to grams; using multiples of 10,000 or 1,000.
Expected Complete conversion tables, converting kilometres to metres; kilograms to grams; including numbers to 1 decimal place.
Greater Depth Complete conversion tables, converting kilometres to metres; kilograms to grams; including numbers up to 2 decimal places and using zero as a place holder.

Questions 2, 5 and 8 (Varied Fluency)
Developing Check whether sets of measurements have been ordered correctly, converting kilometres to metres; kilograms to grams; using multiples of 10,000 or 1,000.
Expected Check whether sets of measurements have been ordered correctly, converting kilometres to metres; kilograms to grams; including numbers to 1 decimal place and some use of fractions.
Greater Depth Check whether sets of measurements have been ordered correctly, converting kilometres to metres; kilograms to grams; including numbers up to 2 decimal places and fractions and use of zero as a place holder.

Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Deciding which of 3 weights is the heaviest and explaining reasoning. Converting kilograms to grams; using multiples of 10,000 or 1,000.
Expected Deciding which of 3 weights is the heaviest and explaining reasoning. Converting kilograms to grams; including numbers to 1 decimal place and some use of fractions.
Greater Depth Deciding which of 3 weights is the heaviest and explaining reasoning. Converting kilograms to grams; including numbers up to 2 decimal places and fractions and use of zero as a place holder.

More Year 5 Converting Units resources.

Did you like this resource? Don't forget to review it on our website.

classroomsecrets.co.uk

Kilograms and Kilometres

1. Complete the conversion tables.

metres	⬌	kilometres
2,000m		
		5km
30,000m		
		40km
		6km
9,000m		

grams	⬌	kilograms
5,000g		
		7kg
8,000g		
4,000g		
		10kg
40,000g		

2. Check that these measurements have been ordered correctly.

		✓ or X
A	19kg, 20,000g, 21kg, 30,000g, 33kg	
B	7km, 8,000m, 9km, 1,000m, 11km	
C	81kg, 80,000g, 86kg, 90,000g, 90kg	
D	3km, 30,000m 33km, 40,000m 46km	

3. Which animal weighs the most? Convince me.

10,000g   **60kg**   **70,000g**

classroomsecrets.co.uk
Homework/Extension – Kilograms and Kilometres – Year 5 Developing

Kilograms and Kilometres

4. Complete the conversion tables.

metres	⟷	kilometres
1,000m		
		6km
2,500m		
		4.8km
		0.5km
9,900m		

grams	⟷	kilograms
500g		
		7.2kg
8,700g		
3,400g		
		1.6kg
4,100g		

VF
HW/Ext

5. Check that these measurements have been ordered correctly.

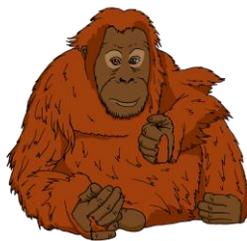|		✓ or X
A	2.5kg, $2\frac{7}{10}$ kg, 2.6kg, $2\frac{9}{10}$ kg, 3,000g	
B	7,000m, $7\frac{1}{10}$ km, 7.2km, $7\frac{7}{10}$ km, 7.8km	
C	8.1kg, $8\frac{3}{10}$ kg, 8.6kg, $9\frac{5}{10}$ kg, 9,600g	
D	3,200m, $3\frac{1}{10}$ km, 3.4km, $4\frac{3}{10}$ km, 4.6km	

VF
HW/Ext

6. Which animal weighs the most? Convince me.
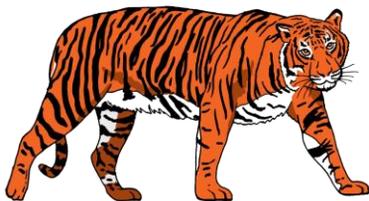
81.2kg   82,000g $81\frac{3}{10}$kg

RPS
HW/Ext

classroomsecrets.co.uk

Homework/Extension – Kilograms and Kilometres – Year 5 Expected

Kilograms and Kilometres

7. Complete the conversion tables.

metres	⟷	kilometres
1,230m		
		6.25km
3,050m		
		4.09km
		0.01km
10,090m		

grams	⟷	kilograms
5,090g		
		7.23kg
80,700g		
3,450g		
		11.6kg
40,100g		

8. Check that these measurements have been ordered correctly.

		✓ or X
A	3.51kg, $3\frac{5}{10}$ kg, 3.7kg, $3\frac{9}{10}$ kg, 4000g	
B	8,020m, $8\frac{3}{10}$km, 8.4km, $8\frac{7}{10}$km, 8.8km	
C	9.01kg, $9\frac{1}{10}$ kg, 9.3kg, $9\frac{5}{10}$ kg, 9,690g	
D	4,020m, $4\frac{1}{10}$km, 4.4km, $4\frac{3}{10}$km, 4.6km	

9. Which animal weighs the most? Convince me.

96,030g   25,590g $725\frac{3}{10}$kg

classroomsecrets.co.uk

Homework/Extension – Kilograms and Kilometres – Year 5 Greater Depth
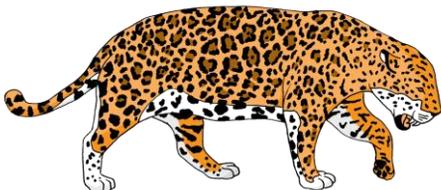
Homework/Extension
Kilograms and Kilometres

Developing
1. 2,000m = 2km, 5,000m = 5km, 30,000m = 30km, 40,000m = 40km, 6,000m = 6km, 9,000m = 9km.

5,000g = 5kg, 7,000g = 7kg, 8,000g = 8kg, 4,000g = 4kg, 10,000g = 10kg, 40,000g = 40kg

2. A and D ticked.

3. The chimpanzee weighs 60kg. The jackal weighs 10,000g, which is equivalent to 10kg. The cheetah weighs 70,000g, which is equivalent to 70kg, so the cheetah weighs the most.

Expected
4. 1,000m = 1km, 6,000m = 6km, 2,500m = 2.5km, 4,800m = 4.8km, 500m = 0.5km, 9,900m = 9.9km.

500g = 0.5kg, 7,200g = 7.2kg, 8,700g = 8.7kg, 3,400g = 3.4kg, 1,600g = 1.6kg, 4,100g = 4.1kg

5. B and C ticked.

6. The tiger weighs 81.2kg. The orangutan weighs 82,000g, which is equivalent to 82kg. The bear weighs $81\frac{3}{10}$ kg which is equivalent to 81.3kg, so the orangutan weighs the most.

Greater Depth
7. 1,230m = 1.23km, 6,250m = 6.25km, 3,050m = 3.05km, 4,090 = 4.09km, 10m = 0.01km, 10,090m = 10.09km

5,090g = 5.09kg, 7,230g = 7.23kg, 80,700g = 80.7kg, 3,450g = 3.45kg, 11.6kg = 11,600g, 40,100g = 40.1kg.

8. B and C ticked.

9. The ox weighs $725\frac{3}{10}$kg. The jaguar weighs 25,590g, which is equivalent to 25.59kg. The monkey weighs 96,030g, which is equivalent to 96.03kg, so the ox weighs the most.

classroomsecrets.co.uk
Homework/Extension – Kilograms and Kilometres ANSWERS