

Busy at Maths 6 - Sixth Class

Weight

I like to find the cost of 100g first!



A local store has opened a new deli section. Study the price list. Work out the cost per kilogramme (kg) for each item.

150g of kidney beans cost 39c
 $150g = 39c$
 $50g = 13c$ ← $(39c \div 3)$
 $100g = 26c$ ← $(13c \times 2)$
 $1,000g (1kg) = €2.60$ ← $(26c \times 10)$



DELI PRICE LIST

- Kidney beans: 39c for 150g
- Jalapeno peppers: €1.25 for 500g
- Wild mushrooms: €3.30 for 200g
- Green chillies: €3.21 for 300g
- Stuffed olives: 60c for 125g
- Sun-dried tomatoes: €1.89 for 350g
- Red peppers: €3.51 for 450g

1. What is the cost per **kg** of each of the following:
- (a) Jalapeno peppers _____ (b) Wild mushrooms _____ (c) Green chillies _____
 (d) Stuffed olives _____ (e) Sun-dried tomatoes _____ (f) Red peppers _____

2. Work out the total cost for the produce in each basket.

Item	A	B	C	D	E
Kidney beans	450g		600g	500g	
Jalapeno peppers		700g	900g	1½kg	
Wild mushrooms	500g	300g			800g
Green chillies		800g	700g	200g	
Stuffed olives	375g			625g	875g
Sun-dried tomatoes		450g			550g
Red peppers	1kg		550g		1.2kg
Total cost	€ _____	€ _____	€ _____	€ _____	€ _____

3. Write the following **kg** weights as **grammes (g)**.
- (a) $\frac{1}{8}kg =$ _____ g (b) $1\frac{1}{4}kg =$ _____ g (c) $0.625kg =$ _____ g
 (d) $0.35kg =$ _____ g (e) $2.45kg =$ _____ g (f) $1.15kg =$ _____ g
4. (a) $\frac{1}{10}$ of 2kg = _____ g (b) $\frac{3}{10}$ of 5kg = _____ g (c) $\frac{1}{5}$ of 4kg = _____ g
 (d) $\frac{7}{10}$ of 3kg = _____ g (e) $\frac{3}{5}$ of 2kg = _____ g (f) $\frac{7}{8}$ of 4kg = _____ g
 (g) $1\frac{3}{8}$ of 6kg = _____ g (h) $1\frac{1}{8}$ of 12kg = _____ g (i) $\frac{4}{5}$ of 11kg = _____ g

Maths Fact 10 tonnes of rock are needed to extract 30g of platinum. Platinum is a precious metal rarer than gold.
















Challenge At this rate, how many tonnes of rock would be required to produce 3kg of platinum? _____


















Weight – Weight of Euro coins

 = 8.5g,
  = 7.5g,
  = 7.8g,
  = 5.7g,
  = 4.1g

1. Complete these tables by calculating the **missing weights** for each one.

(a)	Value	Coin	Weight	(b)	Value	Coin	Weight	(c)	Value	Coin	Weight
(i)	€10	 × 5	42.5g	(i)	€50	 × 25		(i)	€100	 × 50	
(ii)	€10	 × 10	75g	(ii)	€40	 × 40		(ii)	€73	 × 73	
(iii)	€10	 × 20		(iii)	€20	 × 40	312g	(iii)	€39	 × 78	
(iv)	€10	 × 50		(iv)	€12	 × 60		(iv)	€6.80	 × 34	
(v)	€10	 × 100	410g	(v)	€15	 × 150	615g	(v)	€7.40	 × 74	303.4g

2. These tables show the total weight of the coins used. Find the value of the coins in €.

(a)	Weight	Coin	Value	(b)	Weight	Coin	Value	(c)	Weight	Coin	Value
(i)	204g			(i)	202.5g			(i)	561.7g		
(ii)	484.5g		€114	(ii)	435g			(ii)	649.8g		
(iii)	561g			(iii)	1.02kg			(iii)	2.262kg		
(iv)	365.5g			(iv)	304.2g			(iv)	3,135g		
(v)	144.5g			(v)	302.1g			(v)	1.476kg		

3. Calculate the weight for each of these amounts using the least number of **coins**.

(a) €5.90	(b) €3.60	(c) €2.70	(d) €8.40	(e) €11.30	(f) €17.80
Weight: _____	_____	_____	_____	_____	_____

4. Eoghan went shopping and spent the following amounts in each shop. He used a €20 note as payment in each shop. Calculate the weight of his **change** using the **least number** of coins.

Spent: (a) €18.20	(b) €17.40	(c) €15.50	(d) €17.90	(e) €16.30	(f) €15.70
Change: _____	_____	_____	_____	_____	_____
Weight: _____	_____	_____	_____	_____	_____

Maths Fact



900 grammes is the weight of the heaviest recorded African giant snail. It was 39.3cm long.

Challenge

How many of these record snails would it take to weigh 7kg 200g?

Weight (and more)

The Ploughing Championships

- Dad took students, Paul and Niamh, to the ploughing championships. What entry fee did he pay?
- If he had booked online, he would have received a 10% discount.
 - What would he have paid?
 - How much was this discount worth in euro?
- The cake stall has prepared 6 trays of oatmeal muffins. Each muffin weighs 136g. There are two dozen on each tray. What is the weight per tray in (a) g, and (b) kg?
- If $1\frac{1}{4}$ trays were unsold, what weight of muffins was sold?
- How much money was taken in by the stall-holder, if the muffins were sold for 69c each?
- The average sheep fleece weighs 3.6kg. What would 24 fleeces weigh in grammes?
- In a demonstration, the shearer can shear a sheep in 2 minutes. At this rate, what weight of sheep fleece was sheared in $1\frac{1}{2}$ hrs?
- 2.592t was the weight of wool after a record 9 hour shearing session. If each fleece weighed 3.6kg, how many sheep were sheared?
- A tractor hauled in 27 round bales of hay. If each bale weighed 360kg:
 - What was the total weight of hay hauled? (answer in tonnes)
 - What is the value of the 27 bales if each bale sells for €34.75?
- The vintage tractor section has 11 John Deere 60s from 1955. Their total weight is 24.64t.
 - What is the average weight in kg of the tractors?
 - What would 29 full fuel tanks hold if each tank can hold 77.6l?



Maths Fact



The Brachiosaurus dinosaur could eat about 180kg of plants daily. Luckily it was vegetarian!

Challenge

About how many tonnes of plants would have been eaten by the Brachiosaurus during June, July and August one year?