

WA5MMGNS1

Non-spatial measurement

Core + Challenge

NAPLAN-style

Mass

I can choose g, kg or t, estimate mass, and read and draw pointers on scales.

Name: _____ Date: _____ Score: _____ / 56

Key idea

Mass is how heavy something is. Light things are measured in **grams (g)**, heavier things in **kilograms (kg)**, and very heavy things in **tonnes (t)**.

1 kg = 1000 g and **1 t = 1000 kg**. A 1 L bottle of water has a mass of about 1 kg.

To read a scale, work out **what each small step is worth**: the gap between two labels ÷ the number of steps. On a balance, the **heavier** side goes **down**.

Example: this dial has **5 steps** from 1 kg to 2 kg, so each step is $1000 \div 5 = 200$ g. The pointer is 2 steps past 1 kg: **1 kg 400 g** = 1400 g.

Reading a scale



The heavier side goes down



A Warm up *choose, estimate, read and draw*

/ 16 marks

Which unit would you use to measure the mass: **g**, **kg** or **t**? Circle one. 1 mark each.

1 a pencil



2 a full school bag



3 a loaded truck



4 a watermelon



Circle the **best estimate** of each mass. 1 mark each.

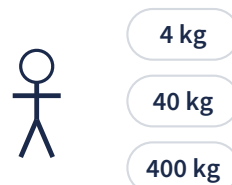
5 an apple



6 a family car



7 a Year 5 student



8 a loaf of bread



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Read each scale. Write the mass shown by the pointer, with its unit. 1 mark each.

9



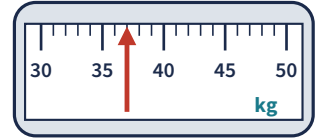
10



11

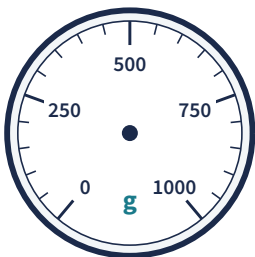


12 Bathroom scale

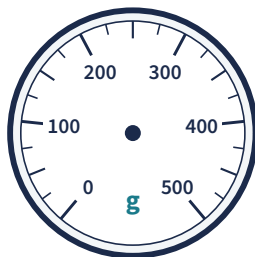


Draw the pointer on each scale to show the mass. 1 mark each.

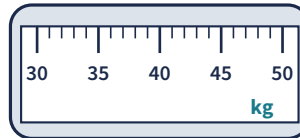
13 Draw 400 g



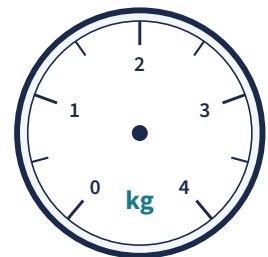
14 Draw 325 g



15 Draw 42 kg



16 Draw 2500 g

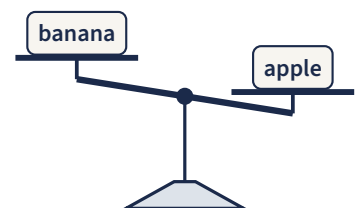
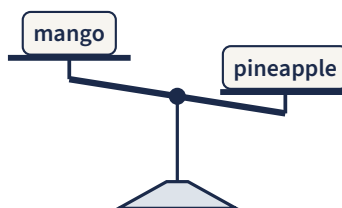
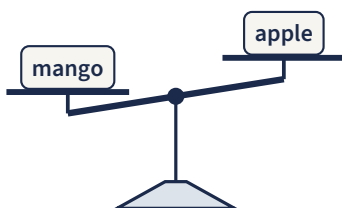


B

Practise use the skill

/ 21 marks

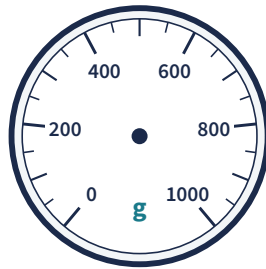
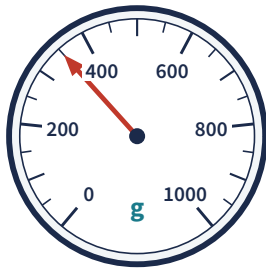
1 Look at the three balances. Write the fruit in order from **lightest** to **heaviest**. [2 marks]



Answer: _____

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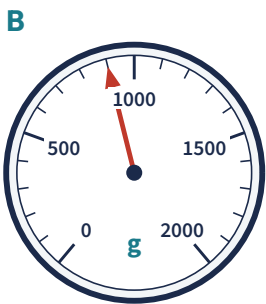
- 2 Zoe is baking. She puts flour on the kitchen scale. **a)** How much flour is on the scale? **b)** The recipe needs **800 g** of flour. How much more flour does she need? **c)** Draw the pointer on the second scale to show 800 g. [3 marks]



a) _____

b) _____

- 3 Two parcels are weighed on different scales. **a)** What is the mass of each parcel? **b)** Which parcel is heavier? By how many **grams**? [3 marks]

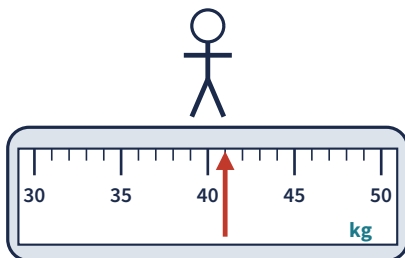


a) _____

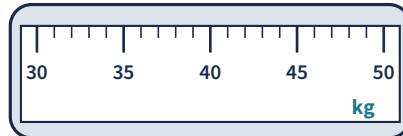
b) _____

- 4 Ella stands on the bathroom scale holding her cat. The first scale shows their mass together. Ella's mass on her own is **36 kg**. **a)** Draw the pointer on the second scale to show Ella's mass. **b)** What is the mass of the cat? [2 marks]

First scale: Ella and her cat



Second scale: Ella on her own



Answer: _____

- 5 A small truck can carry up to **5 t**. It is loaded with **3** crates. Each crate has a mass of **1200 kg**. **a)** What is the mass of the crates altogether? **b)** How much more mass can the truck carry? [2 marks]

Answer: _____

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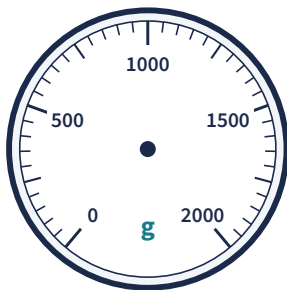
- 6 Complete the table. Choose the best unit (g, kg or t) and write a sensible estimate.

[2 marks]

Object	Unit	Estimate
a slice of bread		
a netball		
an adult elephant		
a bag of potatoes		

- 7 Lucy posts 3 books. Each book has a mass of **450 g**. **a)** What is the mass of the parcel? **b)** Draw the pointer to show it. **c)** Use the price list to find the cost of posting it.

[3 marks]



Parcel prices	
Mass of parcel	Price
Up to 500 g	\$8.95
Over 500 g, up to 1 kg	\$12.50
Over 1 kg, up to 3 kg	\$16.40
Over 3 kg, up to 5 kg	\$19.80

- a) _____
- c) _____

- 8 Draw a line to join each pair of **equal** masses.

[2 marks]

1 kg	•	•	2000 kg
half a kilogram	•	•	1500 g
2 t	•	•	250 g
a quarter of a kilogram	•	•	1000 g
1 kg 500 g	•	•	500 g

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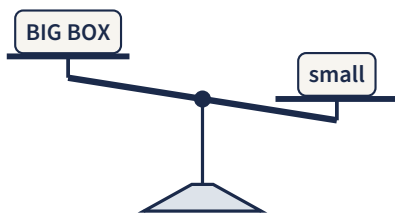
- 9 An AFL football has a mass of **450 g**. The coach carries **8** footballs in a bag. The empty bag has a mass of **400 g**. What is the total mass, in **kilograms**? [2 marks]

Answer:

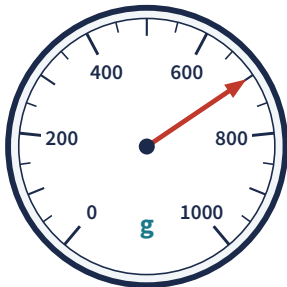
C Think it through *explain your thinking*

/ 10 marks

- 1 Zac says, “The big box must be heavier than the small box, because it is bigger.” [2 marks]
Look at the balance. Do you agree with Zac? Explain.



- 2 Priya says the scale shows **620 g**. Do you agree with Priya? Explain her mistake. [2 marks]



- 3 True or false? “1 kg of feathers is lighter than 1 kg of bricks.” Explain. [2 marks]

- 4 Always, sometimes or never true? “A mass written in **grams** is lighter than a mass written in **kilograms**.” Circle one and give examples. [2 marks]

Always

Sometimes

Never

- 5 Which is the **odd one out**? 2500 g, $2\frac{1}{2}$ kg, 2 kg 500 g, 250 g Explain. [2 marks]

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D**Challenge** *stretch yourself*

/ 9 marks

- 1** **3 apples** balance **1 pineapple**. **2 pineapples** balance **1 watermelon**. The watermelon has a mass of **2400 g**. All apples have the same mass, and so do the pineapples. **a)** Find the mass of one pineapple and one apple. **b)** How many apples would balance the watermelon? [3 marks]



Answer: _____

- 2** Mr Chen has three masses for his pan balance: **100 g**, **200 g** and **500 g**. **a)** He puts one or more masses on **one** pan. List **all** the different masses of flour he can measure. **b)** He wants **400 g** of flour. Explain how he can do it if he may put masses on **both** pans. [3 marks]

Answer: _____

- 3** A lift can safely carry **600 kg**. Mr Lee has a mass of **85 kg** and his trolley has a mass of **35 kg**. He wants to take boxes of paper up in the lift with him. Each box has a mass of **7 kg**. What is the **greatest** number of boxes he can take in one trip? Explain. [3 marks]

Answer: _____

How did I go?Warm up ____ / 16 Practise ____ / 21 Think it through ____ / 10 Challenge ____ / 9 **Total** ____ / 56Want help with Year 5 maths? Our tutors make it click. **Book a free trial class at [edulift.com.au](https://www.edulift.com.au)**