



Year 4 Mathematics

Measuring Our World: Weight (g, kg)

Worksheet 33: Units & Scaled Instruments

Name: _____ Date: _____

Section 1: Fluency - Choosing g or kg

Decide which unit is most appropriate for measuring each object.

1. Would you measure a slice of bread in grams (g) or kilograms (kg)?

Answer: _____

2. Would you measure a mountain bike in grams (g) or kilograms (kg)?

Answer: _____

3. Which unit would you use to measure an apple?

Answer: _____

4. Which unit would you use to measure a car?

Answer: _____

5. Would you measure a pencil in grams (g) or kilograms (kg)?

Answer: _____



6. Would you measure a watermelon in grams (g) or kilograms (kg)?

Answer: _____

7. Which unit would you use to measure a paperclip?

Answer: _____

8. Which unit would you use to measure an adult person?

Answer: _____

Gram Grasshopper!

Why did the grasshopper love grams?

Because they were light enough to hop around with!

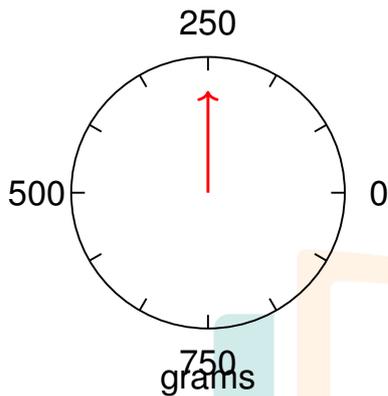




Section 2: Visual Modeling - Reading Kitchen Scales

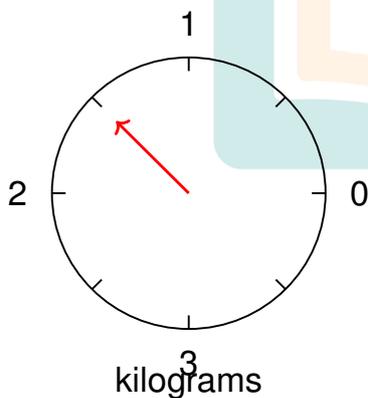
Read the mass shown on each scale carefully.

9. What is the mass shown on this scale?



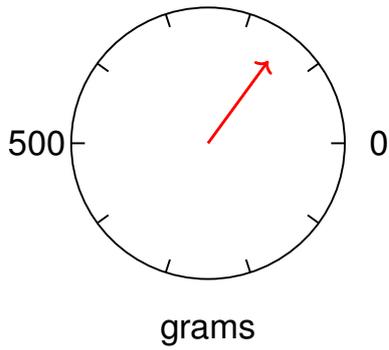
Answer: _____

10. What mass is shown on this scale?



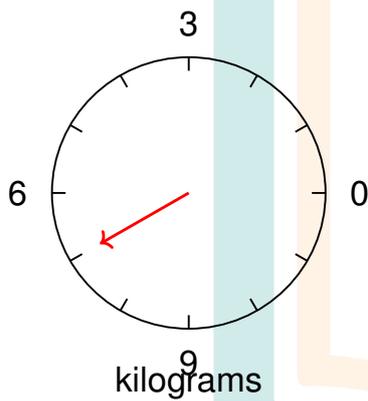
Answer: _____

11. Read the mass on this scale:



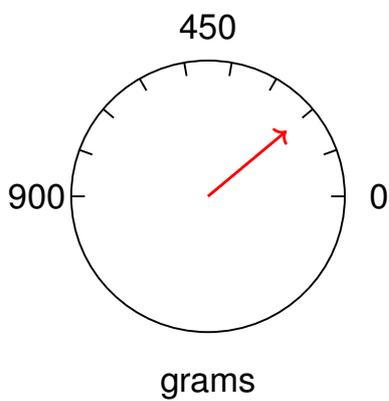
Answer: _____

12. What is the mass shown?



Answer: _____

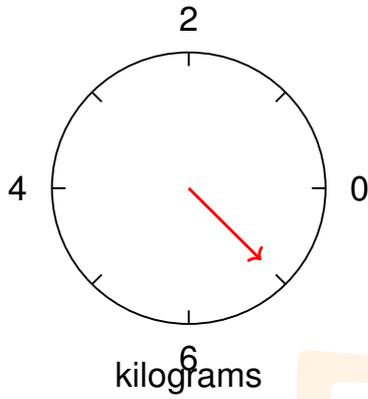
13. What mass does the needle point to?





Answer: _____

14. Read this scale:



Answer: _____



Scale Reader Champion!

Why did the needle go to school?

To learn how to point things out clearly!



Section 3: Reasoning - Interpreting Partial Units

Work out the mass when the needle is between marked intervals.

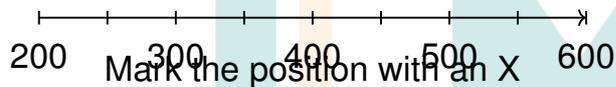
15. A scale has marks every 100g. The needle is exactly halfway between 400g and 500g. What is the weight?

Answer: _____

16. A scale shows marks at 0kg, 2kg, 4kg, and 6kg. The needle is halfway between 2kg and 4kg. What is the mass?

Answer: _____

17. The scale below has marks every 50g. Where is 375g?



18. A kitchen scale shows 0g, 500g, and 1000g. If the needle points one-quarter of the way between 500g and 1000g, what is the mass?

Answer: _____

19. On a scale marked in intervals of 200g, the needle is between the 600g and 800g marks, closer to 600g. Estimate the mass.

Answer: _____

20. A scale has marks at 0kg, 1kg, 2kg, 3kg, 4kg, and 5kg. The needle points three-quarters of the way from 2kg to 3kg. What is the mass?



Answer: _____

21. If a scale counts by 10g (10g, 20g, 30g...), and the needle is at the third mark after 50g, what is the reading?

Answer: _____

22. A bathroom scale shows marks every 5kg. If you're standing on it and the needle is exactly between 40kg and 45kg, what is your mass?

Answer: _____

Mass Master!



intervals

Why did the student put his homework on the scale?

Because he heard it was 'heavy' reading!

Excellent! You're a mass measurement expert!



Answer Key

Worksheet 33: Units & Scaled Instruments

Section 1: Fluency - Choosing g or kg

1. Answer: **grams (g)**
2. Answer: **kilograms (kg)**
3. Answer: **grams (g)**
4. Answer: **kilograms (kg)**
5. Answer: **grams (g)**
6. Answer: **kilograms (kg)**
7. Answer: **grams (g)**
8. Answer: **kilograms (kg)**

Section 2: Visual Modeling - Reading Kitchen Scales

9. Answer: **250g**
10. Answer: **1.5kg** or **1kg 500g**
11. Answer: **150g** (approximately)
12. Answer: **7kg** (approximately)
13. Answer: **200g** (approximately)
14. Answer: **7kg** or **6.5-7kg**

Section 3: Reasoning - Interpreting Partial Units

15. Answer: **450g**
16. Answer: **3kg**
17. Answer: **Mark should be placed at 3.5 units from the start** (between 350g and 400g)
18. Answer: **625g**



Working: One-quarter of the way from 500g to 1000g = $500\text{g} + 125\text{g} = 625\text{g}$

19. Answer: **650g** (or similar estimate like 640-660g)

20. Answer: **2.75kg** or **2kg 750g**

21. Answer: **80g**

Working: $50\text{g} + 10\text{g} + 10\text{g} + 10\text{g} = 80\text{g}$

22. Answer: **42.5kg** or **42kg 500g**





Year 4 Mathematics

Measuring Our World: Weight (g, kg)

Worksheet 34: Comparing Mass & Conversions

Name: _____ Date: _____

Remember: 1 kilogram (kg) = 1,000 grams (g)

Section 1: Fluency - Simple Conversions

Convert between grams and kilograms.

1. How many grams are in 2 kilograms?

Answer: _____

2. Convert 3,500g into kilograms and grams.

Answer: _____

3. How many grams are in 5 kilograms?

Answer: _____

4. Convert 1,250g to kilograms and grams.

Answer: _____

5. How many grams are in 4.5 kilograms?



Answer: _____

6. Convert 7,000g to kilograms.

Answer: _____

7. How many grams are in 0.5 kilograms?

Answer: _____

8. Convert 2,800g into kilograms and grams.

Answer: _____

Conversion Champion!

*Why did the kilogram break up with the gram?
Because there were 1,000 reasons between
them!*





Section 2: Problem Solving - Comparing and Ordering

Compare masses and arrange them in order.

9. Order these from lightest to heaviest: 500g, 2kg, 1,200g, 50g.

Answer: _____

10. Which is heavier: 3,500g or 3kg?

Answer: _____

11. Order from lightest to heaviest: 750g, 1.5kg, 900g, 2,100g.

Answer: _____

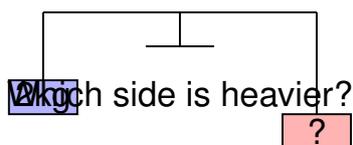
12. Which is lighter: 4kg or 4,200g?

Answer: _____

13. Circle the heaviest mass: 850g, 0.9kg, 920g, 1kg.

Answer: _____

14. Look at this balance scale:



If the right side holds 1,800g, which side is heavier?

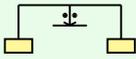


Answer: _____

15. Order these masses from heaviest to lightest: 5kg, 4,500g, 6,200g, 5.5kg.

Answer: _____

Comparing Champion!



Why did the balance scale love its job?

Because it always stayed fair and balanced!





Section 3: Challenge - Addition of Mass

Add masses together, converting where necessary.

16. A bag of flour weighs 1.5kg and a bag of sugar weighs 500g. What is the total mass in kilograms?

Answer: _____

17. A parcel contains a book weighing 850g and a toy weighing 1.2kg. What is the total mass in grams?

Answer: _____

18. Three apples weigh 450g in total. If you add a 2kg watermelon, what is the total mass in kilograms?

Answer: _____

19. A recipe needs 750g of butter and 1.25kg of flour. What is the total mass in kilograms?

Answer: _____

20. A backpack weighs 2.5kg. You add books weighing 1,800g. What is the total mass in kilograms?

Answer: _____

21. A box contains items weighing 600g, 1.4kg, and 950g. What is the total



mass?

Answer: _____

22. If a cat weighs 3.8kg and gains 450g, what is its new mass?

Answer: _____

23. A shopping bag contains groceries weighing 2.3kg. You add items weighing 700g and 550g. What is the total mass in kilograms?

Answer: _____

Weight Wizard!



Why did the heavyweight hippo love maths?

Because adding up all the kilograms was a 'weigh' of life!

Outstanding! You're a mass measurement master!



Answer Key

Worksheet 34: Comparing Mass & Conversions

Section 1: Fluency - Simple Conversions

1. Answer: **2,000g**
2. Answer: **3kg 500g** or **3.5kg**
3. Answer: **5,000g**
4. Answer: **1kg 250g** or **1.25kg**
5. Answer: **4,500g**
6. Answer: **7kg**
7. Answer: **500g**
8. Answer: **2kg 800g** or **2.8kg**

Section 2: Problem Solving - Comparing and Ordering

9. Answer: **50g, 500g, 1,200g, 2kg**
10. Answer: **3,500g** (because $3\text{kg} = 3,000\text{g}$)
11. Answer: **750g, 900g, 1.5kg, 2,100g**
12. Answer: **4kg** (because $4\text{kg} = 4,000\text{g}$)
13. Answer: **1kg** (heaviest)
14. Answer: **The left side (2kg)** is heavier than 1,800g
15. Answer: **6,200g, 5.5kg, 5kg, 4,500g**
(From heaviest to lightest: 6.2kg, 5.5kg, 5kg, 4.5kg)

Section 3: Challenge - Addition of Mass

16. Answer: **2kg** or **2.0kg**
Working: $1.5\text{kg} + 0.5\text{kg} = 2\text{kg}$
17. Answer: **2,050g**



Working: $850\text{g} + 1,200\text{g} = 2,050\text{g}$

18. Answer: **2.45kg**

Working: $0.45\text{kg} + 2\text{kg} = 2.45\text{kg}$

19. Answer: **2kg** or **2.0kg**

Working: $0.75\text{kg} + 1.25\text{kg} = 2\text{kg}$

20. Answer: **4.3kg**

Working: $2.5\text{kg} + 1.8\text{kg} = 4.3\text{kg}$

21. Answer: **2.95kg** or **2,950g**

Working: $600\text{g} + 1,400\text{g} + 950\text{g} = 2,950\text{g} = 2.95\text{kg}$

22. Answer: **4.25kg**

Working: $3.8\text{kg} + 0.45\text{kg} = 4.25\text{kg}$

23. Answer: **3.55kg**

Working: $2.3\text{kg} + 0.7\text{kg} + 0.55\text{kg} = 3.55\text{kg}$

Congratulations!

You are now a Mass Measurement Expert!

Keep weighing and measuring accurately!