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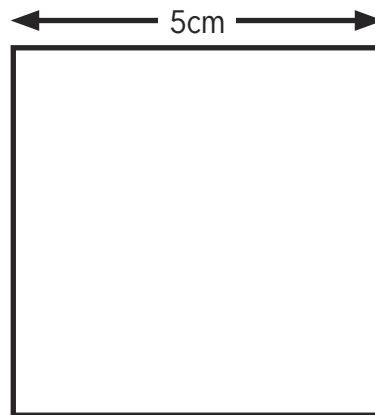
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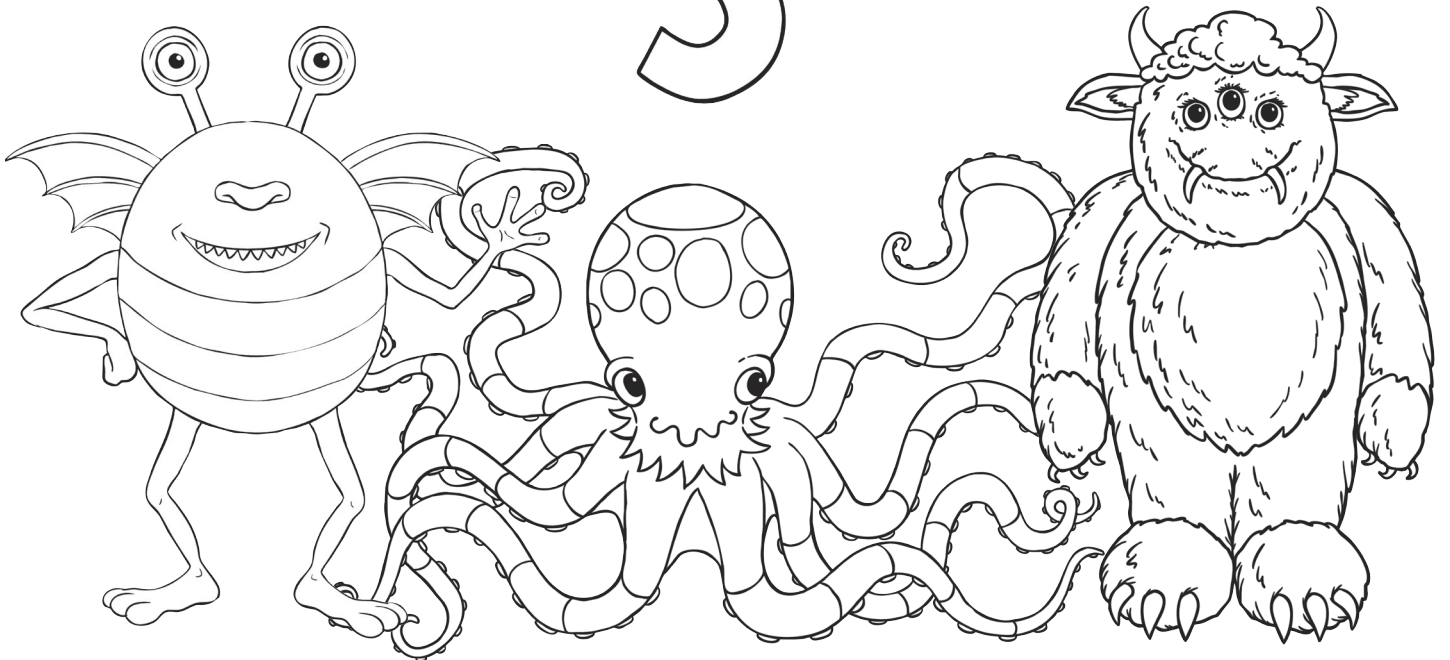


Home Learning Year 4
Maths Activity Book

Measures

Answers

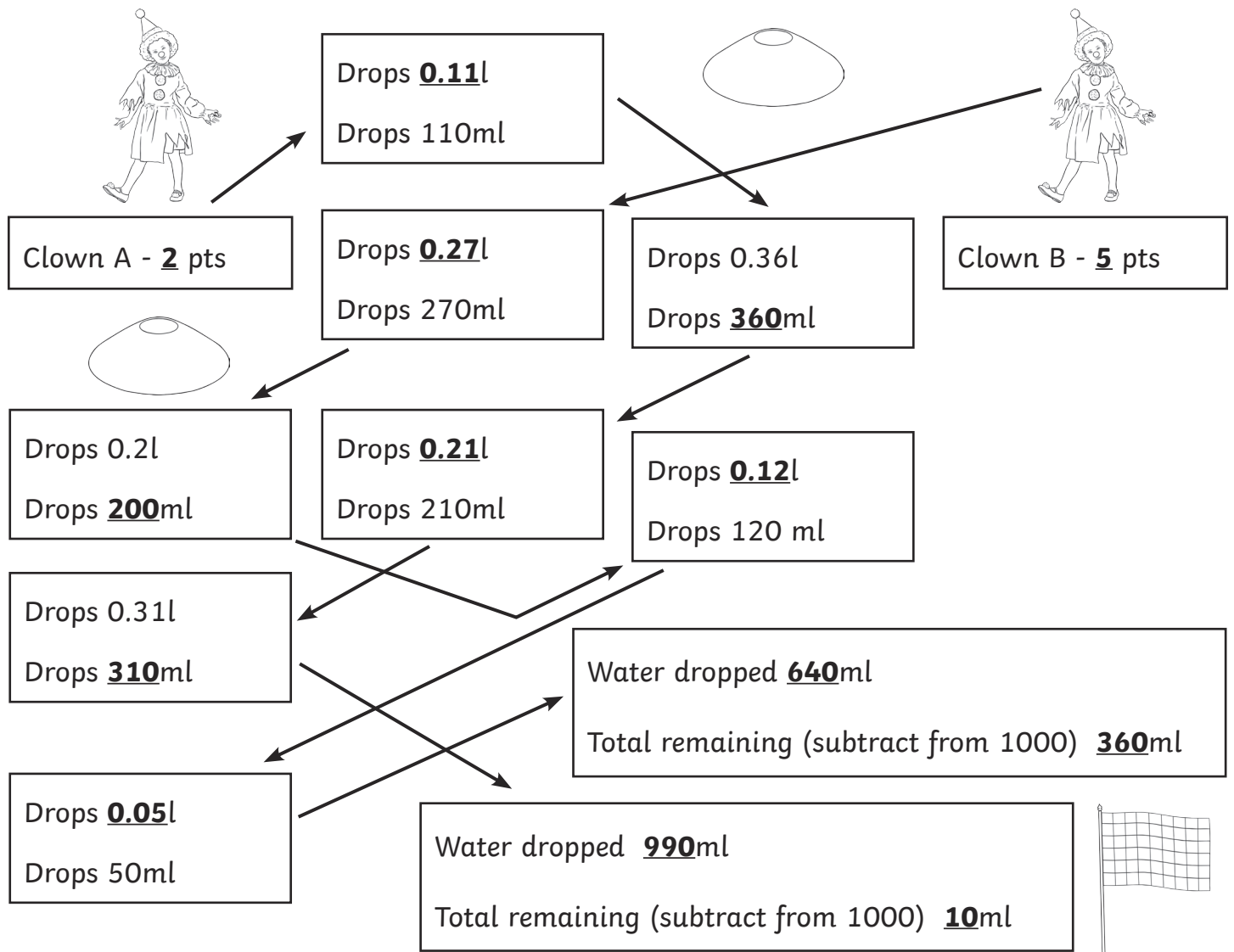
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Year 4 Programme of Study – Measures

Statutory Requirements	Worksheet	Page Number	Notes
Convert between different units of measure.	It's a Knockout	1	
	Converting Measurements with a Place Value Chart	2	
Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.	Measure and calculate the perimeter of a rectilinear figure	3	
Find the area of rectilinear shapes by counting squares.	Calculate Area by Counting Squares	4	
Estimate, compare and calculate different measures, including money in pounds and pence.	Estimating and Comparing Measures	5	
	Money Problems	6,7	
	Maths with Measures Worksheet	8	
Read, write and convert time between analogue and digital 12- and 24-hour clocks.	Converting Time Worksheet	9	
Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days.	Converting Space Units of Time	10	

It's a Knockout – Litres and Millilitres



Converting Measurements with a Place Value Chart

mm	cm	m
2000	200	2
300	30	0.3
160	16	0.16
3400	340	3.4
67	6.7	0.067
450	45	0.45
1800	180	1.8
346	34.6	0.346
1900	190	1.9
990	99	0.99
10000	1000	10
1568	156.8	1.568

Measure and Calculate the Perimeter of a Rectilinear Figure

The Perimeter of Squares

1. Side 1 = 9cm
Perimeter = 36cm

2. Side 1 = 1cm
Perimeter = 4cm

3. Side 1 = 3cm
Perimeter = 12cm

4. Side 1 = 6cm
Perimeter = 24cm

5. Side 1 = 9cm
Side 2 = 7cm
Perimeter = 32cm

6. Side 1 = 4cm
Side 2 = 3cm
Perimeter = 14cm

7. Side 1 = 9cm
Side 2 = 3cm
Perimeter = 24cm

8. Side 1 = 7cm
Side 2 = 5cm
Perimeter = 24cm

9. Side 1 = 1cm
Side 2 = 6cm
Perimeter = 14cm

10. Side 1 = 7cm
Side 2 = 2cm
Perimeter = 18cm

Calculating the Area of Shapes by Counting Squares

1. 11 cm^2
2. 7 cm^2
3. 12 cm^2
4. 17 cm^2
5. 16 cm^2
6. Answers will vary.

Estimating and Comparing Measures

*Approximate based on average sizes:

1. Medium sized car = 1360 kg, Average adult = 76 kg (UK)
Answer = Approximately 18 adults!
2. Bus = Average length 7 metres, Pencil = 19cm
Answer = Approximately 37 pencils!
3. Film = Average length 110 minutes, Cartoon = Average length 10 minutes
Answer = Approximately 11 cartoons
4. Woman = Average height 161cm (UK), Beans – Tin height 10.6cm
Answer = Approximately 15!
5. Elephant = Average weight 5000kg (Asian Elephant), Fridge = 90kg
Answer = Approximately 60!
6. Apple = Average weight = 100g, Egg = Average weight = 50g
Answer = Approximately 2!
7. Pop Song = Average length 3 minutes, TV advert = Average length 30 seconds
Answer = Approximately 6!
8. Lorry = Average height 4 metres, Cat = Average height 25cm
Answer = Approximately 16!

Money Problems

1. I buy a pen for £1.70 and a notepad for £3.20. How much have I spent altogether?

£4.90

2. I buy three cakes for £1.86 each. How much have I spent altogether?

£5.58

3. I bought one bike for £39.98 and one scooter for £9.78. How much have I spent altogether?

£49.76

4. I bought two pairs of socks at £2.21 each and 3 bunches of flowers priced £4.70 each. How much have I spent altogether?

£18.52

5. I bought two jumpers priced £15.60 each and four lollipops for 30p each. How much have I spent altogether?

£32.40

6. Sam and 3 of his friends bought a drink each for £1.75. How much did they spend in total?

£7.00

7. I bought one jumper for £13.00, one pair of shoes for £24.39 and a bag for £12.50. How much did I spend altogether?

£49.89

8. John bought 3 brownies at a bake sale. If each brownie cost £0.25 and he paid with a twenty pound note, how much change does he get?

£19.25

9. Jenny bought 4 cans of pop at the shop. If each can cost her £1.60 and she paid with a twenty pound note how much change does she get back?

£13.60

10. Harry bought 4 bunches of bananas at the greengrocers. Each bunch cost £0.79. how much change would he get if he paid with a twenty pound note?

£16.84

11. Julia got given a gift card for her birthday with £20 of store credit. She bought a dress that cost £16.67 using the gift card. How much money does she have left on the gift card?

£3.33

12. Paul bought a book from the book shop. If it costs £6.23, how much change would Paul get back if he paid with a twenty pound note?

£13.77

13. Helen bought an ornament from a gift shop. It cost £19.67. How much change will Helen receive if she paid with a twenty pound note?

£0.33

14. Annie bought 4 chocolate bars to give to her friends. Each one cost £1.43. How much change will she receive if she pays with a twenty pound note?

£14.28

Maths with Measures

1. I have a 3m piece of ribbon and use 50cm of it to make a card. How much ribbon do I have left?

2.5m or 250cm

2. Show your working out underneath. How many 25mm slices of rock can be made from one 2m piece of rock?

80 slices

3. Imperial measurements: **1oz = 30g**

1 pint = 568ml

What are the metric measurements of these?

a) 10 oz = **300g**

a) 3 oz = **90g**

a) 6 oz = **180g**

a) Half a pint = **284ml**

a) 4 pints = **2272ml**









4. I have a 10 kg bag of potatoes, but dropped a quarter of them on the way home. How many grams of potatoes do I have left?

7.5kg

5. There is 500ml of water in the small bottle. The big bottle contains 4 and a half times as much. How much water is in the big bottle?

2250ml

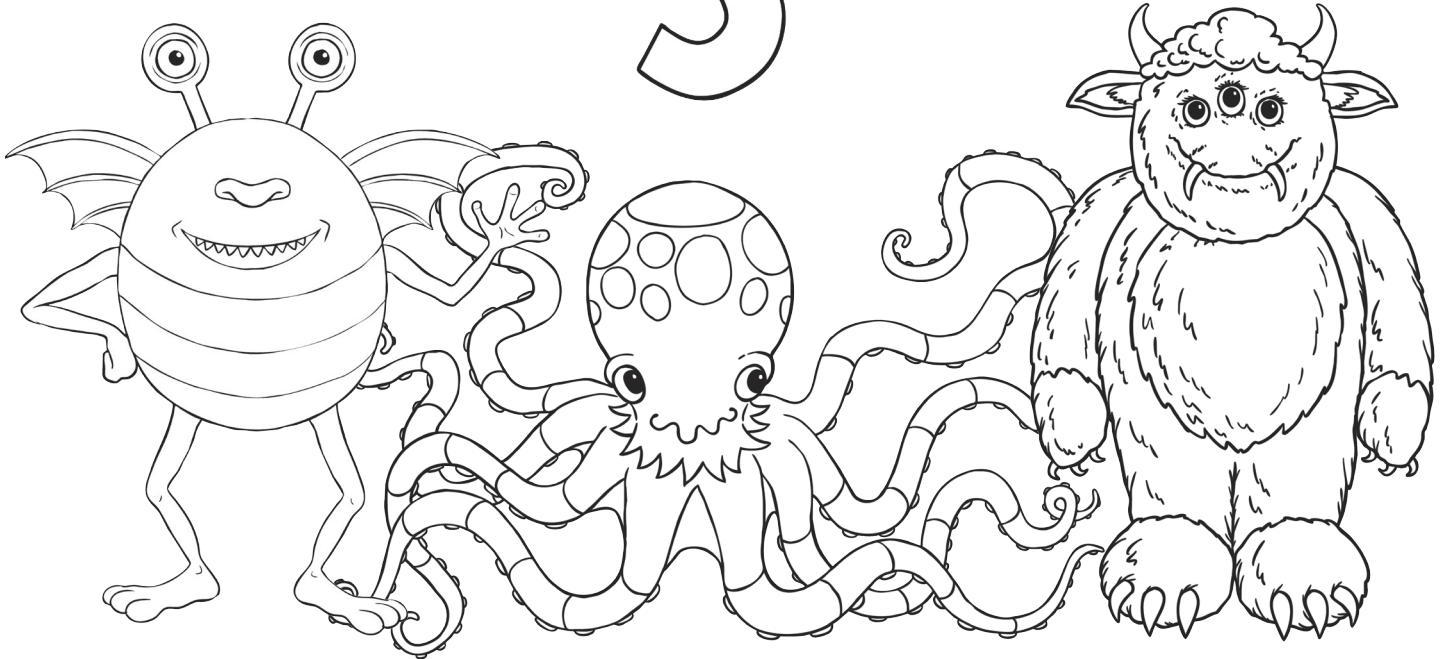
Converting Time

Time in Words	24 Hour Clock	12 Hour Clock	Analogue
seven o'clock in the evening	19:00	7:00p.m.	
eleven o'clock in the morning	11:00	11:00a.m.	
quarter past two in the afternoon	14:15	2:15 pm	
twenty past eight in the morning	8:20	8:20p.m	
midday	12:00	12:00 midday	
twenty to seven in the evening	18:40	6:40p.m.	
midnight	0:00	12:00 midnight	
seven minutes to eight at night	19:53	7:53 pm	

Converting Space Units of Time

1. 36 months
2. 510 seconds
3. 1392 hours
4. 90 minutes
5. 153 hours
6. 72 hours
7. 12 weeks and 4 days

1 2 3 + =



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