Mathletics

Series D Teacher

Measurement

Series D – Measurement

Contents

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Series D – Measurement

Page 1

1a 600

b 300

c 900

2a–c Answers will vary.

3a 4–6

b 2–3

c 1–2

Page 2

1 $2\frac{1}{2}$ cm; 6 cm; 13 cm

2a–d Teacher check.

3a–d Answers will vary. Teacher check.

Page 3

1a 138

b 167

c 282

d 545

e 459

f 290

2a 2 m 17 cm

b 3 m 91 cm

c 4 m 62 cm

d 1 m 13 cm

e 8 m 35 cm

f 1 m 94 cm

3a 50

b 35

4a cm

b m

c m

d cm

Pages 4–5

1a–c Answers will vary. Teacher check.

2a 40

b 90

c 20

3a 4

b 7

c 3

4a 25

b 35

c 15

d 57

5a 38 mm

b 40 mm

c 45 mm

d 36 mm

6a 15

b 57

c 48

d 19

e 83

f 24

7b 8 cm 4 mm

c 2 cm 7 mm

d 1 cm 9 mm

e 5 cm 3 mm

f 3 cm 6 mm

8a 13

b 58

c 12

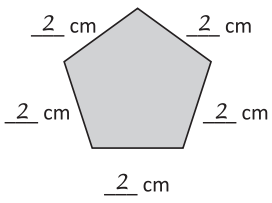
d 19

Page 6

1a P = 6 + 1 + 6 + 1
= 14 cm

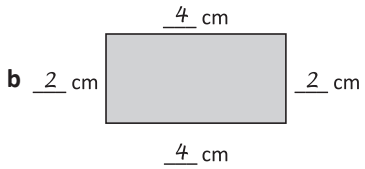
b P = 3 + 3 + 3 + 3
= 12 cm

2a



P = 2 + 2 + 2 + 2 + 2
= 10 cm

b



P = 4 + 2 + 4 + 2
= 12 cm

Page 7

1 C A E B D

2 B A D E C

3a 515 mm 51 cm $\frac{1}{2}$ m

b $\frac{1}{4}$ m 24 cm 230 mm

Page 8

1a 4 cm

b 5 cm

c 25 m; 100 m

d 10 m; 1,000 cm

e Kumar; Mark

f 400 mm or 40 cm

Page 9

Getting ready

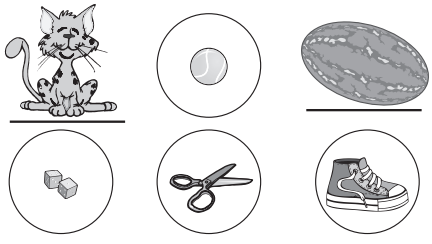
Teacher check.

What to do

Observe students.

Pages 10–11

1a–f



2 Teacher check.

3a 500 g

b 250 g

c 400 g

d 850 g

Series D – Measurement

Pages 10–11

3e 750 g

f 600 g

4a (400 g) (100 g) (500 g)

b (200 g) (600 g) (200 g)

c (220 g) (480 g) (300 g)

5 Answers will vary.

6 bananas, oranges, apples, lettuce, carrots

Pages 12–13

1a 75 g

b 82 g

c 500 g

d 1,000 g

e (1,000 g)

f 500 g

2a g

b kg

c g

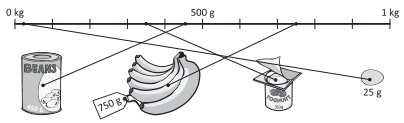
d kg

3a–c Answers will vary.

4a–c Answers will vary.

5a–c Answers will vary.

6



7a (more)

b (less)

c (more)

d (less)

8a 350 g

b 250 g

Page 14

1a 300 g

b 1 kg 250 g

c 21 kg 800g

d Fruity Chews; 2 p

e 800 kg

f A, B and E

Page 15

Getting ready

Observe students.

What to do

Answers will vary. Teacher check.

Page 16

a 300

b 750

c 1,750

Page 17

1a–h Answers will vary.

2a–d Answers will vary.

Pages 18–19

1a 4

b 5

c 20

d 1,000

2 **Order:** d, e, c, b, a

3a ml

b l

c l

d ml

e ml or l

f ml

4a 200 ml

b 500 ml

c 800 ml

d 100 ml

5a c

b d

5c 600 ml

d a, b, d

6a 700 ml

b 600 ml

Page 20

Getting ready

Observe students.

What to do

Answers will vary. Teacher check.

Page 21

1a l

b 600 ml

c 120 l; 990 l

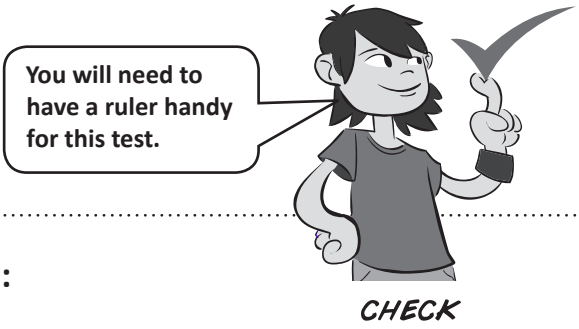
d 6

e 1 l 400 ml

f 1 l 300 ml

Units of length

Name _____



1 **Complete this fact:**

1 m = _____ cm

2 **Fill the gaps using cm or m:**

a Becca is 112 _____ tall.

b Tom lives 50 _____ from school.

c Her hair ribbon was 12 _____ long.

d The pool is 2 _____ deep.

3 **Convert these metres to centimetres:**

a 7 m = _____ cm **b** 2 m = _____ cm **c** 10 m = _____ cm

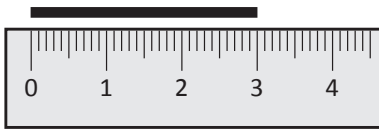
4 **Convert these centimetres to metres:**

a 100 cm = _____ m **b** 500 cm = _____ m **c** 300 cm = _____ m

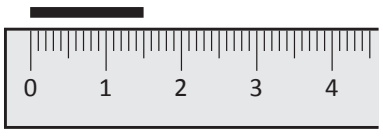
5 **Write these lengths in centimetres:**

a 2 m 36 cm = ____ cm **b** 5 m 16 cm = ____ cm **c** 1 m 9 cm = ____ cm

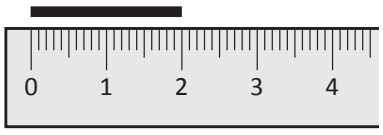
6 **Record the length of each line in centimetres and millimetres:**

a 

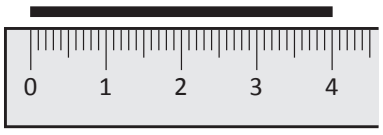
_____ cm
_____ mm

b 

_____ cm
_____ mm

c 

_____ cm
_____ mm

d 

_____ cm
_____ mm

Skills	Not yet	Kind of	Got it
• Measures lengths or distances using centimetres and metres			
• Converts between metres and centimetres			
• Converts between centimetres and millimetres			

Units of length

Name _____

7 **For this question, you need a ruler. Create your own design made of only straight lines. It should include these lengths: 20 mm, $\frac{1}{2}$ cm, 10 cm, 12 cm, 5 cm and 8 mm. Label each line.**

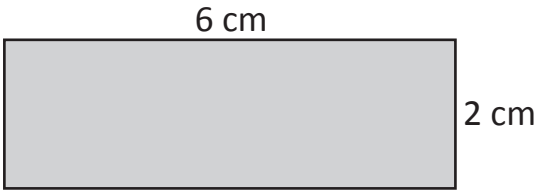
8 **What is a perimeter?**

_____

_____

9 **Find the perimeters of these shapes.**

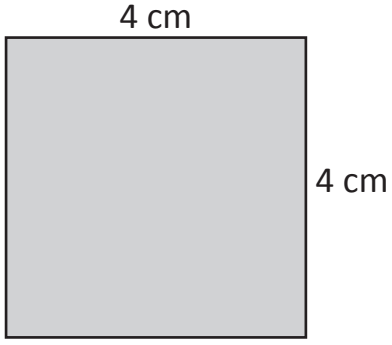
a



P = ____ + ____ + ____ + ____

= _____ cm

b



P = ____ + ____ + ____ + ____

= _____ cm

Skills	Not yet	Kind of	Got it
• Defines the term 'perimeter'			
• Measures the perimeter of rectangles and squares			

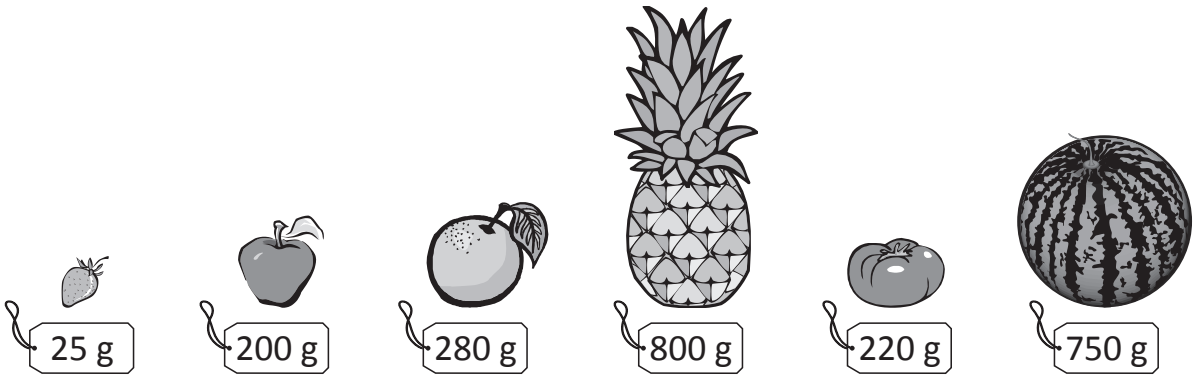
Mass

Name _____

1 **Convert these kilograms to grams:**

a 1 kg = ☐ **b** 2 kg = ☐ **c** 9 kg = ☐

2 **Here are some fruit with labels showing their mass. Answer the questions below:**

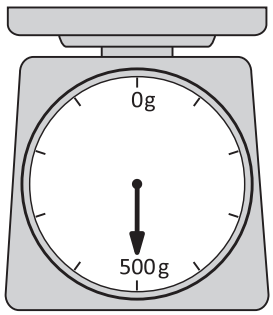


a Which is the heaviest fruit? _____

b Which is the lightest fruit? _____

c How many apples will make 1 kg? _____

d Look carefully at the row of fruit. Put a ring around two that together will give the mass shown on the scale.



Skills	Not yet	Kind of	Got it
• Converts between kilograms and grams			
• Identifies objects that have a mass of about one kilogram			

Volume and capacity

Name _____

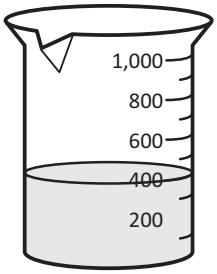
1 **How much liquid do you think each container could hold? Draw a line to match the capacity label to each object.**

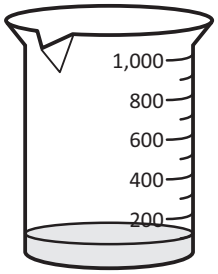
250 ml	1 l	50 ml

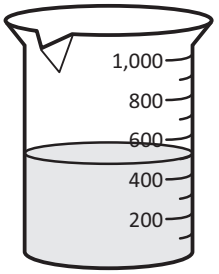
2 **Convert these litres to millilitres:**

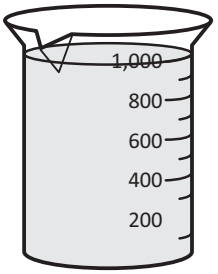
a 2 l = _____ ml **b** 4 l = _____ ml **c** $1\frac{1}{2}$ l = _____ ml

3 **Label these containers with the amount of water in each:**









a _____ **b** _____ **c** _____ **d** _____

Skills	Not yet	Kind of	Got it
• Recognises capacity of containers			
• Knows one litre = 1,000 ml, half litre = 500 ml			

Series D – Measurement – Student Progress Record

Name_____ Class_____ Date _____

What went well: _____

_____

_____

_____

What I need to improve: _____

_____

_____

_____

Series D – Measurement – Student Progress Record

Name_____ Class_____ Date _____

What went well: _____

_____

_____

_____

What I need to improve: _____

_____

_____

_____

Series D – Measurement

ASSESSMENT ANSWERS

Pages 3–4

1 100

2a cm

b m

c cm

d m

3a 700

b 200

c 1000

4a 1

b 5

c 3

5a 236

b 516

c 109

6a 3 cm; 30 mm

b $1\frac{1}{2}$ cm; 15 mm

c 2 cm; 20 mm

d 4 cm; 40 mm

7 Teacher check.

8 Perimeter is the total length around the outside of an enclosed space.

9a P = 6 + 2 + 6 + 2
= 16 cm

b P = 4 + 4 + 4 + 4
= 16 cm

Page 5

1a 1000 g

b 2000 g

c 9000 g

2a pineapple

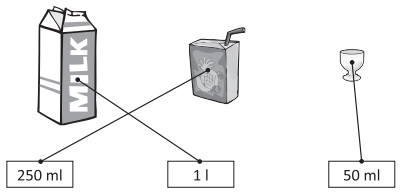
b strawberry

c 5

d Circle orange and tomato.

Page 6

1



2a 2000

b 4000

c 1500

3a 400 ml

b 100 ml

c 500 ml

d 1000 ml or 1 l

Series D – Measurement

Topic	Reference	Strand	Objective
Units of length	3M1a	Measurement	Compare lengths (m/cm/mm).
Mass	3M1b	Measurement	Compare mass (kg/g).
Volume and capacity	3M1c	Measurement	Compare volume/capacity (l/ml).
Units of length	3M2a	Measurement	Measure lengths (m/cm/mm).
Mass	3M2b	Measurement	Measure mass (kg/g).
Volume and capacity	3M2c	Measurement	Measure volume/capacity (l/ml).
Units of length	3M7	Measurement	Measure the perimeter of simple 2D shapes.
Units of length	3M9b	Measurement	Add and subtract lengths (m/cm/mm).
Mass	3M9c	Measurement	Add and subtract mass (kg/g).
Volume and capacity	3M9d	Measurement	Add and subtract volume/capacity (l/ml).