

Mathletics

Series



Teacher



Measurement



Series B – Measurement

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Series B – Measurement

Page 1

1 Answers will vary.

Page 2

What to do

Answers will vary.

What to do next

Answers will vary.

Page 3

1a–e Answers will vary.

2 Answers will vary.

Page 4

What to do

a–c Answers will vary.

What to do next

Answers will vary.

Page 5

What to do

Answers will vary.

Page 6

What to do

Answers will vary.

What to do next

Observe students.

Page 7

What to do

Answers will vary.

Do students realise they must use the same measuring tool or combination of tools to compare the lengths?

What to do next

Answers will vary.

Do students realise that lengths can be measured using different tools?

Page 8

1a–e Answers will vary.

2a–e Answers will vary.

Page 9

1 Answers will vary.
Answers may include: half, bit, some, a little bit or other fractional terms.

2 Answers will vary.

3 Answers will vary.

Page 10

1a Amira

b no gaps, straight across

2a Teacher check.

b Answers will vary.

Do students note that measurement is often inexact due to variables?

Page 11

What to do

Answers will vary.

Answers will vary.

Answers will vary. Do students realise that the longer the measuring unit, the fewer units will be required?

What to do next

Answers will vary.

Page 12

1 Answers will vary.

2 Answers will vary.

3 Answers will vary.

Page 13

1a–f Answers will vary.

Page 14

Answers will vary.

Page 15

1 Answers will vary.

2 Answers will vary.

3 Answers will vary.

Page 16

1 Answers will vary.

2 Answers will vary.

Page 17

1a, b Answers will vary.

2a, b Answers will vary.

3 Answers will vary.

Students may note that the object with more mass feels heavier or that it pushes down on their hand more.

Page 18

What to do

Answers will vary.

Page 19

Answers will vary.

Page 20

a–f Answers will vary.

Page 21

a–e Answers will vary.

Page 22

What to do

Answers will vary.

What to do next

Observe students.

Page 23

1 Answers will vary.

2 Answers will vary.

3 Answers will vary.

Page 24

1a This house is small.
This house is big.

b This flower is big.
This flower is small.

2 Answers will vary.

Page 25

1 Answers will vary.

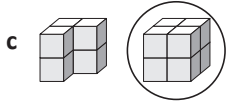
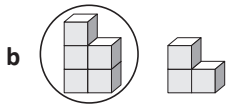
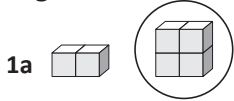
Page 26

1 capacity

2 Answers will vary.

Series B – Measurement

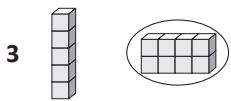
Page 27



2a 6

b more than 6 blocks

c 5 or fewer blocks



Students can be misled by height.
Do they realise it is the total
number of blocks that is relevant?

Page 28

What to do:

Observe students.

Whose lunchbox holds the most?

Answers will vary.

What to do next

Answers will vary.

Page 29



2 Answers will vary.

Containers with the capacity of
one litre.

Page 30

a–c Answers will vary.

Page 31

What to do

Answers will vary.

What to do next

Answers will vary.

Page 32

What to do

a–c Answers will vary.

What to do next

Answers will vary.

Page 33

What to do

a, b Answers will vary.

What to do next

a–c Answers will vary.

Length




Name _____

1 Colour the opposites the same colour.

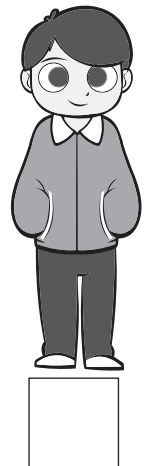
| | | | |
|-------------|--------------|-------|--------|
| long | shorter than | about | double |
| longer than | exactly | short | half |

2 Use objects to measure the length of this page. Draw or write the objects you used and how many you needed.

3 Draw a line that is

| | | |
|---|---|---|
| a much longer than this  | b a little bit shorter than this  | c the same length as this  |
|---|---|---|

4 Number the children to order them from shortest to tallest.



Length

Name _____

5 You can use different objects to measure length.

a Use  to measure the length of your 

b Use  to measure the length of your 

c Why might the numbers be different?

6 Use centicubes to measure the length of this line.

How long is it? centicubes long

| Skills and understandings | Not yet | Kind of | Got it |
|--|---------|---------|--------|
| • Uses a variety of terms to talk about length | | | |
| • Measures length with informal units | | | |
| • Compares and orders lengths | | | |
| • Measures with repeated common units | | | |
| • Measures with formal units using centicubes | | | |

1 Write some words we use when we talk about mass.

heavier than

2 Draw or write something that

a has a lot of mass

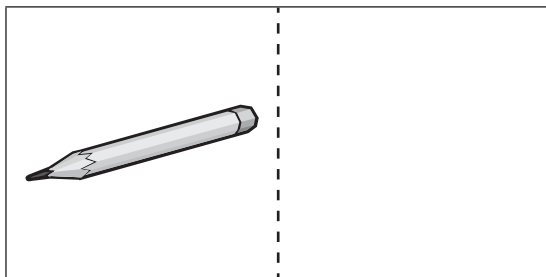
b has a little bit of mass

c you could lift easily

d you couldn't lift

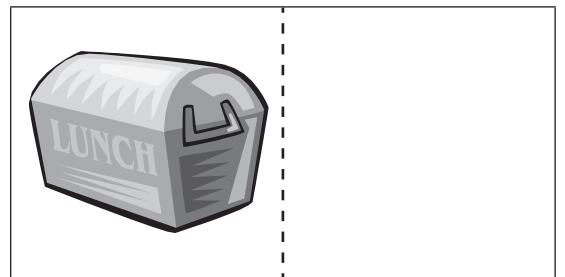
3 Hold classroom objects in your hands to find something that has more or less mass than the objects below. Draw them.

a



more mass

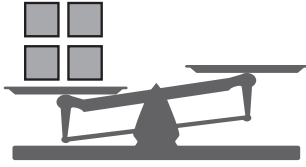
b



less mass

4 Draw blocks on the empty pan to make the scales look like this.

a



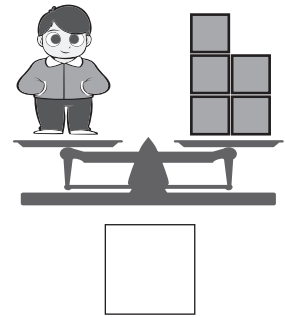
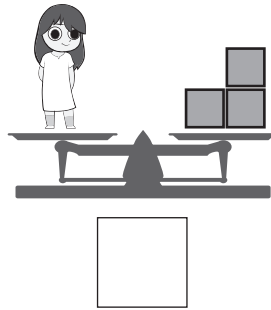
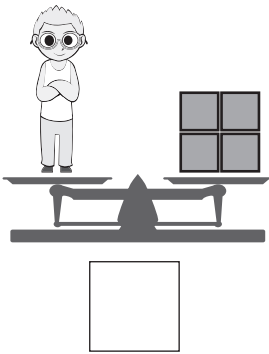
b



c



5 These children have been balanced with blocks. Order them from lightest to heaviest.



6 Draw or write something that is

a small AND heavy

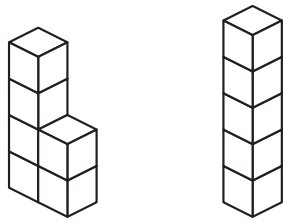
b big AND light

| Skills and understandings | Not yet | Kind of | Got it |
|---|---------|---------|--------|
| • Uses a variety of terms to talk about mass | | | |
| • Measures mass by estimating | | | |
| • Measures mass using informal units | | | |
| • Compares and orders masses | | | |
| • Explores the relationship between size and mass | | | |

Volume and capacity

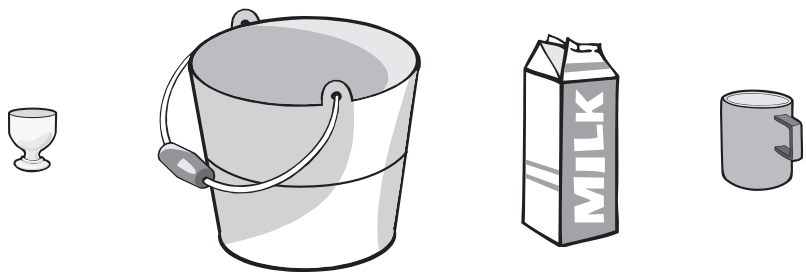
Name _____

1 a Circle the building with the greater volume.

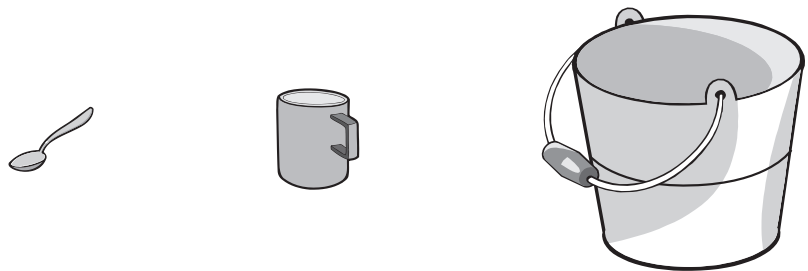


b How do you know it has the greater volume?

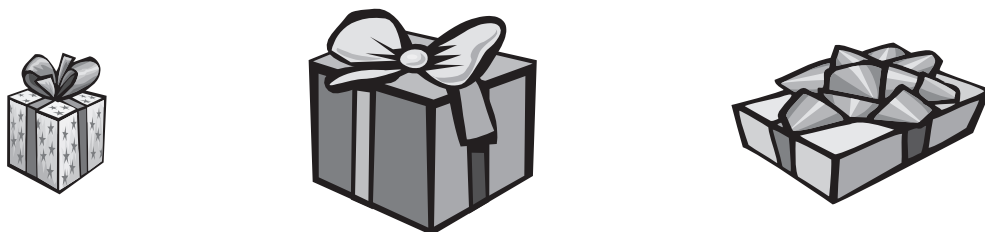
2 Circle the container that holds the **most** and **X** the container that holds the **least**.



3 Circle the object you would use to fill a bath tub.



4 Circle the box with the greatest volume.



| Skills and understandings | Not yet | Kind of | Got it |
|--|---------|---------|--------|
| • Measures volume by counting blocks | | | |
| • Compares and orders capacity of containers | | | |
| • Selects an appropriate informal measuring unit | | | |

Series B – Measurement – Student Progress Record

Name _____ Class _____ Date _____

What went well: _____

What I need to improve: _____



Series B – Measurement – Student Progress Record

Name _____ Class _____ Date _____

What went well: _____

What I need to improve: _____

Series B – Measurement

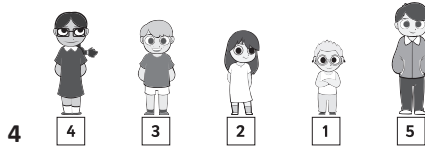
ASSESSMENT ANSWERS

Pages 3–4

- 1
- | | | | |
|-------------|--------------|-------|--------|
| long | shorter than | about | double |
| longer than | exactly | short | half |

2 Answers will vary.

3a–c Answers will vary.



5a–c Answers will vary.

6 16

Pages 5–6

1 Answers will vary.

2a–d Answers will vary.

3a, b Answers will vary.

4a Draw 3 or fewer blocks.

b Draw more than 1 block.

c Draw 2 blocks.

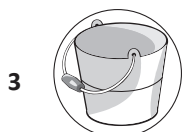
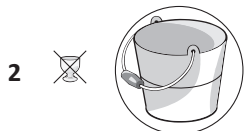


6a–d Answers will vary.

Page 7



b It uses more blocks.



Series B – Measurement

| Topic | Reference | Strand | Objective |
|----------------------------|-----------|-------------|---|
| Length | 1M1 | Measurement | Compare, describe and solve practical problems for: lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half); mass or weight (e.g. heavy/light, heavier than, lighter than); capacity/volume (full/empty, more than, less than, quarter); and time (quicker, slower, earlier, later). |
| Length | 1M2 | Measurement | Measure and begin to record the following: lengths and heights; mass/weight; capacity and volume; and time (hours, minutes, seconds). |
| Mass | 1M1 | Measurement | Compare, describe and solve practical problems for: lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half); mass or weight (e.g. heavy/light, heavier than, lighter than); capacity/volume (full/empty, more than, less than, quarter); and time (quicker, slower, earlier, later). |
| Mass | 1M2 | Measurement | Measure and begin to record the following: lengths and heights; mass/weight; capacity and volume; and time (hours, minutes, seconds). |
| Volume and Capacity | 1M1 | Measurement | Compare, describe and solve practical problems for: lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half); mass or weight (e.g. heavy/light, heavier than, lighter than); capacity/volume (full/empty, more than, less than, quarter); and time (quicker, slower, earlier, later). |
| Volume and Capacity | 1M2 | Measurement | Measure and begin to record the following: lengths and heights; mass/weight; capacity and volume; and time (hours, minutes, seconds). |