VISUAL DELIVERY

EMMathon 1–2

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Teacher Information

EMMmathon

After students have self-evaluated their first group of 20 lessons (myEMMdata page 12), teachers are advised to run an EMMathon.

An EMMathon is made up of 5 Marathons. A Marathon consists of 2 lessons from the previous 10, where the teacher presents the entire 40 questions without any teacher modelling.

The first Marathon (myEMMdata page 14, coded M01 in the plan below) revisits Lessons 11 and 12 (coded L11–L12) where only the question is presented. The second Marathon (M02) revisits Lessons 13 and 14 (L13–L14) etc. After the first EMMathon is completed, teachers return to the program presenting Lessons 21–40 as per the EMM script.

After students have self-evaluated their second group of 20 lessons (myEMMdata page 28), teachers run a second EMMathon (myEMMdata page 28), then return to the program, and so on. Each of the darker shaded sections below denote an EMMathon round. An EMMathon round consists of 10 lessons restructured into 5, effectively adding 40 lessons to the EMM program.

EMMathon 1

EMMathon 2

EMMathon 3

EMMathon 4

EMMathon 5

EMMathon 6

EMMathon 7

EMMathon 8

Teachers may consider commencing EMMathons later in the program or adapting them in some other way that better befits the ability of their students. For example, a Marathon could consist of a set of 4 lessons. See pages 150–153 for EMMathon400 optional templates.

EMMathon to BugFree

EMMathons provide students with the opportunity to demonstrate they are BugFree; they affirm fluency and further enhance self-efficacy. Following the first EMMathon students should complete EMMathon 1 Task, myEMMdata page 58, and then, go to page 60 and convert their own EMMathon 1 scores to BugFree levels. Conversions should be performed after each EMMathon.
## EMMathon

<table>
<thead>
<tr>
<th>Data</th>
<th>EMMathon 1</th>
<th>Marathon 1</th>
<th>Marathon 2</th>
<th>Marathon 3</th>
<th>Marathon 4</th>
<th>Marathon 5</th>
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<tbody>
<tr>
<td>Question 1</td>
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<tr>
<td>Question 20</td>
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</tbody>
</table>

**My score:**

Out of: 40 | 40 | 40 | 40 | 40 | 40

---

After recording my data for this EMMathon, I go to page 38 and complete my EMMathon 1 Task.
Marathon 1
Question 1

543
Question 2

5 4 3
Question 3

\[ \begin{array}{c}
1 \\
2 \\
\times \\
3 \\
\hline
2 \\
\end{array} \]
Question 4

\[
\begin{array}{c}
3 \\
3 \\
\end{array}
\begin{array}{c}
3 \\
9 \\
6 \\
3 \\
\end{array}
\]
Question 5
Question 6

? × 2 = 8
Question 7

H T Ones

2 4 5
Question 8

\[
\begin{array}{c}
\frac{3}{2} & \frac{1}{2} \\
\end{array}
\]
1000 mm $= 1$ m
Question 11

quadrilateral
Question 12

quadrilateral

12 cm

6 cm

4 cm

P = 32 cm

L11
Question 13
Question 14

12 - 10 = 2
Question 15

\[
\begin{array}{r}
$6.21 \\
+ 0.21 \\
\hline
$
\end{array}
\]
Question 16

2:30 a.m.   1:30 p.m.
Question 17

13 − 10 = 3
Question 18

♥ 0 = 8
♥♥♥ 000 = 17
♥♥♥♥ 000 =
Question 19

<table>
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<tr>
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<th>Grade One</th>
<th>Total</th>
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<td><strong>Total</strong></td>
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<td>25</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>
Question 20
Question 1

4 3 5
Question 2

4 3 5
Question 3

\[
\begin{array}{c}
1 \\
2 \\
\times \\
4 \\
\hline
6
\end{array}
\]
Question 4

\[
\begin{array}{c}
3 \\
3 \quad \underline{9} \\
\end{array}
\]

\[
\begin{array}{c}
3 \\
2 \\
9 \\
6 \\
6 \\
\end{array}
\]
Question 5
Question 6

? \times 2 = 10
Question 7

H     T     Ones
2    4    5
Question 8

\[
\begin{array}{cc}
\frac{3}{4} & \frac{1}{4}
\end{array}
\]
Question 9

4.02
Question 10

Not to scale
Question 11

quadrilateral
Question 12

quadrilateral

12 cm

6 cm

4 cm

P = 34 cm
Question 13
Question 14

$$12 - 10 = 2$$
Question 15

\[ \$6.21 + .21 = \$ \]

L12
Question 16

2:30 a.m.  1:30 p.m.
Question 17

$13 - 10 = 3$
Question 18

♥ 〇 = 3
♥♥〇〇〇 = 7
♥♥♥〇〇〇 =
<table>
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Girls and boys, Springville Infant School

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<td>Total</td>
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<td>25</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>
Question 20
Marathon 2
Question 3

\[
\begin{array}{c}
1 \\
1 \ 3 \\
\times \\
6 \\
\hline
8
\end{array}
\]
Question 4
Question 5
Question 6

\[ ? \times 5 = 20 \]
Question 8

\[
\frac{4}{3} \quad \frac{1}{3}
\]
Question 9

4.02

L13
Question 10

10 mm = 1 cm

Not to scale
Question 11
Question 12

P = 33 cm

12 cm

6 cm

4 cm
Question 14

12 - 10 = 2
Question 15

\[
\begin{align*}
\$6.21 \\
+ \quad .21 \\
\hline \\
\$ \quad .21
\end{align*}
\]
Question 16

2:30 a.m.  1:30 p.m.
Question 17
Question 18

\[
\begin{align*}
\heartsuit & \circ \quad = \quad 6 \\
\heartsuit \heartsuit \heartsuit & \circ \circ \circ \circ \quad = \quad 13 \\
\heartsuit \heartsuit \heartsuit \heartsuit & \circ \circ \circ \circ \quad = \quad \\
\end{align*}
\]
Question 19

<table>
<thead>
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<th></th>
<th>Grade Three</th>
<th>Grade Two</th>
<th>Grade One</th>
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<td>Total</td>
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<td>25</td>
<td>26</td>
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</table>
Question 20
Question 1

4 5 3
Question 2

453
Question 3

\[
\begin{array}{c}
1 \\
2 \ 3 \\
\times \\
4 \\
\hline \\
2
\end{array}
\]
Question 4
Question 5
Question 6

? \times 2 = 16
Question 7

H    T    Ones
2    4    5
Question 8

\[
\frac{4}{5} \quad \frac{1}{5}
\]
Question 10

10 mm = 1 cm
Question 11
Question 12

P = 28 cm
Question 13
Question 14
Question 15
Question 16
Question 17
Question 18

\[
\begin{align*}
\heartsuit \odot & = 9 \\
\heartsuit \heartsuit \heartsuit \heartsuit \heartsuit \heartsuit \heartsuit & = 21 \\
\heartsuit \heartsuit \heartsuit & =
\end{align*}
\]
## Question 19

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<th>Grade One</th>
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*Girls and boys, Springville Infant School*
Question 20
Marathon 3
Question 1

534
Question 2

534
Question 3

\[
\begin{array}{c}
2 \\
\times \\
1 \ 6 \\
\hline
4 \\
\end{array}
\]
Question 4
Question 5
Question 6

\[ ? \times 5 = 15 \]
Question 8

\[
\frac{4}{10} \quad \frac{1}{10}
\]
Question 9

4.19
Question 10

student ruler

Not to scale
Question 11
Question 12

P = 35 cm
Question 13
Question 14
Question 15
Question 16
Question 17
Question 18

♥ O = 4
♥♥ O O O O = 9
♥♥♥ O O O O =
### Girls and boys, Springville Infant School

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<td>Boys</td>
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<td>39</td>
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<td>Total</td>
<td>26</td>
<td>25</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>
Question 20
Question 1

\[
\begin{array}{c}
7 & 2 & 2 \\
+ & 3 & 2 & 1 \\
\hline \\
1 & 0 & 4 & 3 \\
\end{array}
\]
Question 2

722
Question 3
Question 4

\[
\begin{array}{c}
\phantom{0}\\
2 \left\lfloor \phantom{0} \right. \\
\end{array}
\begin{array}{cccc}
2 & 0 & 4 & 0 & 8 \\
\end{array}
\]
Question 5
Question 6
<table>
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<th></th>
<th>TH</th>
<th>H</th>
<th>T</th>
<th>Ones</th>
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<tr>
<td>1</td>
<td>2</td>
<td>4</td>
<td>5</td>
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</table>

Question 7
Question 8
Question 9

1 and 40-hundredths
Question 10

1 m   100 cm   100 mm
Question 11

parallelogram
Question 12

parallelogram

P = 24 cm

L16
Question 13
Question 14

2 \times 5 = 10
Question 15

\[
\begin{array}{c}
6.29 \\
- \quad 0.13 \\
\hline
6.16
\end{array}
\]
Question 16

2:15 a.m.  1:15 p.m.
Question 17

$13 \times 10 = 130$
Question 18
Question 19

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<td>26</td>
<td>76</td>
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</table>
Marathon 4
Question 1

732
Question 2

732
Question 3
Question 4

\[
\begin{array}{c}
20 \\
\hline \\
804
\end{array}
\]

\[
4 \left( \begin{array}{c}
804
\end{array} \right)
\]
Question 5
Question 6
Question 7

TH    H    T    Ones
1    2    4    5
Question 8

![Two circles divided into four equal parts, one colored purple and the other white.](image)
Question 9

3 and 4-hundredths
Question 10

1 m  100 cm  100 mm
Question 11

parallelogram
Question 12

parallelogram

P = 26 cm
Question 13
Question 14

\[2 \times 5 = 10\]
Question 15
Question 17

13 × 10 = 130
Question 18
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<td><strong>Total</strong></td>
<td>26</td>
<td>24</td>
<td>26</td>
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</table>
Question 20
Question 1

6 2 3

L18
Question 2

623
Question 3
Question 4

\[ 2 \begin{array}{c}
  \phantom{4} \\
  \hline
  8 \\
  \phantom{4} \\
  \hline
  0 \\
  \phantom{4} \\
  \hline
  2
\end{array} \]

\[ \overset{4}{\phantom{4}}0 \]
Question 5
Question 6
Question 7
Question 8

\[ \frac{2}{2} = 1 \]
Question 9

4 and 1-tenth
Question 10

3 m  300 cm  300 mm
parallellogram
Question 12

parallelogram

P = 28 cm
Question 13
Question 14

\[ 2 \times 5 = 10 \]
Question 15
Question 16
Question 17
Question 18
Question 19

<table>
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<td>24</td>
<td>26</td>
<td>76</td>
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</table>
Question 20
Question 1
Question 3
Question 4

\[ \begin{array}{c}
3 \\
\hline
6 \quad 0 \quad 0 \quad 9
\end{array} \]

\[ \overline{\begin{array}{c}
2 \quad 0
\end{array}} \]
Question 5
Question 6
Question 7
Question 8
Question 9

2 and 5-hundredths
Question 10

3 m  30 cm  300 mm
Question 11

parallelogram
Question 12

parallelogram

P = 30 cm

L19
Question 13
Question 14
Question 16
Question 17
Question 18
Question 19

<table>
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<td><strong>Total</strong></td>
<td>26</td>
<td>24</td>
<td>26</td>
<td>76</td>
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</table>
Question 20
Question 1

931
Question 2

931
Question 3
Question 4

\[ \begin{array}{c}
3 \\
\hline
3 \\
\end{array} \left) \begin{array}{c}
9 \\
0 \\
6 \\
\end{array} \right. \]

\[ 30 \]
Question 5
Question 6
Question 7
Question 8
Question 9

5 and 1-hundredth
Question 10

3 m  100 cm  300 mm
Question 11
Question 12

parallelogram

P = 32 cm
Question 13
Question 14
Question 15
Question 16
Question 17
## Question 19

**Girls and boys, Springville Infant School**

<table>
<thead>
<tr>
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<td>26</td>
<td>24</td>
<td>26</td>
<td>76</td>
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</table>
Question 20
EMMathon to BugFree

EMMathon 1 Task
The Graph on page 59 shows Dan’s Marathon score converted to a BugFree level.

The number of shaded rectangles is equal to a Marathon score.
Look at Marathon 1. The number of shaded rectangles is 34. Dan’s Marathon score is 34.
Look at Marathon 5. The number of shaded rectangles is 40. Dan’s Marathon score is 40.

Analyse Dan’s scores and tick statements that are true.

- a. For Marathon 1 Dan scored 34.
- b. For Marathon 2 Dan scored 86.
- c. For Marathon 18 Dan scored 34.
- d. For Marathon 19 Dan scored 33.
- e. For Marathon 20 Dan scored 40.
- f. For Marathon 5 Dan scored the maximum possible.
- g. Dan scored more for Marathon 5 than for Marathon 20.

Go to page 60 and shade rectangles equal to your scores for Marathons 1-5 (EMMathon 1).

EMMathon 2 Task
Look at Marathon 6. Dan’s Marathon score is 40. Now look at his BugFree level. Dan is 100% BugFree. This means Dan has no bugs.

Look at Marathon 1. Dan’s Marathon score is 34. He is 86% BugFree. This means Dan has some bugs.

Analyse Dan’s BugFree levels and tick statements that are true.

- a. Dan’s Marathon 1 BugFree level is 34%.
- b. Dan’s Marathon 2 BugFree level is 96%.
- c. Dan’s Marathon 5 BugFree level is 40%.
- d. Dan’s most frequent BugFree level is 86%.

Go to page 60 and shade rectangles equal to your scores for Marathons 6-10 (EMMathon 2).

EMMathon 3 Task
Look at Marathon 19. The number of shaded rectangles is 33. Dan’s BugFree level is 82.5%.

Where the height of the shaded Marathon bar is between two BugFree levels, you will need to calculate the BugFree level.

Analyse the Graph and tick statements that are true.

- a. Dan’s Marathon 19 BugFree level is 82.5%.
- b. Dan’s Marathon 19 BugFree level is 33%.
- c. Dan’s BugFree level is more for Marathon 1 than for Marathon 19.
- d. Dan’s BugFree level is less for Marathon 1 than for Marathon 19.

Go to page 61 and shade rectangles equal to your scores for Marathons 11-15 (EMMathon 3).

EMMathon 4 Task
Go to page 61 and shade rectangles equal to your scores for Marathons 16-20 (EMMathon 4).

Conversion Marathon score to BugFree level: Marathons 1-20

Graph showing conversion from Marathon score to BugFree level for Marathons 1 to 20.
Marathon 6
Question 1

\[
\begin{array}{ccc}
1 \\
5 & 3 & 1 \\
+ 1 & 9 & 1 \\
\hline
7 & 2 & 2 \\
\end{array}
\]
Question 2

\[ \begin{array}{c}
4 \\
\underline{5131} \\
- 191 \\
40
\end{array} \]
Question 3
Question 4
Question 5

162
1 + 6 + 2 =
Question 6

36 ÷ 9 = 4

36 ÷ 4 = 9

45 ÷ 9 = 5
Question 7

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</table>

L31
Question 8

\[
\frac{?}{7} = 1
\]
Question 9
Question 10

100 cm chalkboard ruler

Not to scale
Question 11
Question 12

P each square = 4 cm
Question 13
Question 14
Question 15

\[
\begin{array}{c}
\$ 4.21 \\
\times \\
\_3 \\
\hline \\
\$ 12.63
\end{array}
\]
Question 16
Question 17

\[ 3 \times x = 75 \]
Question 18
Question 19

Year 6 Continent of birth

Number of children

<table>
<thead>
<tr>
<th>Continent</th>
<th>Number of children</th>
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<tbody>
<tr>
<td>Asia</td>
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<td>North America</td>
<td>2</td>
</tr>
<tr>
<td>Africa</td>
<td>2</td>
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</table>

Continent
Question 1

4 3 2
Question 2

\[
\begin{array}{c}
3 \\
4 \ 13 \ 2 \\
- \ 2 \ 8 \ 2 \\
\hline
5 \ 0 \\
\end{array}
\]
Question 3
Question 4
Question 5

1 + 6 + 2 = 162
Question 6

\[ 36 \div 9 = 4 \]

\[ 36 \div 4 = 9 \]

\[ 27 \div 3 = 9 \]
Question 7

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</table>
Question 8

\[ \frac{?}{4} = 1 \]
Question 9
Question 10

300 mm student ruler

Not to scale

L32
Question 11

![Diagram of a 3D cube with labels for face, edge, and vertex.](image)
Question 12

\[ P \text{ each square} = 8 \text{ cm} \]
Question 13
Question 14
Question 15

\[
\begin{array}{c}
\$ \ 4.21 \\
\times \\
3 \\
\hline \\
\$ \ 12.63
\end{array}
\]
Question 16
Question 17

\[3 \times x = 75\]
Question 18
Question 19

The diagram shows the number of children born in different continents. Asia has the highest number of children, followed by Australia, Europe, North America, and Africa.
Question 20
Marathon 7
Question 1

4 2 3
Question 2

\[
\begin{array}{cccc}
3 \\
4 & 1 & 2 & 3 \\
\hline
2 & 9 & 3 \\
3 & 0 \\
\end{array}
\]
Question 3
Question 4
Question 5
Question 6

36 ÷ 9 = 4

36 ÷ 4 = 9

18 ÷ 9 = 2
Question 7

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</tbody>
</table>
Question 8

\[ \frac{3}{?} = 1 \]
Question 9
Question 10
Question 11

3D

face  edge  vertex
Question 12

P each square = 20 cm
Question 13

1  2

3  4
Question 14
Question 15
Question 16
Question 17

\[ 3 \times x = 75 \]
Question 18
Question 19

![Bar chart showing the number of children born in different continents.

- Asia: 6
- Australia: 9
- Europe: 4
- North America: 2
- Africa: 2
]
Question 1

2 3 4

L34
Question 2

\[
\begin{array}{cccc}
2 & 3 & 4 \\
- & 1 & 8 & 4 \\
\hline
& & & 0 \\
\end{array}
\]
Question 3
Question 4
Question 5
Question 6

\[ 36 \div 9 = 4 \]

\[ 36 \div 4 = 9 \]

\[ 90 \div 9 = 10 \]
Question 7
Question 8

\[
\frac{5}{?} = 1
\]
Question 10
Question 11
Question 12

P each square = 12 cm
Question 13
Question 14
Question 15
Question 16
Question 17
Question 18
Question 19

![Bar chart showing the number of children by continent. The chart indicates that Australia has the highest number of children, followed by Asia, Europe, North America, and Africa.](image)
Question 20
Question 1
Question 2

\[ \begin{array}{c}
\phantom{-}3 & 3 & 1 \\
\underline{- 1 & 8 & 1} \\
\hline
\phantom{0}0
\end{array} \]
Question 3
Question 4
Question 5
Question 6

$$36 \div 9 = 4$$

$$36 \div 4 = 9$$

$$99 \div 11 = 9$$
Question 7

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</tbody>
</table>
Question 8
Question 9
Question 10
Question 11

3D

face  edge  vertex
Question 12

P each square = 36 cm
Question 13
Question 14
Question 15
Question 16
Question 17
Question 18
Question 19

The graph shows the number of children born in different continents. The continent with the highest number of children is Australia, followed by Asia, Europe, North America, and Africa with the lowest number.
Question 20
Question 1

2 3 1
Question 2

2 3 1
Question 3
Question 4
Question 5
Question 6

36 ÷ 9 = 4
Question 7
Question 8
Question 9

\[ 0.01 = \frac{1}{100} \]
Question 10

kg
Question 11

![Diagram of a 3D cube with labels for face, edge, and vertex.]

L36
Question 12
Question 13

\[
\frac{1}{4} = \frac{\text{chance}}{\text{possible chances}}
\]
Question 14
Question 15

$5$ per hour 1–6 p.m.  $10$ per hour
Question 16
Question 17

\[ x \div 5 = 30 \]
Question 18

L36
Question 19

The bar chart shows the number of children born in different continents.

- Asia: 6
- Australia: 9
- Europe: 4
- North America: 2
- Africa: 2

The chart indicates that Australia has the highest number of children born, followed by Asia, Europe, North America, and Africa.
Question 20
Marathon 9
Question 1

3 8 2
Question 2

3 8 2

L37
Question 3
Question 4
Question 5
Question 6

\[ 35 \div 7 = 5 \]
Question 7
Question 8

![Diagram of two circles, one divided into two equal parts and the other into four equal parts.](image-url)
Question 9

0.01 = \frac{1}{100}
Question 10

kg
Question 11
Question 12
Question 13

\[
\frac{1}{4} = \frac{\text{chance}}{\text{possible chances}}
\]
Question 14

1 2 4

L37
Question 15

$5 per hour 1–6 p.m.  $10 per hour
Question 16
Question 17
Question 18
Question 19

Year 6 Continent of birth

<table>
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<td>Africa</td>
<td>2</td>
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</tbody>
</table>
Question 20
Question 1

3 0 3
Question 2

3 1 3
Question 3
Question 4
Question 5
Question 6

$$27 \div 3 = 9$$
Question 7
Question 8
Question 9

0.07
Question 10

1000 g = 1 kg
Question 11
Question 12
Question 13

\[ \frac{1}{4} = \frac{\text{chance}}{\text{possible chances}} \]
Question 14
Question 15

$5 \text{ per hour} \quad 1-6 \text{ p.m.} \quad $10 \text{ per hour}
Question 16
Question 17
Question 18
Question 19

The graph shows the number of children born in different continents:

- Asia: 6 children
- Australia: 9 children
- Europe: 4 children
- North America: 2 children
- Africa: 2 children

The continent with the highest number of births is Australia.
Question 20
Marathon 10
Question 1

2 8 4
Question 2

2 8 4
Question 3
Question 4
Question 5
Question 6

40 ÷ 5 = 8
Question 7
Question 8
Question 9

0.19
Question 10

1000 g = 1 kg
Question 11
Question 12
Question 13

\[ \frac{1}{4} = \frac{\text{chance}}{\text{possible chances}} \]
Question 14
Question 15

$5 \text{ per hour } 1-6 \text{ p.m.} \quad $10 \text{ per hour}
Question 16
Question 17
Question 18
Question 19

![Bar chart showing the number of children by continent. The chart indicates that Australia has the highest number, followed by Asia, Europe, North America, and Africa.](chart.png)
Question 20
Question 1

3 8 1
Question 2

3 8 1

L40
Question 3
Question 4
Question 5
Question 6

$$63 \div 9 = 7$$
Question 7
Question 8
Question 9

0.64
Question 10

1000 g = 1 kg
Question 11
Question 13

\[
\frac{1}{4} = \frac{\text{chance}}{\text{possible chances}}
\]
Question 14
Question 15

$5 \text{ per hour} \quad 1-6 \text{ p.m.} \quad \$10 \text{ per hour}
Question 16
Question 17
Question 18
Question 19

Year 6 Continent of birth

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Asia</td>
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<td>Australia</td>
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<td>Africa</td>
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L40
Question 20
EMMathon 1 Task
The graph on page 39 shows Dan’s Marathon score converted to a BugFree level.
The number of shaded rectangles is equal to a Marathon score.
Look at Marathon 1. The number of shaded rectangles is 34. Dan’s Marathon score is 34.
Look at Marathon 5. The number of shaded rectangles is 40. Dan’s Marathon score is 40.
Analyse Dan’s scores and tick statements that are true.
- Dan’s Marathon 1 BugFree level is 34%.
- Dan’s Marathon 2 BugFree level is 85%.
- Dan’s Marathon 3 BugFree level is 69%.
- Dan’s Marathon 4 BugFree level is 40%.
- Dan’s most frequent BugFree level is 85%.

EMMathon 2 Task
Look at Marathon 8. Dan’s Marathon score is 45. Now look at his BugFree level. Dan is 100% BugFree. This means Dan has no bugs.
Look at Marathon 1. Dan’s Marathon score is 34. He is 69% BugFree. This means Dan has some bugs.
Analyse Dan’s BugFree levels and tick statements that are true.
- Dan’s Marathon 1 BugFree level is 34%.
- Dan’s Marathon 2 BugFree level is 85%.
- Dan’s Marathon 3 BugFree level is 69%.
- Dan’s BugFree level is more for Marathon 1 than for Marathon 19.
- Dan’s BugFree level is less for Marathon 1 than for Marathon 19.

EMMathon 3 Task
Look at Marathon 19. The number of shaded rectangles is 33. Dan’s BugFree level is 82.5%.
Where the height of the shaded Marathon bar is between two BugFree levels, you will need to calculate the BugFree level.
Analyse the graph and tick statements that are true.
- Dan’s Marathon 19 BugFree level is 82.5%.
- Dan’s Marathon 19 BugFree level is 75%.
- Dan’s Marathon 19 BugFree level is 60%.
- Dan’s BugFree level is more for Marathon 1 than for Marathon 19.
- Dan’s BugFree level is less for Marathon 1 than for Marathon 19.

EMMathon 4 Task
Go to page 80 and shade rectangles equal to your scores for Marathons 1-5 (EMMathon 1).
Go to page 81 and shade rectangles equal to your scores for Marathons 5-10 (EMMathon 2).
Go to page 81 and shade rectangles equal to your scores for Marathons 11-15 (EMMathon 3).
Go to page 81 and shade rectangles equal to your scores for Marathons 16-20 (EMMathon 4).
For complimentary EMMathon 3-8 Visual Delivery slides please contact sales@acer.edu.au or Customer Service (03) 9277 5447


Thank you for your participation in the Math Mastery Series. The importance of the teacher’s role cannot be over-emphasised. Your feedback is much valued and appreciated.

Dr Rhonda Farkota
rhonda.farkota@acer.edu.au
Tel: (03) 9277 5627