Think MENTALS™ 5

Maths Strategies and Practice

Student Workbook Sample Pages

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Firefly EDUCATION

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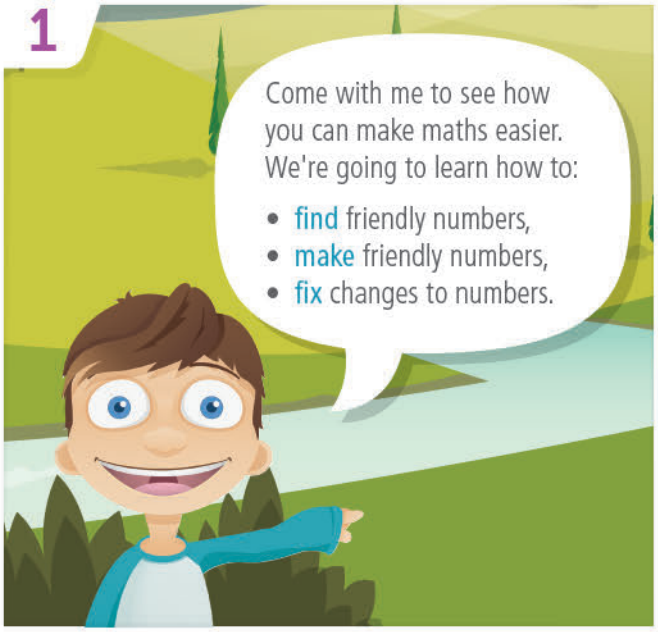

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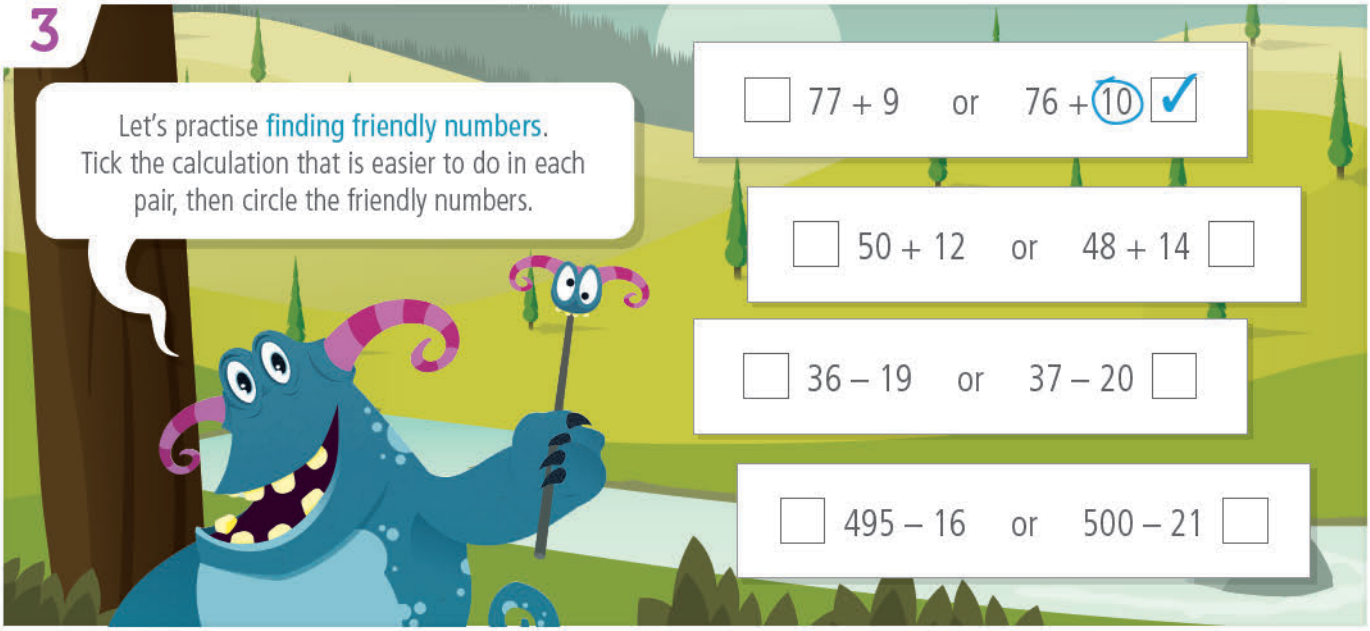

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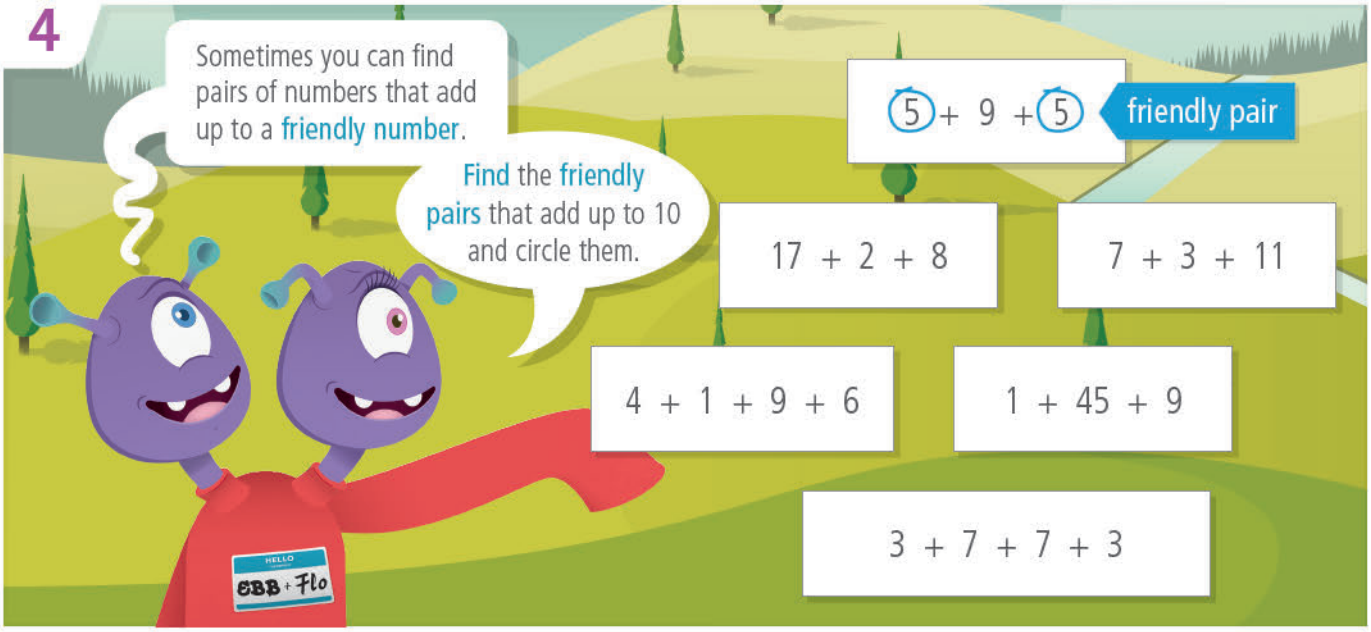

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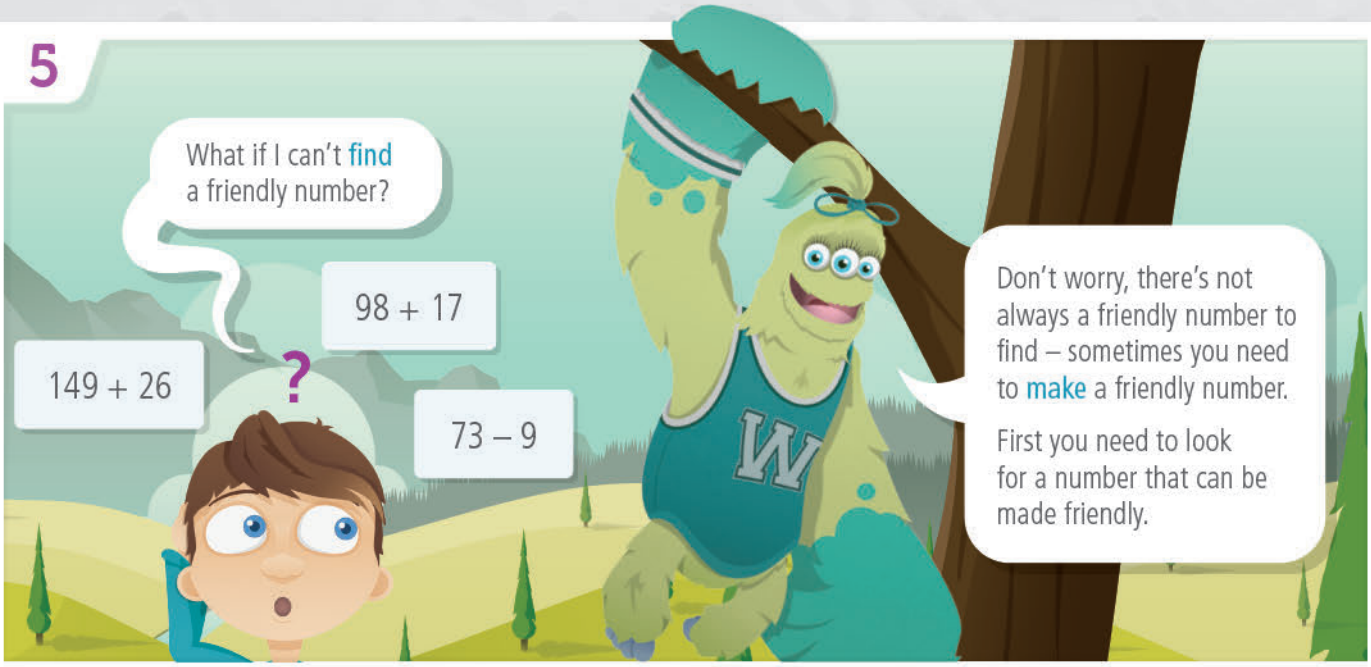

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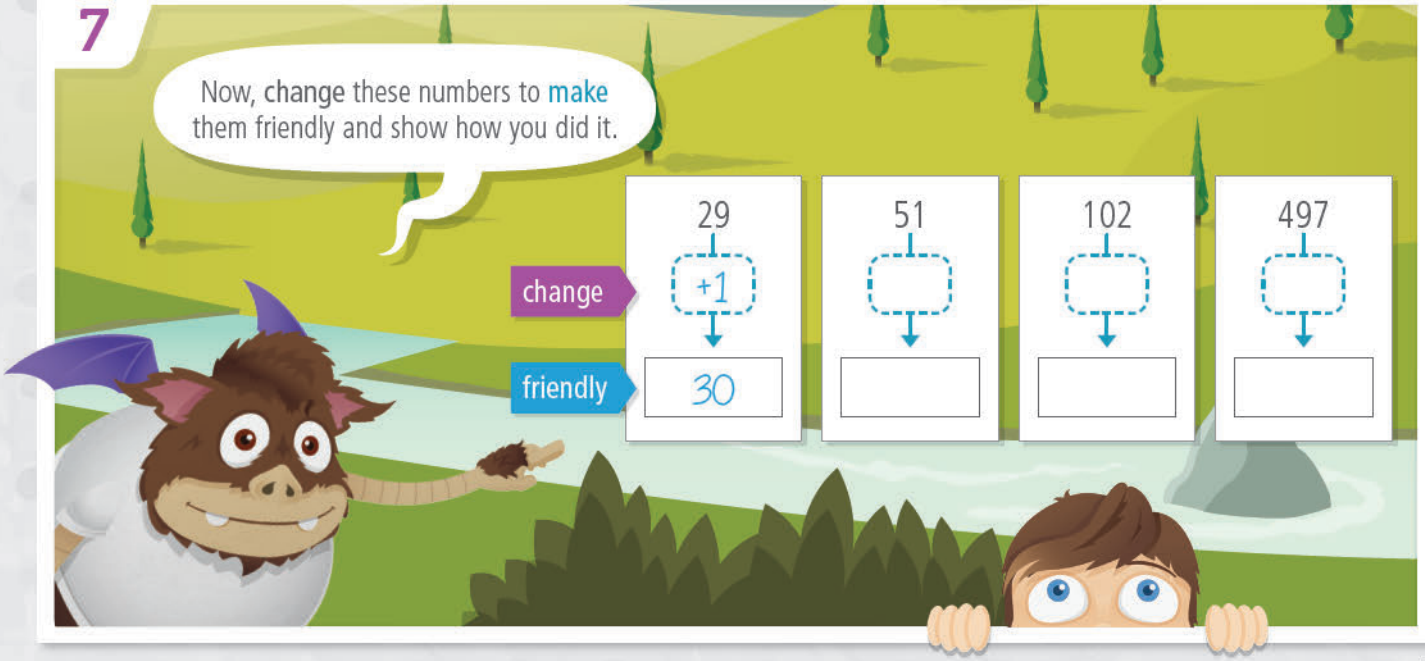

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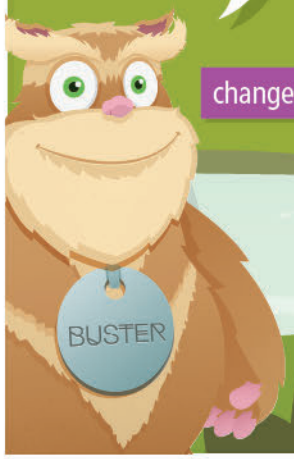
8

You can fix a change by doing the opposite of what you did to make a number friendly. Fix the change in these additions.



29 + 46

change +1 −1 fix

30 + 45

51 + 26

−1

50 + ☐

155 + 102

−2

☐ + 100

497 + 125

+3

500 + ☐

9

You can also make friendly numbers by breaking larger numbers into place values.

Can you make these numbers friendly?

853 = 800 + 50 + 3

419 =

272 =

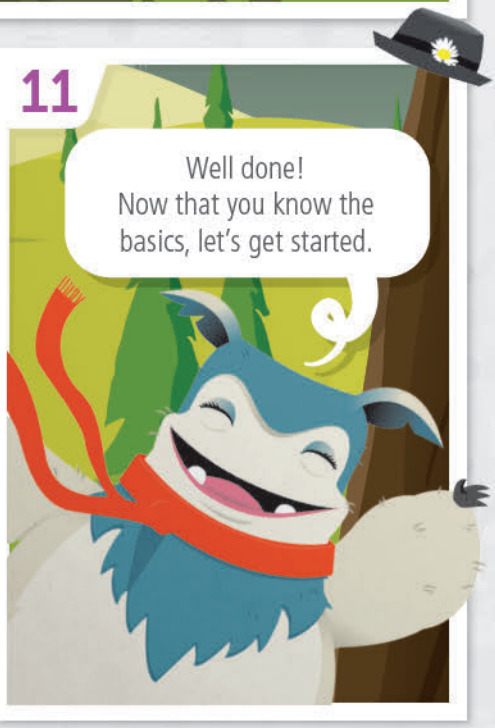
690 =

10

How did you go? Tick the boxes below to show what you know!

- A friendly number ends in a 0 ☐
- Friendly numbers make maths easier ☐
- How to find friendly numbers ☐
- How to make friendly numbers ☐
- How to fix my changes ☐

11



Well done! Now that you know the basics, let's get started.

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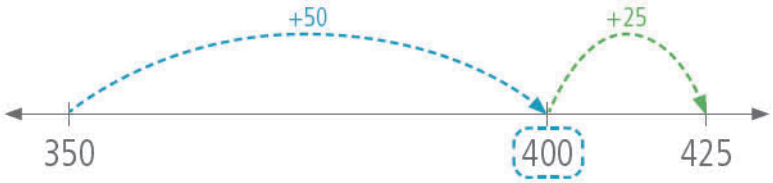
Addition Strategy

Friendly Jumps

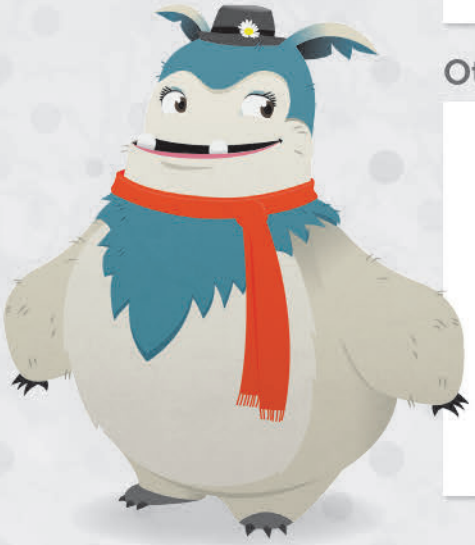
Make a number line in your head to 'jump' along.

1 Jump forward to a friendly number.

$350 + 75$



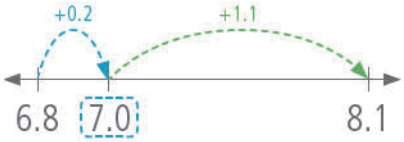
2 Jump forward the rest.



Other Examples

$695 + $60

6.8 + 1.3



Day 1

1	250 + 75		11	15.8 + 0.4	
2	180 + 60		12	3.5 + 0.8	
3	670 + 38		13	7.7 + 0.6	
4	498 + 22		14	22.6 + 0.5	
5	950 + 55		15	9.4 + 0.8	
6	$795 + $40		16	197 + 24	
7	$130 + $85		17	496 + 18	
8	$4.90 + 45c		18	395 + 66	
9	$5.50 + 80c		19	890 + 59	

10 How much for a milkshake and a cupcake?

20 A 1140 mL jug of lemonade was mixed with 85 mL of fruit cordial. How much drink was made?

Practice

Q1–20: /20 | My time:

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Day 2

Practice

1 380 + 45 ☐
2 $550 + $75 ☐
3 $1.90 + 50c ☐
4 $3.50 + 85c ☐
5 690 + 84 ☐

Revision

6 44 x 2 ☐
7 52 x 2 ☐
8 900 – 50 ☐
9 400 – 20 ☐
10 18 ÷ 2 ☐

11 Complete this expanded notation.
☐ = 9000 + 100 + 40 + 6

12 Write 6275 using expanded notation.
☐

13 Which number has the greater value, 4.14 or 4.4? ☐

14 Write these numbers from least to greatest.
7.77 7.07 0.77 ☐, ☐, ☐

15 How much orange juice is in this jug? ☐

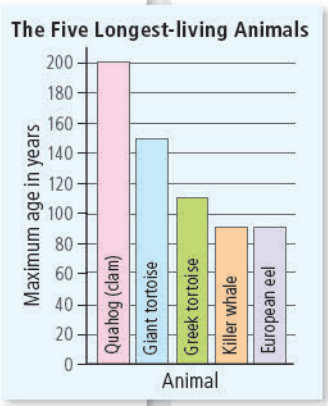
16 How much more orange juice is needed to fill the jug to the 1 L mark? ☐

17 What is the next number in this pattern?
1.5 2.0 2.5 3.0 ☐

18 What is the repeated gap in the pattern?
○ +5 ○ +0.5 ○ +1.5

19 What is the maximum age of the Quahog (clam)? ☐

20 Which animal has a maximum age of 150 years?
☐



Q1–10: /10 | Q11–20: /10 | My time:

Day 3

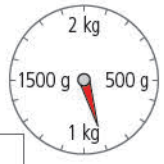
Practice

1 880 kg + 55 kg ☐
2 160 m + 80 m ☐
3 7.5 + 0.8 ☐
4 5.6 s + 0.6 s ☐
5 9.3 km + 0.8 km ☐

Revision

6 $45 x 2 ☐
7 24 hours x 2 ☐
8 100 mL – 55 mL ☐
9 200 – 75 ☐
10 $80 ÷ 2 ☐

11 What is the mass shown on the scales? ☐



12 What mass needs to be added for the scales to reach 1.5 kg? ☐

13 What is the next number in this pattern?
6.6 6.4 6.2 6.0 ☐

14 What is the repeated gap in the pattern?
○ –2 ○ –0.2 ○ –2.2

15 Which number has the greater value, 1.99 or 1.19? ☐

16 Write these numbers from least to greatest.
5.2 2.05 5.02 ☐, ☐, ☐

17 Complete this expanded notation.
☐ = 3000 + 300 + 80 + 5

18 Write 1221 using expanded notation.
☐

19 Which two animals have the closest lifespan?
☐

20 Which animal has a maximum age of 110 years?
☐

Q1–10: /10 | Q11–20: /10 | My time:

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Day 4

Practice

1 1170 + 75 ☐
2 2080 km + 88 km ☐
3 14.3 s + 0.8 s ☐
4 22.5 + 0.7 ☐
5 395 L + 67 L ☐

Revision

6 73 x 2 ☐
7 2 x 84 ☐
8 600 – 35 ☐
9 1000 mL – 555 mL ☐
10 240 ÷ 2 ☐

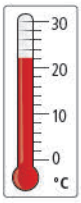
11 Which number has the greater value, 33.22 or 33.3? ☐

12 Write these numbers from least to greatest.
1.1 0.11 1.01 ☐, ☐, ☐

13 Complete this expanded notation.
☐ = 4000 + 20 + 8

14 Write 7077 using expanded notation.
☐

15 What temperature is shown by this thermometer? ☐



16 What will the temperature be if it increases 4 °C, then drops 10 °C? ☐

17 What is the next number in this pattern?
9.1 10.2 11.3 12.4 ☐

18 What is the repeated gap in the pattern? ☐

19 Which mammal is 20 km/h slower than a pronghorn antelope?
◯ hare 72 km/h ◯ greyhound 68 km/h
◯ horse 69 km/h ◯ springbok 80 km/h

20 Which mammal is capable of exceeding a 100 km/h speed limit?
☐

World's Five Fastest Mammals

Mammal	Maximum recorded speed (km/h)
Cheetah	105
Pronghorn antelope	89
Mongolian gazelle	80
Springbok	80
Grant's gazelle	76

Q1–10: /10 | Q11–20: /10 | My time:

Day 5

Assessment

1 450 + 80 ☐
2 170 + 65 ☐
3 580 + 35 ☐
4 $6.60 + 45c ☐
5 $8.50 + 85c ☐
6 5.7 + 0.7 ☐
7 50.6 + 0.5 ☐
8 9.4 + 0.8 ☐
9 197 + 28 ☐
10 498 + 50 ☐

11 Complete this expanded notation.
☐ = 8000 + 900 + 10 + 4

12 Write 1915 using expanded notation.
☐

13 What is the next number in this pattern?
5.4 5.1 4.8 4.5 4.2 ☐

14 What is the repeated gap in the pattern? ☐

15 Which number has the greater value, 7.61 or 7.16? ☐

16 Write these numbers from least to greatest.
4.2 2.04 2.24 ☐, ☐, ☐

17 How much water is in this jug? ☐

18 How much more water is needed to fill the jug to the 2 L mark? ☐

19 Which two mammals have a maximum recorded speed of 80 km/h?
☐

20 Which mammal can outrun a springbok by 25 km/h?
☐

Q1–10: /10 | Q11–20: /10 | My time:

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Addition Strategy

Friendly Balance

Move amounts from one number to another to make easy additions.

1. **Find a number to make friendly.**
2. **Make a friendly number.**
   Moving part of a number keeps the addition balanced.
3. **Calculate.**

$$499 + 51$$
move 1
$$= 500 + 50$$
$$= 550$$

Other Examples

$$\$42 + \$38$$
move 2
$$= \$40 + \$40$$
$$= \$80$$

$$7.9 + 2.3$$
move 0.1
$$= 8.0 + 2.2$$
$$= 10.2$$

Day 1

Practice

1	0.9 + 0.6		11	599 + 61	
2	1.9 + 0.8		12	199 + 71	
3	9.9 + 0.4		13	797 + 43	
4	4.2 + 0.9		14	290 + 510	
5	7.7 + 1.8		15	$294 + $106	
6	59 + 61		16	$9.80 + $5.20	
7	52 + 98		17	$1.95 + $1.05	
8	71 + 49		18	$595 + $55	
9	88 + 92		19	$280 + $820	

10 Jojo's car had 28 L of fuel in the tank. She pumped 32 L more to fill it. How much fuel does the tank hold? ____

20 Jojo drove her car 195 km before lunch. It is another 55 km to her destination. What will Jojo's total driving distance be? ____

Q1–20: /20 | My time:

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Day 2

Practice

1 9.9 + 0.6 ☐
2 2.7 + 3.3 ☐
3 38 + 42 ☐
4 505 + 195 ☐
5 99c + 88c ☐

Revision

6 16 x 5 ☐
7 22 x 5 ☐
8 40 – 19 ☐
9 80 – 29 ☐
10 93 ÷ 3 ☐

11 Circle multiples of 3.
4 9 21 23 30

12 Write the next three multiples of 5 after 40.
☐, ☐, ☐

13 2 x 6 = ☐ 3 x 7 = ☐ 5 x 5 = ☐

14 Complete this multiplication grid.

x	2	3	5	10
2				
4				

15 Measure this line to the nearest millimetre. ☐

16 In centimetres, the measurement is equal to:
○ 2.1 cm ○ 2.5 cm ○ 2.9 cm

17 Double 5, add 7, then subtract 2. ☐

18 Multiply 4 by 3, add 8, then halve. ☐

19 In which year did Sydney host the Summer Olympic Games? ☐

20 Which city hosted the 2020 Summer Olympic Games?
☐

Summer Olympic Games

Host City	Year
Sydney	2000
Athens	2004
Beijing	2008
London	2012
Rio de Janeiro	2016
Tokyo	2020

Q1–10: /10 | Q11–20: /10 | My time:

Day 3

Practice

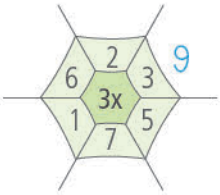
1 7.8 m + 2.2 m ☐
2 91 L + 89 L ☐
3 395 + 205 ☐
4 $4.90 + $5.10 ☐
5 895 km + 55 km ☐

Revision

6 18 x 5 ☐
7 $66 x 5 ☐
8 100 – 59 ☐
9 70 kg – 39 kg ☐
10 848 ÷ 4 ☐

11 2 x 8 = ☐ 3 x 8 = ☐ 5 x 7 = ☐

12 Complete this multiplication web.



13 Measure the height of this frog to the nearest millimetre. ☐

14 Write the measurement in centimetres. ☐

15 Circle multiples of 2.
5 7 8 18 41 42

16 Write the next three multiples of 4 after 16.
☐, ☐, ☐

17 Add 6 to 94, double, then subtract 50. ☐

18 Multiply 7 by 3, subtract 1, then divide by 5. ☐

19 Athens hosted the first Olympic Games of the modern era in 1896. When was Athens host city again? ☐

20 Are Summer Olympic Games years also leap years? ☐

Q1–10: /10 | Q11–20: /10 | My time:

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Day 4

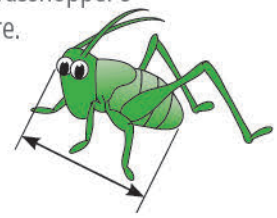
Practice

1 66.9 + 3.1 ☐
2 7.1 + 0.9 + 8.4 ☐
3 99 + 51 + 30 ☐
4 1094 + 106 ☐
5 5005 + 4995 ☐

Revision

6 64 x 5 ☐
7 120 x 5 ☐
8 300 – 149 ☐
9 1100 – 99 ☐
10 609 ÷ 3 ☐

11 Measure the length of this grasshopper's body to the nearest millimetre. ☐



12 Write the measurement in centimetres. ☐

13 5 x 3 = ☐ 2 x 7 = ☐ 8 x 10 = ☐

14 2 x 8 = ☐ 3 x 6 = ☐ 9 x 10 = ☐

15 Halve 16, add 1, then multiply by 3. ☐

16 Subtract 2 from 37, divide by 5, then add a dozen. ☐

17 Are the following numbers mostly multiples of 2, 3 or 5? ☐

4 8 12 14 16

18 Are the following numbers mostly multiples of 4, 5 or 6? ☐

10 15 30 45 50

19 How often is the football World Cup held?

☐

20 Which country hosted the football World Cup eight years after Germany?

☐

World Cup Football

Host Country	Year
Germany	2006
South Africa	2010
Brazil	2014
Russia	2018
Qatar	2022

Q1–10: /10 | Q11–20: /10 | My time:

Day 5

Assessment

1 5.8 + 2.2 ☐
2 1.9 + 0.6 ☐
3 3.7 + 4.3 ☐
4 29 + 31 ☐
5 62 + 58 ☐
6 99c + 26c ☐
7 105 + 195 ☐
8 495 + 55 ☐
9 $10.10 + $4.90 ☐
10 380 + 220 ☐

11 Add 3 to 17, double, then subtract 2. ☐

12 Multiply 5 by 5, subtract 4, then double. ☐

13 8 x 30 = ☐ 5 x 800 = ☐

17 x 10 = ☐

14 Complete this multiplication grid.

x	9	7	4	2
5				
3				

15 Circle multiples of 5.

8 10 25 28 35

16 Write the next three multiples of 6 after 12.

☐, ☐, ☐

17 Measure the length of this pencil to the nearest millimetre. ☐

18 Write the measurement in centimetres.

☐

19 Which country hosted the World Cup in 2022?

☐

20 In which year is the World Cup held after Qatar is the host country? ☐

Q1–10: /10 | Q11–20: /10 | My time:

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Day 1

Revision

1 440 + 80 ☐
2 170 + 55 ☐
3 560 + 45 ☐
4 $9.60 + 45c ☐
5 $5.50 + 85c ☐
6 2.7 + 0.7 ☐
7 30.6 + 0.5 ☐
8 5.4 + 0.8 ☐
9 197 + 38 ☐
10 298 + 50 ☐

11 How much orange juice is in this jug? ☐

12 How much more orange juice is needed to fill the jug to the 1 L mark? ☐

13 $\frac{1}{2}$ hour = ☐ minutes

14 2 weeks = ☐ days

15 37 x 100 = ☐

16 8100 ÷ 10 = ☐

17 Write forty thousand as a numeral. ☐

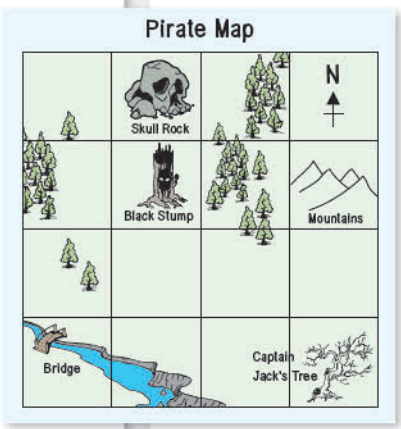
18 Which digit is in the thousands place in 23 100? ☐

19 Which map feature is located north of Captain Jack's Tree?

○ Mountains ○ Waterfall ○ Bridge

20 The direction from the Mountains to the Black Stump is:

○ north ○ south ○ east ○ west



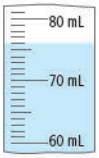
Q1–10: /10 | Q11–20: /10 | My time:

Day 2

Revision

1 710 – 60 ☐
2 540 – 50 ☐
3 8.6 – 0.7 ☐
4 3.2 – 0.4 ☐
5 900 – 51 ☐
6 200 – 22 ☐
7 100 – 55 ☐
8 $5.50 – 80c ☐
9 $9.20 – 50c ☐
10 $18.20 – 40c ☐

11 How much liquid is in this container? ☐



12 How much more liquid is needed to make 80 mL? ☐

13 $\frac{1}{4}$ hour = ☐ minutes

14 3 weeks = ☐ days

15 45 x 100 = ☐

16 1600 ÷ 10 = ☐

17 Write thirty-three thousand as a numeral. ☐

18 Which digit is in the hundreds place in 87 200? ☐

19 Which location is north of the Black Stump? ☐

20 The direction from the Mountains to Captain Jack's Tree is ☐.

Q1–10: /10 | Q11–20: /10 | My time:

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Day 3

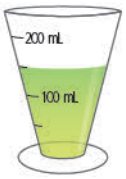
Revision

1 8 x 15 ☐
2 18 x 5 ☐
3 16 x 3 ☐
4 16 x 15 ☐
5 6 x 15 ☐
6 45 x 8 ☐
7 35 x 6 ☐
8 35 x 4 ☐
9 15 x 18 ☐
10 35 x 12 ☐

11 Which digit is in the ten thousands place in 20 710? ☐

12 Which of these numbers has the greater value, 50 550 or 55 500? ☐

13 How much liquid is in this cup of medicine? ☐



14 How much is half the amount shown? ☐

15 Which one is equal to 5000?
○ 50 x 10 ○ 50 x 100 ○ 50 x 1000

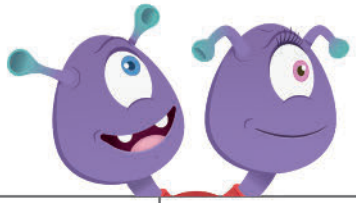
16 Which one is equal to 99?
○ 9900 ÷ 10 ○ 9900 ÷ 100 ○ 9900 ÷ 1000

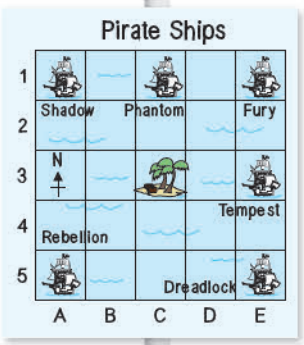
17 How many minutes in $\frac{3}{4}$ of an hour? ☐

18 48 hours = ☐ days

19 Which pirate ship is north of the island? ☐

20 Which pirate ship is south of Tempest? ☐





Q1–10: /10 | Q11–20: /10 | My time:

Day 4

Revision

1 $\frac{1}{3}$ of 18 ☐
2 $\frac{1}{7}$ of 49 ☐
3 $\frac{1}{2}$ of 48 ☐
4 $\frac{1}{5}$ of 30 ☐
5 $\frac{1}{4}$ of 28 ☐
6 $\frac{1}{9}$ of 81 ☐
7 $\frac{1}{6}$ of 36 ☐
8 $\frac{1}{2}$ of 82 ☐
9 $\frac{1}{7}$ of 35 ☐
10 $\frac{1}{8}$ of 64 ☐

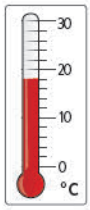
11 220 x 100 = ☐

12 8000 ÷ 100 = ☐

13 A movie screened for $1\frac{3}{4}$ hours. How many minutes did it last? ☐

14 36 hours = ☐ days

15 What temperature is shown by this thermometer? ☐



16 The temperature increased a further 2 °C that day before dropping 12 °C to its minimum. What was the minimum temperature? ☐

17 Write eighty-eight thousand as a numeral. ☐

18 Which of these numbers has the greater value, 12 110 or 12 102? ☐

19 How many pirate ships are east of map reference B1? ☐

20 Which pirate ship would sail east then north to the island? ☐

Q1–10: /10 | Q11–20: /10 | My time:

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Day 5

1 840 + 80 ☐

2 270 + 65 ☐

3 2.2 – 0.8 ☐

4 3.5 – 0.6 ☐

5 12 x 15 ☐

6 45 x 6 ☐

7 35 x 8 ☐

8 $\frac{1}{3}$ of 21 ☐

9 $\frac{1}{7}$ of 56 ☐

10 $\frac{1}{5}$ of 45 ☐

11 How much water is in this jug? ☐

12 How much more water is needed to fill this jug to the 2 L mark? ☐

13 53 x 1000 = ☐

14 6100 ÷ 10 = ☐

15 Which digit is in the ten thousands place in 54 321? ☐

16 Which of these numbers has the greater value, 98 890 or 98 980? ☐

17 How many minutes in a $\frac{1}{4}$ hour? ☐

18 $\frac{1}{2}$ a day is equal to:

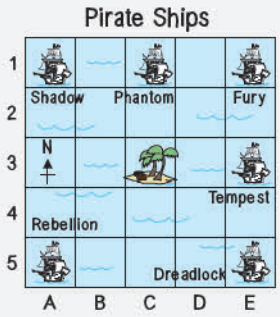
○ 6 hours ○ 12 hours ○ 18 hours

19 Which pirate ship is east of the island?

☐

20 Which pirate ship is west of Phantom?

☐



Assessment

Q1–10:	/10	Q11–20:	/10	My time:

Think Box

Calculator Story

Right-o, shipmates! Use your calculator to solve the clues below. For each answer, turn your calculator upside down and write the word in the story.

Clues

1 1538 x 3
2 1640 + 2111
3 2345 ÷ 7
4 8028 – 7514
5 10 x 27 679 x 2
6 3923 x 96
7 4112 ÷ 8
8 5000 + 999 + 76
9 555 555 – 20 041
10 8 x 672 351
11 28 554 + 28 554
12 1000 – 382
13 615 293 x 9
14 493 + 166 + 74
15 6677 ÷ 11
16 213 803 x 25
17 53 400 – 355
18 15 428 ÷ 2
19 4304 + 1000
20 0.2 x 3.869
21 926 x 4
22 7777 – 672
23 105 280 ÷ 28
24 5000 + 500 + 7

Captain Blackbeard, the most feared pirate on the **1**_____ seas, yells, "Land ho! 'Tis the Treasure **2**_____ I **3**_____!" Captain Blackbeard and **4**_____ crew set anchor and row to the jungle island. Untold riches will **5**_____ any pirate and **6**_____ **7**_____ mind. Blackbeard curses himself for choosing the jungle as the hiding place for the treasure.

The pirates **8**_____ their way through a steamy swamp as a snake **9**_____ overhead. The ooze **10**_____ and **11**_____, but the crew dares not grumble, even when a **12**_____ **13**_____ **14**_____ slithers over a **15**_____ and **16**_____ into the murky waters beneath their **17**_____.

Following Blackbeard's map the crew stops on a low, grassy **18**_____. "Grab the shovels and **19**_____ and dig, me hearties!" **20**_____ws the Captain. Within minutes a huge chest is hoisted out of the **21**_____ and dumped beside the mound of **22**_____. Captain Blackbeard breaks the lock and throws open the lid. Captain and crew alike stand and **23**_____ the sight, at a **24**_____ for words. Before them is a dazzling array of gold, jewels and pearls beyond imagination!

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