

*Think*

3

# MENTALS™

Student Workbook



**Maths Strategies and Practice**

1

Come with me to see how you can make maths easier. We're going to learn how to:

- find friendly numbers,
- make friendly numbers,
- fix changes to numbers.

2

Friendly numbers end in 0. They are easy to work with.

10 is friendlier than 9

30 is friendlier than 31

80 is friendlier than 79

50 is friendlier than 48

100 is friendlier than 95

3

Let's practise finding friendly numbers. Circle the friendly numbers in each pair.

9 or 10

49 or 50

20 or 22

67 or 70

4

Sometimes you can find pairs of numbers that add up to a friendly number.

Find the friendly pairs that add up to 10 and circle them.

1 + 4 + 9 friendly pair

8 + 5 + 5

3 + 1 + 7

4 + 6 + 3

2 + 8 + 9

5 + 9 + 1

5

What if I can't find a friendly number?

$85 - 44$

?

$36 + 22$

$47 + 51$

Don't worry, there's not always a friendly number to find – sometimes you need to **make** a friendly number.

First you need to look for a number that can be made friendly.

6

Find the number in each addition that is easy to make friendly, then circle it.

$\textcircled{19} + 8$

$31 + 44$

$26 + 18$

$99 + 37$

7

Now, change these numbers to **make** them friendly and show how you did it.

change

friendly

19

+1

20

31

18

99

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.



change

$$\begin{array}{r} 19 + 8 \\ \downarrow +1 \quad \downarrow -1 \\ 20 + \boxed{7} \end{array}$$

fix

$$\begin{array}{r} 31 + 44 \\ \downarrow -1 \quad \downarrow \square \\ 30 + \square \end{array}$$

$$\begin{array}{r} 26 + 18 \\ \downarrow \square \quad \downarrow +2 \\ \square + 20 \end{array}$$

$$\begin{array}{r} 99 + 37 \\ \downarrow +1 \quad \downarrow \square \\ 100 + \square \end{array}$$

9



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

Can you **make** these numbers friendly?

$$36 = 30 + 6$$

$$85 =$$

$$47 =$$

$$539 =$$

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.



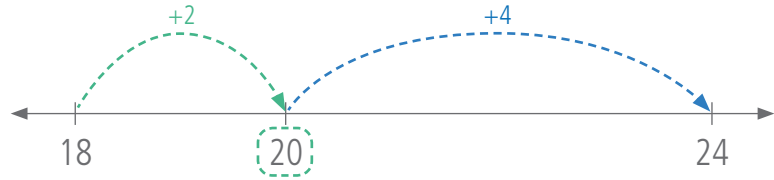
**+** Addition Strategy

# Friendly Jumps

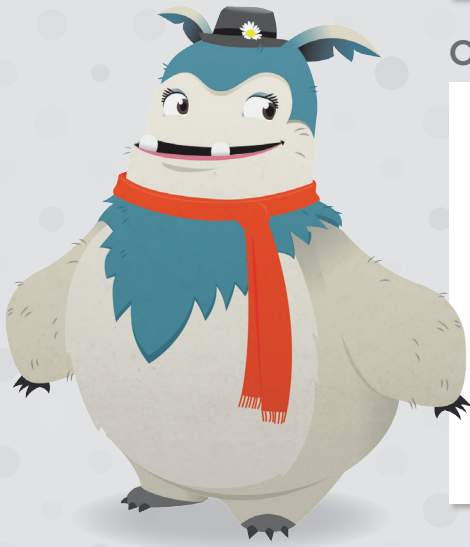
Make a number line in your head to 'jump' along.

**1** Jump forward to a friendly number.

$$18 + 6$$

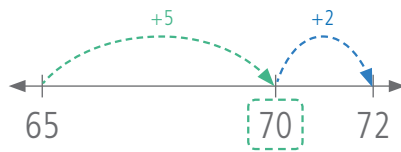


**2** Jump forward the rest.

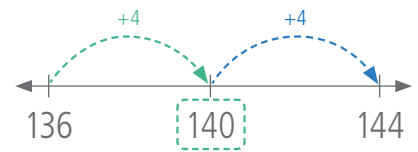


### Other Examples

$$65 + 7$$



$$136 + 8$$



## Day 1

**1**  $6 + 6$

**2**  $8 + 6$

**3**  $18 + 4$

**4**  $18 + 8$

**5**  $16 + 6$

**6**  $16 + 8$

**7**  $25 + 6$

**8**  $35 + 7$

**9**  $27 + 5$

**10**  $28 + 8$

**11**  $46 + 6$

**12**  $185 + 7$

**13**  $146 + 6$

**14**  $258 + 5$

**15** Susie bought a game for \$26 and a book for \$8. How much did she spend?

Practice

Q1–15:

/15

My time:

Day 2

1  $17 + 5$

2  $19 + 3$

3  $45 + 7$

4  $167 + 8$

5  $508 + 6$

Practice

6  $12 - 4$

7  $13 - 6$

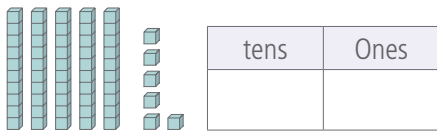
8  $14 - 8$

9  $15 - 7$

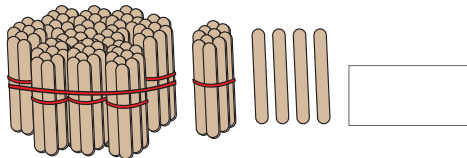
10 Jake had 12 jelly beans. He ate 5. How many are left?

Revision

11 Complete this place value chart.



12 How many popsticks?



13 Complete these addition facts.

$3 + 3 = \square$     $2 + 3 = \square$

$4 + 3 = \square$

14 How much money is in this bag?



15 How tall is a door?

- 1 metre    2 metres    4 metres    100 metres

Day 3

1  $17 + 7$

2  $19 + 7$

3  $68 + 5$

4  $425 + 7$

5  $388 + 6$

Practice

6  $23 - 8$

7  $34 - 7$

8  $85 - 6$

9  $56 - 8$

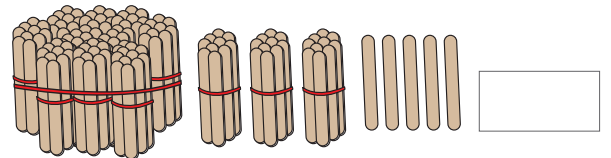
10 25 students are on the oval. 8 students leave. How many are left?

Revision

11 Complete this place value chart.



12 How many popsticks?



13 Complete these addition facts.

$4 + 4 = \square$     $6 + 4 = \square$

$8 + 4 = \square$

14 How much money is in this bag?



15 How long is a car?

- 1 metre    2 metres    4 metres    100 metres

Day 4

1  $19 + 5$

2  $87 + 6$

3  $365 + 7$

4  $896 + 5$

5  $298 + 7$

Practice

6  $16 - 9$

7  $53 - 5$

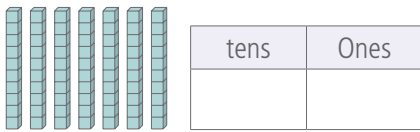
8  $87 - 8$

9  $42 - 6$

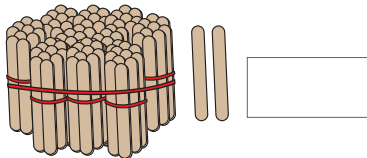
Revision

10 Kirsty has 36 pencils. 8 are sharp. How many need sharpening?

11 Complete this place value chart.



12 How many popsticks?



13 Complete these addition facts.

$7 + 7 =$       $9 + 7 =$

$8 + 7 =$

14 How much money is in this bag?



15 How long is a soccer field?

- 1 metre     2 metres     4 metres     100 metres

Day 5

1  $18 + 8$

2  $55 + 7$

3  $27 + 6$

4  $135 + 8$

5  $249 + 5$

6  $6 + 48$

7  $8 + 25$

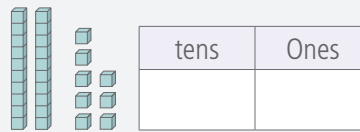
8  $428 + 7$

9  $877 + 7$

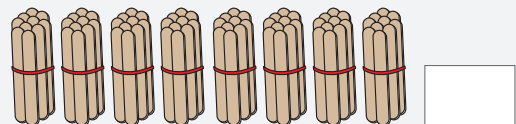
Assessment

10 Gemma scored 126 goals last year. This year she has scored only 8 goals. How many goals in total?

11 Complete this place value chart.



12 How many popsticks?



13 Complete these addition facts.

$5 + 5 =$       $6 + 5 =$

$9 + 5 =$

14 How much money is in this bag?



15 How long is your armspan?

- 1 metre     2 metres     4 metres     100 metres



Addition  
Strategy

## Friendly Pairs

When there are many numbers to add, look for pairs that add to ten. Add them first.



**1** Find friendly pairs.

$$9 + \boxed{5} + \boxed{5}$$

10

**2** Calculate.

$$= 9 + \boxed{10}$$

$$= 19$$

### Other Examples

$$\boxed{7} + \boxed{1} + \boxed{3} + \boxed{9}$$

10

$$= 10 + 10$$

$$= 20$$

$$\boxed{2} + \boxed{4} + \boxed{6} + 5 + \boxed{8}$$

10

$$= 10 + 10 + 5$$

$$= 25$$

### Day 1

**1**  $8 + 6 + 4$

**2**  $5 + 7 + 3$

**3**  $6 + 8 + 2$

**4**  $4 + 9 + 1$

**5**  $8 + 5 + 5$

**6**  $7 + 4 + 6$

**7**  $9 + 3 + 7$

**8**  $8 + 6 + 2 + 4$

**9**  $3 + 9 + 1 + 7$

**10**  $2 + 5 + 5 + 8$

**11**  $7 + 8 + 3 + 2$

**12**  $1 + 2 + 9 + 8$

**13**  $5 + 6 + 4 + 3 + 5$

**14**  $9 + 5 + 2 + 8 + 1$

**15** Blair caught 6 fish on Friday, 8 fish on Saturday and 4 fish on Sunday. How many fish did he catch?

Practice

Q1–15:

/15

My time:



Day 2

- 1  $5 + 8 + 2$
- 2  $6 + 4 + 9$
- 3  $4 + 8 + 6 + 2$
- 4  $7 + 5 + 5 + 3$
- 5  $2 + 7 + 8 + 3 + 6$

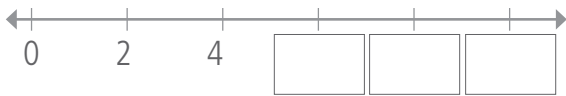
Practice

- 6  $46 - 10$
- 7  $89 - 10$
- 8  $55 - 10$
- 9  $62 - 10$

Revision

10 Amelia had \$23. She spent \$10 on a toy. How much is left?

11 Count on by 2s.



12

Hundreds	tens	Ones
<input type="text"/>	<input type="text"/>	<input type="text"/>

- 13  $5 - 2 = \square$     $9 - 2 = \square$   
 $4 - 2 = \square$

14 How much money is this?



15 What time is this?  
 past



Day 3

- 1  $7 + 2 + 3$
- 2  $5 + 7 + 5$
- 3  $3 + 6 + 4 + 7$
- 4  $8 + 9 + 1 + 2$
- 5  $4 + 5 + 9 + 5 + 6$

Practice

- 6  $95 - 10$
- 7  $49 - 10$
- 8  $26 - 10$
- 9  $31 - 10$

Revision

10 Oscar has 22 students in his class. 10 are girls. How many boys?

11 Count on by 2s, starting from 10.



12

Hundreds	tens	Ones
<input type="text"/>	<input type="text"/>	<input type="text"/>

- 13  $8 - 3 = \square$     $3 - 3 = \square$   
 $7 - 3 = \square$

14 How much money is this?



15 What time is this?  
 :



## Day 4

- 1  $9 + 6 + 1$
- 2  $5 + 5 + 8$
- 3  $1 + 9 + 5 + 5$
- 4  $7 + 8 + 1 + 2 + 9 + 3$
- 5  $6 + 5 + 4 + 9 + 5 + 8 + 2$

Practice

- 6  $29 - 10$
- 7  $52 - 10$
- 8  $45 - 10$
- 9  $84 - 10$
- 10 36 vehicles parked. 10 are vans, the rest are cars. How many cars?

Revision

- 11 Count on by 2s, starting from 1.



12

Hundreds	tens	Ones
<input type="text"/>	<input type="text"/>	<input type="text"/>

- 13  $10 - 5 =$       $10 - 2 =$
- $10 - 6 =$

- 14 How much money is this?
- 

- 15 What time is this?  :
- 

## Day 5

- 1  $6 + 5 + 5$
- 2  $8 + 5 + 2 + 5$
- 3  $1 + 2 + 8 + 9$
- 4  $4 + 7 + 6 + 3$
- 5  $3 + 5 + 5 + 7$
- 6  $1 + 6 + 9$
- 7  $5 + 6 + 5 + 4 + 8$
- 8  $7 + 9 + 1 + 7 + 3$
- 9  $3 + 6 + 5 + 4 + 7 + 5$

Assessment

- 10 Luke counted his toy cars. He had 7 red, 5 blue, 6 black, 3 silver and 4 white cars. How many cars is that?

- 11 Count on by 2s, starting from 20.



12

Hundreds	tens	Ones
<input type="text"/>	<input type="text"/>	<input type="text"/>

- 13  $9 - 4 =$       $5 - 4 =$
- $7 - 4 =$

- 14 How much money is this?
- 

- 15 What time is this?  past
-

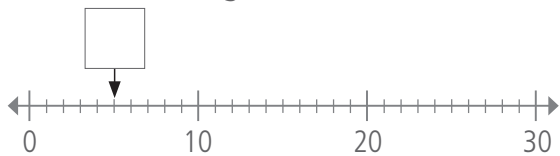
Day 1

- 1  $35 + 9$
- 2  $147 + 9$
- 3  $76 + 19$
- 4  $318 + 19$
- 5  $54 + 29$
- 6  $215 + 29$
- 7  $27 + 39$
- 8  $426 + 39$
- 9  $735 + 49$

Revision

10 Keed has 37 green marbles and 19 blue marbles. How many is that?

11 Write the missing number.



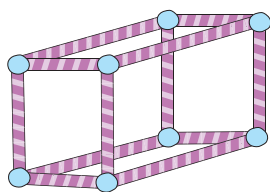
12 Write the number that has 5 hundreds, 2 tens and 6 ones.

13  $4 + 6 =$       $2 + 8 =$    
 $7 + 3 =$

14 Which Australian gold coin has the least value?

15 How many faces, edges and corners?

- faces
- edges
- corners



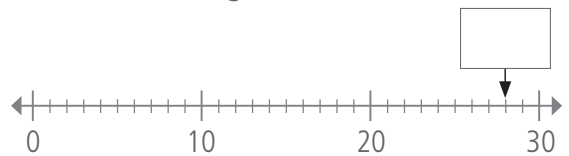
Day 2

- 1  $53 - 9$
- 2  $156 - 9$
- 3  $74 - 19$
- 4  $143 - 19$
- 5  $55 - 29$
- 6  $247 - 29$
- 7  $78 - 39$
- 8  $342 - 39$
- 9  $181 - 49$

Revision

10 Cody's dad is 37 and his mum is 9 years younger. How old is Cody's mum?

11 Write the missing number.



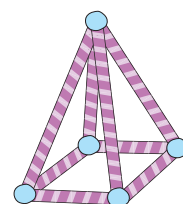
12 Write the number that has 2 hundreds and 8 tens.

13  $4 + 8 =$       $8 + 8 =$    
 $7 + 6 =$

14 Which Australian silver coin has the least value?

15 How many faces, edges and corners?

- faces
- edges
- corners

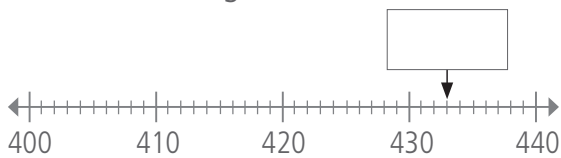


## Day 3

- 1  $8 \times 2$
- 2  $21 \times 2$
- 3  $64 \times 2$
- 4  $83 \times 2$
- 5  $31 \times 2$
- 6  $50 \times 2$
- 7  $70 \times 2$
- 8  $40 \times 2$
- 9  $80 \times 2$
- 10 How many minutes are in 2 hours?

Revision

11 Write the missing number.



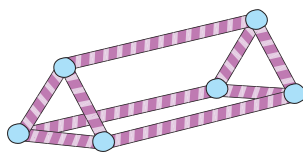
12 Write the number that has 9 hundreds and 9 ones.

13  $6 + 6 =$       $9 + 9 =$    
 $5 + 5 =$

14 Which Australian gold coin has the greatest value?

15 How many faces, edges and corners?

- faces
- edges
- corners



## Day 4

- 1  $12 \div 2$
- 2  $10 \div 2$
- 3  $16 \div 2$
- 4  $20 \div 2$
- 5  $8 \div 2$
- 6  $14 \div 2$
- 7  $26 \div 2$
- 8  $50 \div 2$
- 9  $44 \div 2$
- 10 24 marbles are shared equally by 2 friends. How many each?

Revision

11 Mark 85 on this number line.



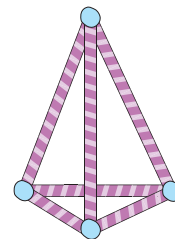
12 Write the number that has 2 ones, 7 hundreds and 1 ten.

13  $19 + 5 =$       $17 + 8 =$    
 $16 + 7 =$

14 What is the total value of one each of the Australian gold and silver coins?

15 How many faces, edges and corners?

- faces
- edges
- corners



Day 5

1  $46 + 19$

2  $223 + 39$

3  $85 - 29$

4  $194 - 49$

5  $92 \times 2$

6  $64 \times 2$

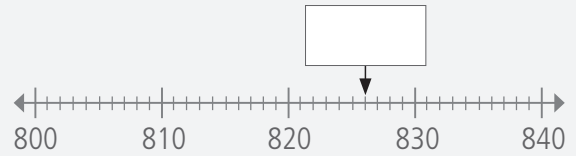
7  $12 \div 2$

8  $46 \div 2$

9  $100 \div 2$

10 Jasmine bought 2 games for \$43 each. How much did she spend?

11 Write the missing number.



12 Write the number that has 4 tens, 3 ones and 6 hundreds.

13  $8 + 4 =$    $6 + 7 =$

$5 + 9 =$

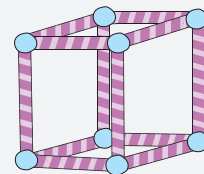
14 Which Australian silver coin has the greatest value?

15 How many faces, edges and corners?

faces

edges

corners



Assessment

Q1-10:

/10

Q11-15:

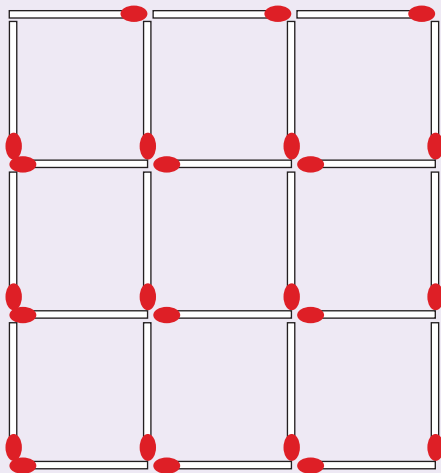
/5

My time:

Think Box

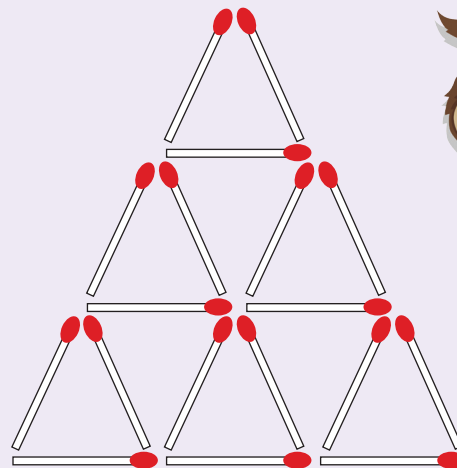
Matchstick Puzzles

How many squares are in this shape?  
Look out for squares made from other squares.



squares

How many triangles are in this shape?  
Look out for triangles made from other triangles.



triangles

