





Mental Starters Grade 3 Learner Workbook



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Dear Learner,

In this Mental Starters book, you have tasks to do in class that your teacher will show you how to do. In each starter, there is also a task for you to cut out and do at home. If you have access to a phone you can watch the support video with family or friends.



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BRIDGING THROUGH 10: Pre-Test, Part 1

Name:

II. Ι. 7 + 3 = 50 + 6 = 2. 12. 2 + 8 = 3 + 60 = 3. 13. 10 = 7 + 40 - 7 =14. 4. 8 less than 10 is 40 + 8 = What is the next multiple of IO? 2 5. 15. 48 10 + 5 6. 16. 100 + 27 = 5 What is the multiple of IO before 34? 34 7. 10 - 5 = 17. 8. 18. 10 - 4 = +7 = 50q q. 19. 30 -= 27 20. 10. 87 = 80 + + 10 = 10

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Bridging Through 10: Pre-Test, Part 1

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BRIDGING THROUGH 10: Pre-Test, Part 2

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WARM-UP

The teacher says 'pop' and the learners say 'fizz'; then the teacher says a number, and learners respond with the matching number for the rapid recall skill.

a. Pop-Fizz Make 10

In this version, the learners should respond with the number that would make the sum 10.



b. Pop-Fizz Make 20 (or another multiple of 10)

In this version, the learners should respond with the number that would make the sum 20 (or any multiple of 10).



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BRIDGING THROUGH 10: Starter 1

At school

Fast as you can



Make 10.

3 + 7	6 + 4
2 +	9 +
7 +	0 +

Make 20.

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16 + 4	II + 9
l3 +	18 +
14 +	17 +



Support Video https://youtu.be/iJNrdV3P4_s



At home Fast as you can

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Make 10.

4 + 6	+
8 +	5 +
10 +	9 +

Make 20.

15 + 5	10 +
I9 +	l6 +
12 +	l3 +



Bridging Through 10: Starter 1

Dear Parent/Guardian,

Your child will bring home mental maths tasks like this one to complete.

The tasks should take about 10 minutes. On the top of the page there is a QR code:

> Support Video https://youtu.be/iJNrdV3P4_s



Each QR code will take you to a video that you can watch with your child to help them with the task. The tasks should take about 10 minutes. If you see your child making a mistake, ask them to spot the mistake before helping them to find the correct answer.

We hope your child enjoys working on these tasks.

WARM-UP

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The teacher says 'pop' and the learners say 'fizz'; then the teacher says a number, and learners respond with the matching number for the rapid recall skill.

a. Pop-Fizz: Make 20



b. Jumping to the *next* multiple of 10 (e.g. 23 [∧] 30; 56 [∧] 60)

This is not rounding to the nearest ten but jumping to the **next** multiple of ten on the number line.



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BRIDGING THROUGH 10: Starter 2

At school

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Fast as you can



Make 20.

13 + 7	19 + 1
12 +	14 +
17 +	15 +

Jump to the next multiple of 10.

47 ⁄~ <u>50</u>	32 🖓
l6 🖓	26 🖓
43 🖓	59 🔿



Support Video https://youtu.be/upvlvkC3Yko



At home Fast as you can

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Make 30.

24 + 6	23 +
27 +	24 +
21 +	28 +

Jump to the next multiple of 10.

36 ⁄~ <u>40</u>	27 🔿
39 🔿	64 🖓
83 🔿	72 🔿



Bridging Through 10: Starter 2

WARM-UP

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a. Jumping to the *next* multiple of 10 (e.g. 23 $^{\sim}$ 30; 56 $^{\sim}$ 60)

This is not rounding to the nearest ten but jumping to the **next** multiple of ten on the on the number line.



b. Adding to a multiple of ten



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BRIDGING THROUGH 10: Starter 3

At school

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Fast as you can



Jump to the next multiple of 10.

23 \land <u>30</u>	56 ⁄~ <u>60</u>
37 🔿	64 🔿
89 🔿	98 🔿

Add to a multiple of 10.

30 + 6 = 36	50 + 2 =
70 + 5 =	20 + 9 =
40 + 3 =	60 + I =



44 + 8 = ____

- 39 + 7 = ____
- 43 + 8 = ____
- 67 + 6 = ____
- 84 + 7 = ____

Support Video https://youtu.be/wDEEqU9B_5Q



At home Fast as you can

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Jump to the next multiple of 10.

45 ⁄~ <u>50</u>	87 🔿
24 🔿	43 🖓
76 🔿	31 🔿

Add to a multiple of 10.

20 + 3 = <u>23</u>	40 + 8 =
30 + 7 =	60 + 5 =
80 + 8 =	70 + 2 =





64 + 7 = ____

Bridging Through 10: Starter 3



BRIDGING THROUGH 10: Starter 4

At school

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Fast as you can





$$28 + _ = 30$$
 and $30 + _ = 35$
 $67 + _ = 70$ and $70 + _ = 72$

Example
$$34 + _ = 42$$

 $34 + \boxed{8} = 42$
 $+ 6 + 2$
 $+ 6 + 2$
 $34 + 40 + 2$



Support Video https://youtu.be/INITWPDMFKY



At home

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Fast as you can





36 +	_ = 40	and	40 +	_ = 41
85 +	_ = 90	and	90 +	_ = 92



Bridging Through 10: Starter 4

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Bridging Through 10: Worksheet 1

WARM-UP

a. Jumping to the multiple of ten *before*

This is not rounding to the nearest ten but jumping to the multiple of ten **before** on the number line..



b. Subtracting from a multiple of ten



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BRIDGING THROUGH 10: Starter 5

At school

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Fast as you can



Jump to the multiple of 10 before.

<u>20</u> k 26	K 53
×~ 34	K 62
K~ 89	¥~ 47

Subtract from a multiple of 10.

40 - 6 = 34	50 – 2 =
70 – 5 =	20 - 9 =
40 - 3 =	60 – I =



Support Video https://youtu.be/-bQNTOPly7I



At home Fast as you can

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Jump to the multiple of 10 before.

<u>30</u> k 32	¥\ 4I
<u> </u>	K^ 29
×~ 72	K qq

Subtract from a multiple of 10.

20 – 4 = <u>16</u>	70 – 3 =
60 - 8 =	30 - 2 =
80 – 5 =	50 - 6 =



Bridging Through 10: Starter 5

WARM-UP

a. Jumping to the multiple of ten *before*

This is not rounding to the nearest ten but jumping to the multiple of ten **before** on the number line..



b. Subtracting from a multiple of ten



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BRIDGING THROUGH 10: Starter 6

At school

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Fast as you can



Jump to the multiple of 10 before.

<u>20</u> k 23	156
¥ ~ 25	× 73
v 57	V~ 7I

Subtract from a multiple of 10.

30 - 3 = 27	40-6 =
60 – 9 = <u> </u>	30 – 5 =
90 - 4 =	60 - 2 =



35 – 7 = ____



- 42 8 = ____
- 62 6 = ____

84 - 7 = ____

Support Video https://youtu.be/JvNKtAdrzfM



At home Fast as you can

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Jump to the multiple of 10 before.

<u>20</u> k 25	K I8
¥~ 43	39 10
K 64	v 87

Subtract from a multiple of 10.

30 - 6 = 24	20 – 9 =
50 – 3 =	70 - 8 =
40-5 =	90 - 2 =





82 - 5 = ____

Bridging Through 10: Starter 6

WARM-UP

a. Jumping to the multiple of ten *before*

This is not rounding to the nearest ten but jumping to the multiple of ten **before** on the number line..



b. Subtracting from a multiple of ten



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BRIDGING THROUGH 10: Starter 7

At school

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Fast as you can



Jump to the multiple of 10 before.

<u>20</u> k 23	¥ ~ 56
¥ 92	K 64
¥~~ 36	×~ 75

Subtract from a multiple of 10.

30 - 3 = 27	40 - 6 =
20 – 3 =	50 - 6 =
70 – I =	80 - 7 =



81-4 = ____

Support Video https://youtu.be/npm_pVwiXD4



At home Fast as you can

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Jump to the multiple of 10 before.

<u>70</u> x 75	K⁄ 18
¥~ 43	K 39
K 64	v 87

Subtract from a multiple of 10.

40 – 7 = <u>33</u>	30 – 9 =
90-4 =	20 - 8 =
50 – 9 =	70 - 4 =



Bridging Through 10: Starter 7

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Name:

Bridging Through 10: Worksheet 2

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10





At school

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Fast as you can





$$42 - _ = 40 \quad \text{and} \quad 40 - _ = 34$$
$$36 - _ = 30 \quad \text{and} \quad 30 - _ = 28$$
$$98 - _ = 90 \quad \text{and} \quad 90 - _ = 83$$



Support Video https://youtu.be/9YSloijDOso



At home

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Fast as you can



e	63 –	_ = 60	and $60 - _ = 55$
	54 –	_ = 50	and $50 - _ = 46$
-	75 –	= 70	and $70 - \ = 69$



Bridging Through 10: Starter 8

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BRIDGING THROUGH 10: Post-Test, Part 1



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Bridging Through 10: Post-Test, Part 1

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BRIDGING THROUGH 10: Post-Test, Part 2

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Bridging Through 10: Post-Test, Part 2

JUMP STRATEGIES: Pre-Test, Part 1

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2 minutes for this page



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JUMP STRATEGIES: Pre-Test, Part 2

3 minutes for this page



Mark: 10

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a. Round the room 10 more

The teacher says a number and learners respond round the room with 10 more than the last number.



b. Round the room 10 less

The teacher says a number and learners respond round the room with 10 less than the last number.



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JUMP STRATEGIES: Starter 1

At school

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Fast as you can



Round the room 10 more.



Round the room 10 less.







Support Video https://youtu.be/FPTVoIFFd3k



At home Fast as you can

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Round the room 10 more.



Round the room 10 less.





Jump Strategies: Starter 1

Dear Parent/Guardian,

Your child will bring home mental maths tasks like this one to complete.

The tasks should take about 10 minutes. On the top of the page there is a QR code:

> **Support Video** https://youtu.be/FPTVoIFFd3k



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We hope your child enjoys working on these tasks.

WARM-UP

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a. Pop-Fizz 10 more

The teacher says 'pop', learners say 'fizz'; teacher says a number, learners respond with **10 more** (or a multiple of 10 more):



a. Pop-Fizz 10 less

The teacher says 'pop', learners say 'fizz'; teacher says a number, learners respond with **10 less** (or a multiple of 10 less):



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JUMP STRATEGIES: Starter 2

At school

Fast as you can



Write 10 more.

3	\rightarrow	<u>13</u>	52	\rightarrow	
53	\rightarrow		84	\rightarrow	
38	\rightarrow		97	\rightarrow	

Write 10 less.

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49	\rightarrow	<u>39</u>	65	\rightarrow	
78	\rightarrow		q 4	\rightarrow	
83	\rightarrow		109	\rightarrow	



Support Video https://youtu.be/6RkP5bSpINQ



At home

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Fast as you can



Write 10 more.

6	\rightarrow	<u> 16</u>	43	\rightarrow	
37	\rightarrow		84	\rightarrow	
52	\rightarrow		98	\rightarrow	

Write 10 less.

56	\rightarrow	<u>46</u>	72	\rightarrow	
67	\rightarrow		98	\rightarrow	
83	\rightarrow		105	\rightarrow	



Jump Strategies: Starter 2



<u>57 + _ = 60</u>

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JUMP STRATEGIES: Starter 3

At school

Fast as you can



Add 10.

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43 + 10 = 53	56 + 10 =
37 + 10 =	94 + 10 =
85 + 10 =	128 + 10 =

Add up to a multiple of 10.

35 + <u>5</u> = 40	36 + = 40
68 + = 70	93 + = 100
57 + = 60	124 + = 130



Support Video https://youtu.be/JAGey218ADw



At home Fast as you can

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Add 10.		
42 + 10 = 52	65 + 10 =	
53 + 10 =	92 + 10 =	
76 + 10 =	137 + 10 =	

Add up to a multiple of 10.

38 + <u>2</u> = 40	47 + = 50
56 + = 60	94 + = 100
75 + = 80	126 + = 130



Jump Strategies: Starter 3

WARM-UP

a. Jumping to the *next* multiple of ten

This is not rounding to the nearest ten but jumping to the **next** multiple of ten on the number line.



b. Add up to a multiple of 10

The teacher poses oral questions and learners respond.



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JUMP STRATEGIES: Starter 4

At school

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Fast as you can



Jump to the next multiple of 10.

/	$ \rightarrow $	/	$ \longrightarrow $
47	<u>50</u>	68	
	\rightarrow	/	$ \longrightarrow $
55		84	
	\rightarrow	/	$ \longrightarrow $
32		137	

Add up to a multiple of 10.

68 + <u>2</u> = 70	47 + = 50
35 + = 40	93 + = 100
56 + = 60	124 + = 130





Support Video https://youtu.be/A9vFXHWkzUo



At home Fast as you can

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Jump to the next multiple of 10.



Add up to a multiple of 10.

56 + <u>4</u> = 60	69 + = 70
37 + = 40	94 + = 100
48 + = 50	123 + = 130



Jump Strategies: Starter 4

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Name: Jump Strategies: Worksheet 1



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WARM-UP



a. Pop-Fizz 10 less

The teacher says 'pop', learners say 'fizz'; teacher says a number, learners respond with **10 less**:



b. Subtract 10

The teacher poses oral questions and learners respond.



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JUMP STRATEGIES: Starter 5

At school

Fast as you can



Write 10 less.

47	\rightarrow	<u>37</u>	52	\rightarrow	
63	\rightarrow		104	\rightarrow	
85	\rightarrow		139	\rightarrow	

Subtract 10.

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47 - 10 = 37	69 - IO =
37 - 10 =	94 - 10 =
48 - 10 =	123 - 10 =



Support Video https://youtu.be/dFV5gmY68Sc



At home

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Fast as you can



Write 10 less.

56	\rightarrow	<u>46</u>	72	\rightarrow	
67	\rightarrow		108	\rightarrow	
93	\rightarrow		145	\rightarrow	

Subtract 10.

56 - 10 = 46	46 - 10 =
34 - 10 =	93 - 10 =
57 - 10 =	165 - 10 =



Jump Strategies: Starter 5

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WARM-UP

a. Add and Subtract 10

Same method as '10 more/less', but here the teacher offers 'add/subtract 10' problems.



b. Add and Subtract 20

Same method as above, but here the teacher offers 'add/subtract 20' problems.



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JUMP STRATEGIES: Starter 6

At school

Fast as you can



Add 10.	Add 20.
16 + 10 = 26	15 + 20 = 35
84 + 10 =	62 + 20 =
96 + 10 =	73 + 20 =

Subtract 10.

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Subtract 20.

56 - 10 = 46	63 - 20 = 43
84 - 10 =	85 - 20 =
95 - 10 =	94 - 20 =



Support Video https://youtu.be/JQq2zL6pwCM



At home Fast as you can

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Add 10.	Add 20.	
14 + 10 = 24	17 + 20 = 37	
75 + 10 =	52 + 20 =	
83 + 10 =	64 + 20 =	

Subtract 10.	Subtract 20.
52 - 10 = 42	65 - 20 = 45
76 - 10 =	87 - 20 =
93 - 10 =	92 - 20 =



Jump Strategies: Starter 6



JUMP STRATEGIES: Starter 7

At school

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Fast as you can



Break down to subtract.







Support Video https://youtu.be/uFGzuToKGkA



At home Fast as you can



Break down to subtract.





Jump Strategies: Starter 7

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Jump Strategies: Worksheet 2



JUMP STRATEGIES: Starter 8

At school

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Fast as you can



Subtract tens, then subtract ones.

$$84 - 20 = 64 \text{ and } 64 - 3 = 61$$

$$65 - _ = 55 \text{ and } 55 - _ = 53$$

$$57 - _ = 37 \text{ and } 37 - _ = 34$$

$$86 - _ = 66 \text{ and } 66 - _ = 61$$

$$78 - _ = 68 \text{ and } 68 - _ = 64$$





Support Video https://youtu.be/BHC9jDIUdRI



At home Fast as you can

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Subtract tens, then subtract ones.

$$65 - \underline{20} = 45 \quad \text{and} \quad 45 - \underline{4} = 41$$

$$74 - \underline{\qquad} = 54 \quad \text{and} \quad 54 - \underline{\qquad} = 52$$

$$57 - \underline{\qquad} = 47 \quad \text{and} \quad 47 - \underline{\qquad} = 44$$

$$86 - \underline{\qquad} = 76 \quad \text{and} \quad 76 - \underline{\qquad} = 72$$

$$68 - \underline{\qquad} = 48 \quad \text{and} \quad 48 - \underline{\qquad} = 43$$



Jump Strategies: Starter 8

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JUMP STRATEGIES: Post-Test, Part 1

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JUMP STRATEGIES: Post-Test, Part 2

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DOUBLING AND HALVING: Pre-Test, Part 1

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DOUBLING AND HALVING: Pre-Test, Part 2

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WARM-UP

'I show, you say' (whole class and then a learner paired activity)

a. I show, you say

The teacher shows a 'double' number using fingers on two hands, e.g.



The teacher shows: Double 4, Double 1, Double 3, Double 5, Double 2.

Learners say the appropriate sentence, e.g. "Double 4 is 8".

b. I show, you say

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Learners working in pairs can extend this activity to show double 6 – double 10 using their fingers:



Ask learners to mirror match their full hands and the hands with one finger open. Help learners to see that the answer 12 is made up of two hands with 5 fingers and two hands with 1 finger: 5 + 5 and 1 + 1.

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At school

Fast as you can



Double 3 is <u>6</u>	Double 5 is
Double 4 is	Double 2 is
Double 6 is <u> 2</u>	Double 9 is
Double 8 is	Double 7 is







Double is	
Two groups of is	
Two times is	
× 2 =	

2. Half of 20



Half of is
divided by 2 is
shared between 2 is
÷ 2 =

Support Video https://youtu.be/UMmzMVM-SS0



At home





Double 5 is <u>10</u>	Double 4 is
Double 2 is	Double I is
Double 7 is <u> 4</u>	Double 8 is
Double 9 is	Double 6 is

Example	
Double 7 is 14	Two groups of 7 is 14
Two times 7 is 14	$7 \times 2 = 14$
Half of 14 is 7	l4 divided by 2 is 7
l4 shared between 2 is 7	14 ÷ 2 = 7

I. Double 8



Two	times	is	

____ × 2 = ____

2. Half of 18



Half of is
divided by 2 is
shared between 2 is
÷ 2 =

Doubling and Halving: Starter 1

Dear Parent/Guardian,

Your child will bring home mental maths tasks like this one to complete.

The tasks should take about 10 minutes. On the top of the page there is a QR code:

> Support Video https://youtu.be/UMmzMVM-SS0



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We hope your child enjoys working on these tasks.

WARM-UP

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a. Pop-Fizz doubles to ten

The teacher says 'pop', learners say 'fizz'; the teacher says a number, learners respond with **doubles**:



Doubles to 10: $1 \rightarrow 2$; $3 \rightarrow 6$; $5 \rightarrow 10$; $4 \rightarrow 8$; $2 \rightarrow 4$

b. Pop-Fizz halves to ten

The teacher says 'pop', learners say 'fizz'; the teacher says a number, learners respond with **halves**:



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At school

Fast as you can



Double 3 is <u>6</u>	Double 5 is
Double 4 is	Double 2 is
Half of 8 is <u>4</u>	Half of 10 is
Half of 6 is	Half of 4 is

Example	
000000 5	Double 8 is l6
	Half 16 is 8

Write the double and halving number sentences.





Half of _____ is ____



Double ____ is ____ Half of is



Double ____ is ____ Half of ____is ____ Support Video https://youtu.be/8g1unCfK1Lo



At home Fast as you can



Double 4 is <u>8</u>	Double I is
Double 3 is	Double 5 is
Half of 6 is <u>3</u>	Half of 8 is



Write the double and halving number sentences.





Double ____ is ____ Half of ____ is ____



Double ____ is ____ Half of ____is ____



Doubling and Halving: Starter 2

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WARM-UP

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a. Pop-Fizz doubles to twenty

The teacher says 'pop', learners say 'fizz'; the teacher says a number, learners respond with **doubles**.



Doubles to 20: $1 \rightarrow 2$; $3 \rightarrow 6$; $5 \rightarrow 10$; $4 \rightarrow 8$; $2 \rightarrow 4$; $6 \rightarrow 12$; $9 \rightarrow 18$; $7 \rightarrow 14$; $8 \rightarrow 16$; $10 \rightarrow 20$.

b. Pop-Fizz halves to twenty

The teacher says 'pop', learners say 'fizz'; the teacher says a number, learners respond with **halves**:



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At school

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Fast as you can



Double 6 is <u>l2</u>	Double 8 is
Double 4 is	Double 7 is
Double I0 is	Double 9 is
Half of I2 is <u>6</u>	Half of 14 is
Half of I2 is <u>6</u> Half of 20 is	Half of 14 is Half of 6 is



Support Video https://youtu.be/L2_MyczJOyU



At home Fast as you can



Double 7 is <u>14</u>	Double 5 is
Double I0 is	Double 8 is
Double 6 is	Double 9 is
Half of 14 is <u>7</u>	Half of I0 is
Half of 18 is	Half of 16 is

Half of 14 is _____ Half of 12 is ____



Doubling and Halving: Starter 3

WARM-UP

Doubles and halves of friendly numbers

Friendly numbers are numbers that are easy to work with. Often these are multiples of ten.



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At school

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Fast as you can



Double 30 is <u>60</u>	Double 40 is
Double 50 is	Double 70 is
Double 20 is	Double 80 is
Half of I20 is <u>60</u>	Half of 30 is
Half of 80 is	Half of I40 is
Half of I60 is	Half of 70 is







Double 36





Support Video https://youtu.be/qnSniN-bliU



At home Fast as you can



Double 40 is <u>80</u>	Double 20 is
Double 60 is	Double 90 is
Double 30 is	Double 80 is
Half of 140 is <u>70</u>	Half of 50 is
Half of 40 is	Half of I20 is

Half of I80 is ____

Half of 70 is ____

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Double 23 = ____



Double 47 =

Doubling and Halving: Starter 4

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Name: Doubling and Halving: Worksheet 1

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Doubling and Halving: Worksheet 1

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WARM-UP

Doubles and halves of friendly numbers

Friendly numbers are numbers that are easy to work with. Often these are multiples of ten.



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At school

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Fast as you can



Double 20 is <u>40</u>	Double 50 is
Double 40 is	Double 90 is
Double I0 is	Double 80 is
Half of 160 is <u>80</u>	Half of 60 is
Half of 50 is	Half of I80 is
Half of I20 is	Half of 70 is











Support Video https://youtu.be/t2jBnZHnn1Y



At home Fast as you can

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Double 10 is <u>20</u>	Double 20 is
Double 60 is	Double 70 is
Double 30 is	Double 80 is
Half of I20 is <u>60</u>	Half of 30 is
Half of 140 is	Half of 100 is

Half of 90 is ____ Half of 110 is ____



half of 58 = 29 84 \div



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68 ÷ 2 = ____



Half of 72 =

Doubling and Halving: Starter 5

WARM-UP

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Say it another way

Work with different representations of doubling and halving. These can include words like 'double 7' and 'half of 16', or alternatives like 'two groups of 7' or '7 and 7' or '7 + 7' or '16 \div 2' or 'sixteen shared between two'.

This can also include providing an image like the one below. Learners should offer ways of saying or writing 'double 9 = 18' e.g.:



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At school

Fast as you can



Saying the same thing in different ways:

Double 9 is <u>18</u>	9 + 9 =
9 × 2 =	18 – 9 =
l8 ÷ 2 =	Half of 18 =

Double 7 is
$$=$$

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Fill in the web of facts



Support Video https://youtu.be/fxDY11LlCsc



At home Fast as you can



Saying the same thing in different ways:

Double 7 is <u>I4</u>	7 + 7 =
7 × 2 =	14 – 7 =
I4 ÷ 2 =	Half of 14 =

Half of 12 = 12 - 6 =





Doubling and Halving: Starter 6

WARM-UP

Doubles and halves of multiples of 10, 100, 1000



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At school

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Fast as you can



Double		Halve	
Ю	<u>20</u>	40	
100		400	
1000		4000	

Double	 Halve	
30	 50	
300	 500	
3000	 5000	



Support Video https://youtu.be/JJUPpmMdaAw



At home Fast as you can



Double I		Halve	Halve	
20	<u>40</u>	60		
100		600		
1000		6000		

Double	 Halve	
40	 70	
400	 700	
4000	 7000	



Doubling and Halving: Starter 7

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Name: Doubling and Halving: Worksheet 2



Doubling and Halving: Worksheet 2

MSAP Learners Booklet October.indd 69

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WARM-UP

Doubles and halves of friendly numbers

Friendly numbers are numbers that are easy to work with. Often these are multiples of ten.



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At school

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Fast as you can



Double		Halve	
3	<u>6</u>	8	
40		60	
50		70	
200		600	
600		500	
4000		2000	







2. Double 99 = Double 100 - ____

=

3. Double 49 =

Support Video https://youtu.be/_qp_sjlzqLw



At home Fast as you can



Double		Halve	
2	<u>4</u>	6	<u>3</u>
30		80	
70		90	
300		400	
800		700	
3000		5000	



- I. Fill in the web of facts
- 2. Double 98 = Double 100 ____

=____

3. Double 39 =

Doubling and Halving: Starter 8

MSAP Learners Booklet October.indd 71

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DOUBLING AND HALVING: Post-Test, Part 1

Name:

2 minutes for this page



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DOUBLING AND HALVING: Post-Test, Part 2

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ROUNDING AND ADJUSTING: Pre-Test, Part 1

Name:

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ROUNDING AND ADJUSTING: Pre-Test, Part 2

3 minutes for this page



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a. Round the room 10 more

The teacher says a number and learners respond round the room with 10 more than the last number.



b. Add multiples of 10



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At school

Fast as you can



Write 10 more than.



Calculate.

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56 + 20 = 76	42 + 30 =
43 + 20 =	27 + 40 =
35 + 40 =	56 + 20 =



Support Video https://youtu.be/jpwwvujejpl



At home

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Fast as you can



Calculate.

46 + 20 = <u>66</u>	36 + 40 =
65 + 20 =	52 + 30 =
23 + 50 =	38 + 50 =





Rounding and Adjusting: Starter 1

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Dear Parent/Guardian,

Your child will bring home mental maths tasks like this one to complete.

The tasks should take about 10 minutes. On the top of the page there is a QR code:

> Support Video https://youtu.be/jpwwvujejpl



Each QR code will take you to a video that you can watch with your child to help them with the task. The tasks should take about 10 minutes. If you see your child making a mistake, ask them to spot the mistake before helping them to find the correct answer.

We hope your child enjoys working on these tasks.

WARM-UP

 (\blacklozenge)

a. Pop-Fizz: Nearest multiple of 10

The teacher says 'pop' and the learners say 'fizz'; then the teacher says a number, and learners respond with another number.

In this version, the learners should respond with the nearest multiple of ten.



b. How to jump to the nearest multiple of 10

This time learners say what needs to happen to get to the nearest multiple of ten.



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At school

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Fast as you can



Write the nearest multiple of 10.

23	\rightarrow	<u>20</u>	52	\rightarrow	
47	\rightarrow		68	\rightarrow	
31	\rightarrow		93	\rightarrow	

How do I get to the nearest multiple of 10?

47	\rightarrow	<u>+ 3</u>	67	\rightarrow	
36	\rightarrow		54	\rightarrow	
73	\rightarrow		98	\rightarrow	



Support Video https://youtu.be/fGILndzXfSY



At home Fast as you can

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Write the nearest multiple of 10.

26	\rightarrow	<u>30</u>	13	\rightarrow	
49	\rightarrow		37	\rightarrow	
22	\rightarrow		84	\rightarrow	

How do I get to the nearest multiple of 10?

52	\rightarrow	<u>– 2</u>	63	\rightarrow	
89	\rightarrow		41	\rightarrow	
53	\rightarrow		76	\rightarrow	



36 + 49 = ____

Rounding and Adjusting: Starter 2





At school

Fast as you can



How do I get to the nearest multiple of 10?

47	\rightarrow	<u>+ 3</u>	26	\rightarrow	
38	\rightarrow		24	\rightarrow	
62	\rightarrow		91	\rightarrow	

Quick calculations.

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63 – I = <u>62</u>	56 + I =
44-2 =	35 + 2 =
57 – 3 =	22 + 3 =



Support Video https://youtu.be/St5nSH_BdRE



At home Fast as you can

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How do I get to the nearest multiple of 10?

42	\rightarrow	<u>- 2</u>	27	\rightarrow	
46	\rightarrow		34	\rightarrow	
97	\rightarrow		88	\rightarrow	

Quick calculations.

73 - 1 = 72	47 + 1 =
25-2 =	56 + 2 =
75 - 3 =	14 + 3 =



Rounding and Adjusting: Starter 3

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WARM-UP

a. Round the room 10 less

The teacher says a number and learners respond round the room with 10 less than the last number.



b. Subtract multiples of 10



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At school

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Fast as you can



Write 10 less than.

26	\rightarrow	<u>16</u>	25	\rightarrow	
32	\rightarrow		64	\rightarrow	
48	\rightarrow		81	\rightarrow	

Write 20 less than.

56	\rightarrow	<u>36</u>	39	\rightarrow	
44	\rightarrow		68	\rightarrow	
72	\rightarrow		87	\rightarrow	



Support Video https://youtu.be/qyCQU1S6M8w



At home

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Fast as you can



Write 10 less than.

26	\rightarrow	<u>16</u>	55	\rightarrow	
78	\rightarrow		34	\rightarrow	
42	\rightarrow		69	\rightarrow	

Write 20 less than.

36	\rightarrow	<u>l6</u>	59	\rightarrow	
74	\rightarrow		58	\rightarrow	
42	\rightarrow		97	\rightarrow	



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Rounding and Adjusting: Worksheet 1

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At school

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Fast as you can



Write the nearest multiple of 10.

43	\rightarrow	<u>40</u>	62	\rightarrow	
37	\rightarrow		58	\rightarrow	
21	\rightarrow		73	\rightarrow	

Example 47 - 29 +1 - 30 -17 - 18Answer = 18 28 - 19 = _____ 54 - 39 = ____ Support Video https://youtu.be/VQ8va_RuHBQ



At home

 $(\blacklozenge$

Fast as you can







Write the nearest multiple of 10.

27	\rightarrow	<u>30</u>	42	\rightarrow	
67	\rightarrow		88	\rightarrow	
33	\rightarrow		97	\rightarrow	



Rounding and Adjusting: Starter 5



At school

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Fast as you can



Quick calculations.

43 + 1 = 44	66 + I =
84 + 2 =	55 + 2 =
156 + 3 =	122 + 3 =

Write the nearest multiple of 10.

43	\rightarrow	<u>40</u>	73	\rightarrow	
48	\rightarrow		62	\rightarrow	
121	\rightarrow		173	\rightarrow	



Support Video https://youtu.be/kG9NCQ9gBPY



At home Fast as you can

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Quick calculations.

64 + 1 = 65	28 + I =
93 + 2 =	74 + 2 =
34 + 3 =	164 + 3 =

Write the nearest multiple of 10.

27	\rightarrow	<u>30</u>	36	\rightarrow	
52	\rightarrow		74	\rightarrow	
133	\rightarrow		167	\rightarrow	



Rounding and Adjusting: Starter 6

WARM-UP

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a. Pop-Fizz: Nearest multiple of 10

The teacher says 'pop' and the learners say 'fizz'; then the teacher says a number, and learners respond with another number.

In this version, the learners should respond with the nearest multiple of ten.



b. How to jump to the nearest multiple of 10

This time learners say what needs to happen to get to the nearest multiple of ten.



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At school

Fast as you can



Write the nearest multiple of 10.

23	\rightarrow	<u>20</u>	42	\rightarrow	
77	\rightarrow		39	\rightarrow	
131	\rightarrow		193	\rightarrow	

How do I get to the nearest multiple of 10?

47	\rightarrow	<u>+ 3</u>	88	\rightarrow	
26	\rightarrow		44	\rightarrow	
178	\rightarrow		193	\rightarrow	

Example 19 + 39 |9 + 39| (round both) = 20 + 40 and adjust - 2(-1 for each) = 60 - 2

= 58

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38 + 29 =



57 + 28 = ____

I9 + I9 + I9 = ____

Support Video https://youtu.be/0TOGmefwNxQ



At home

Fast as you can



Write the nearest multiple of 10.

17	\rightarrow	<u>20</u>	64	\rightarrow	
36	\rightarrow		68	\rightarrow	
119	\rightarrow		166	\rightarrow	

How do I get to the nearest multiple of 10?

44	\rightarrow	<u> </u>	92	\rightarrow	
57	\rightarrow		33	\rightarrow	
153	\rightarrow		167	\rightarrow	

Example 28 + 49= 28 + 49 (round both) = 30 + 50 and adjust - 3 (- 2 and - 1) = 80 - 3= 77

49 + 28 = ____



37 + 39 = ____

29 + 29 + 29 = ____

Rounding and Adjusting: Starter 7

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Rounding and Adjusting: Worksheet 2

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At school

Fast as you can



Write 20 more than.



Write 30 less than.



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Choose <i>round 1</i> or <i>round both</i> . Example 48 + 97			
	48 + 97	(round both)	
=	50 + 100	(and adjust - 5)	
=	150 – 5		
=	145		
	or		
	48 + 97	(round one)	
=	48 + 100	(and adjust - 3)	
=	148 – 3		
=	145		

28 + 29 = ____



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17 + 99 =

Which method do you like most?

Support Video https://youtu.be/mij_d45rw00



At home Fast as you can

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Write 30 more than.



Write 20 less than.





98 + 37 = ____



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29 + 69 = ____

Which method do you like most?

Rounding and Adjusting: Starter 8

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ROUNDING AND ADJUSTING: Post-Test, Part 1

Name:

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2 minutes for this page



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Mark: 20

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ROUNDING AND ADJUSTING: Post-Test, Part 2

3 minutes for this page



Mark:

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RE-ORDERING: Pre-Test, Part 1

Name:

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2 minutes for this page

I.	Circle two numbers that add up to 10.	.	100 + 14 =
	7 4 2 3 9		
2.	Circle two numbers that add up to 10.	12.	2 × 5 =
	5 4 1 6 8		
3.	6 + = 10	13.	Circle two numbers that add up to 20.
			8 14 12 3 19
4.	9 + 11 =	14.	Circle two numbers that add up to 20.
			15 4 I 16 8
5	Circle two numbers that add up to 100.	15	F0 0
J .	24 50 30 38 70	13.	50 × 2 =
	Circle two numbers that add up to 100.		
6.	51 17 29 49 60	16.	140 + = 149
			Circle two numbers that add up to 30.
/.	20 = 8 +	17.	18 14 12 7 19
			Circle two numbers that add up to 30.
8.	+ 3 = 20	18.	10 1/1 (2 16 13
			10 14 4 10 13
	21		69
q.		19.	
	30		
			69 + = 100
10.	56 + 30 =	20	22 + 18 =

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Mark: 20

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RE-ORDERING: Pre-Test, Part 2

3 minutes for this page



Mark: 10



WARM-UP

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a. I say/you say: Make 10

The teacher says a single-digit number and asks learners to say the number that needs to be added to make 10.



b. I say/you say: Make 20

The teacher says a number between 1 and 20 and asks learners to say the number that needs to be added to make 20.



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RE-ORDERING: Starter 1

At school

Fast as you can



In your head.

6 + <u>4</u> = 10	17 += 20
26 + = 30	+ 7 = 20
32 + = 40	+ 3 = 50

37 + 3 = 40	22 += 30
27 + = 30	15 += 20
+ 3 = 60	+ 4 = 20



Circle the calculations below that should be re-ordered to calculate more quickly? Explain why.

5 + 46

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84 + 9

7 + 68

Support Video https://youtu.be/FIIM2einnNo



At home Fast as you can

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In your head.			
8 + <u>2</u> = 10	+ 7 = I0		
15 + = 20	43 + = 50		
5 + = 10	26 + = 30		

56 + <u>4</u> = 60	+ 7 = 20
+ 4 = 60	42 += 50
23 + 7 =	88 + = 90



Circle the calculations below that should be re-ordered to calculate more quickly? Explain why.



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8 + 83

82 + 9

Re-ordering: Starter 1

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Dear Parent/Guardian,

Your child will bring home mental maths tasks like this one to complete.

The tasks should take about 10 minutes. On the top of the page there is a QR code:

> Support Video https://youtu.be/FIIM2einnNo



Each QR code will take you to a video that you can watch with your child to help them with the task. The tasks should take about 10 minutes. If you see your child making a mistake, ask them to spot the mistake before helping them to find the correct answer.

We hope your child enjoys working on these tasks.

WARM-UP

 (\blacklozenge)

Linked calculations (e.g. 8 + 2 = 10; 18 + 2 = 20; 28 + 2 = 30)

The teacher writes an initial calculation on the board:



The teacher tells the class that we know 8 plus 2 equals 10 and asks for the answer to a linked calculation. Indicate individual learners who should answer.



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RE-ORDERING: Starter 2

At school

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Fast as you can



In your head.

8 + 2 = <u>10</u>	7 + 3 =
18 + 2 =	27 + 3 =
28 + 2 =	57 + 3 =

6 + 4 = <u>10</u>	12 + 8 =
36 + 4 =	42 + 8 =
76 + 4 =	4 + 76 =



Circle the calculations below that should be re-ordered to calculate more quickly? Explain why.

6 + 93	68 + 7	15 + 47
23 + 9	8 + 63	57 + 26

Re-order these and calculate



Support Video https://youtu.be/PdZN9ZWaoDQ



At home

4

Fast as you can



In your head.		
14 + 6 =		
24 + 6 =		
54 + 6 =		

67 + 3 = 70	3 + 67 =
77 + 3 =	3 + 77 =
97 + 3 =	3 + 97 =



Circle the calculations below that should be re-ordered to calculate more quickly? Explain why.

33 + 8	7 + 56	15 + 70
6 + 49	78 + 6	9 + 24

Re-order these and calculate

7 + 44 6 + 89



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Re-ordering: Starter 2

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WARM-UP

Round the room: Make friendly numbers

The teacher writes three linked number sentences on the board that make friendly numbers, e.g. 7 + 3 = 1017 + 3 = 2037 + 3 = 40

Going around the room, ask learners for other number sentences linked to this pattern that make friendly numbers. Record the responses on the board.



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RE-ORDERING: Starter 3

At school

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Fast as you can



In your head.

6 + 4 = <u>10</u>	23 + 7 =
56 + 4 =	53 + 7 =
86 + 4 =	83 + 7 =

Write linked number sentences.

8 + 2 = <u>10</u>	+ 9 = 10
18 + 2 =	41 +9 =
+2 =	+9 =



Find the friendly number combination and then calculate the answer.



Support Video https://youtu.be/SdnTj8PZX-o



At home Fast as you can



In your head.

8 + 2 = <u>10</u>	3 + 7 =
28 + 2 =	23 + 7 =
48 + 7 =	93 + 7 =

Write linked number sentences.

6 + 4 = <u>10</u>	5 + 5 = <u>10</u>
36 + 4 =	45 + 5 =
+4 =	+ 5 =



Find the friendly number combination and then calculate the answer.

24 + 18 + 6 43 + 27 + 13 1 + 25 + 29 *Re-ordering: Starter 3*

WARM-UP

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a. I say/you say: Make 30

The teacher says a number and asks learners to say the number that needs to be added to make 30.



b. I say/you say: Make 50

The teacher says a number and asks learners to say the number that needs to be added to make 50.



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RE-ORDERING: Starter 4

At school

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Fast as you can



Write the number to add to make 30.

27 <u>3</u>	16	22
12	8	15

Write the number to add to make 50.

36 <u>14</u>	47	42
12	8	15



Write a different friendly number in each number sentence.



24 + 49 + ____ 24 + 49 + ____

24 + 49 + ____ 24 + 49 + ____

Support Video https://youtu.be/F_1UiS4QAQ4



At home

Fast as you can



Write the number to add to make 20.

17 <u>3</u>	16	2
12	8	15

Write the number to add to make 40.

22 <u>18</u>	36	37
14	8	15



Write a different friendly number in each number sentence.



Re-ordering: Starter 4

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Nar Re —	ne: ordering: Worksheet 1		Mark: 20
Ι.	Circle two numbers that add up to 10: 8 6 2 7 5	11.	100 + 57 =
2.	Circle two numbers that add up to 10: 7 5 4 6 9	12.	2 × 6 =
3.	8 + = 10	13.	Circle two numbers that add up to 30: 9 16 21 7 12
4.	7 + 13 =	14.	Circle two numbers that add up to 30: I7 5 I3 8 I2
5.	Circle two numbers that add up to 100: 36 59 64 45 73	15.	60 × 2 =
6.	Circle two numbers that add up to 100: 45 87 37 55 62	16.	I20 + = I28
7.	20 = 8 +	17.	Circle two numbers that add up to 20:
8.	+ 6 = 20	18.	Circle two numbers that add up to 20: 15 12 8 4 11
9.	34 40	19.	87 87 + = 100
10.	26 + 12 =	20.	24 + 16 =

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Re-ordering: Worksheet 1

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Find a friendly number combination

The teacher writes on the board:



The teacher says any number, e.g. 13, and the learners must pick one of the numbers on the board that would make a friendly number when added to the number, e.g. 17 would make the friendly number 30 when added to 13.



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RE-ORDERING: Starter 5

At school

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Fast as you can



Give numbers to get to a multiple of 10.





Find the friendly number combinations and then calculate the total.

6 + 3 + 2 + 4 + 9 + 8

27 + 32 + 16 + 3 + 8

37 + 18 + 5 + 25 + 12 + 3

Support Video https://youtu.be/dz79xkmVQy8



At home Fast as you can



Give numbers to get to a multiple of 10.





Find the friendly number combinations and then calculate the total.

|4 + 3 + |7 + 26 + 2 + 8



35 + 12 + 18 + 15 + 8 + 7

28 + 19 + 7 + 23 + 11 + 2

Re-ordering: Starter 5

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Pop-Fizz: Multiply by 5

The teacher says 'pop' and the learners say 'fizz'; then the teacher says a number, and learners respond with that number multiplied by 5.



This game can be played to practice any multiplication table. The teacher just needs to specify what number the learners must multiply by at the start of the game.

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RE-ORDERING: Starter 6

At school

Fast as you can



2 × 5 = <u>10</u>	4 × 5 =
3 × 5 =	II × 5 =
9 × 5 =	l2 × 5 =
8 × 5 =	7 × 5 =
10 × 5 =	5 × 7 =



Write two multiplication calculations that can be done to calculate the number of dots in each picture below.



Support Video https://youtu.be/cCVo9O9ibaE



At home

4





3 × 5 = <u>15</u>	4 × 5 =
10 × 5 =	5 × 10 =
II × 5 =	5 × 7 =
8 × 5 =	6 × 5 =
l2 × 5 =	5 × 6 =



Write two multiplication calculations that can be done to calculate the number of dots in each picture below.



Re-ordering: Starter 6

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a. Pop-Fizz: Multiply by 10

The teacher says 'pop' and the learners say 'fizz'; then the teacher says a number, and learners respond with that number multiplied by 10.



This game can be played to practice any multiplication table. The teacher just needs to specify what number the learners must multiply by at the start of the game.

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RE-ORDERING: Starter 7

At school

Fast as you can



In your head.

$ 3 \times 0 = \underline{ 30 }$	9 × 10 =
8 × 10 =	16 × 10 =
5 × 10 =	12 × 10 =

In your head.

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$ 0 \times = \underline{ 0}$	10 × 5 =
I0 × 9 =	10 × 6 =
10 × 12 =	10 x 15 =



Use friendly number combinations to answer:

 $2 \times 6 \times 5 =$



 $5 \times 8 \times 2 =$

 $9 \times 2 \times 5 =$

Support Video https://youtu.be/ZMaAhLcdAQo



At home





In your head.

$ \times 0 = \underline{ 0 }$	8 × 10 =
7 × 10 =	6 × 10 =
15 × 10 =	2 × 10 =

In your head.

$10 \times 9 = \underline{90}$	10 × 4 =
10 × 8 =	10 × 7 =
10 × 12 =	10 × 13 =



Use friendly number combinations to answer:

 $2 \times 8 \times 5 =$



 $5 \times 9 \times 2 =$

$$7 \times 2 \times 5 =$$

Re-ordering: Starter 7

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Re-ordering: Worksheet 2

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WARM-UP

a. Pop-Fizz: Multiply by 5

The teacher says 'pop' and the learners say 'fizz'; then the teacher says a number, and learners respond with that number multiplied by 5.



b. Pop-Fizz: Multiply by 10

The teacher says 'pop' and the learners say 'fizz'; then the teacher says a number, and learners respond with that number multiplied by 10.



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RE-ORDERING: Starter 8

At school

Fast as you can



In your head.

$9 \times 10 = \underline{90}$	9 × 5 =
18 × 10 =	6 x 5 =
5 × 10 =	l2 × 5 =

In your head.

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$10 \times 12 = 120$	10 × 5 =
20 × 3 =	20 × 6 =
10 × 2 =	5 × 9 =



Use friendly number combinations with re-ordering to answer:

 $4 \times 3 \times 5$



5 x 7 x 4

Support Video https://youtu.be/Sh0e84cPf2U



At home

Fast as you can



In your head.		
$ 3 \times 0 = \underline{ 30 }$	8 × 10 =	
7 × 10 =	5 × 8 =	
9 × 10 =	12 × 10 =	

In your head.

$ 0 \times = \underline{ 0}$	10 × 13 =
5 × 9 =	20 × 7 =
20 × 8 =	10 × 15 =



Use friendly number combinations with re-ordering to answer:

4 × 8 × 5 5 × 9 × 4 7 × 4 × 5 *Re-ordering: Starter 8* This page is left intentionally blank.

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RE-ORDERING: Post-Test, Part 1

Name:

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2 minutes for this page

I.	Circle two numbers that add up to IO. 7 4 2 3 9	II.	100 + 32 =
2.	Circle two numbers that add up to IO. 5 4 6 8	12.	2 × 5 =
3.	7 + = 10	13.	Circle two numbers that add up to 20. 8 4 2 3 9
4.	9 + II =	14.	Circle two numbers that add up to 20. 15 4 16 8
5.	Circle two numbers that add up to 100. 24 50 30 38 70	15.	50 × 2 =
6.	Circle two numbers that add up to 100. 51 17 29 49 60	16.	140 + = 149
7.	20 = 8 +	17.	Circle two numbers that add up to 30. 18 14 12 7 19
8.	+ 3 = 20	18.	Circle two numbers that add up to 30. 10 14 9 16 13
q.	21	19.	69 69 + = 100
10.	56 + 30 =	20	22 + 18 =

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Mark: 20

MSAP Learners Booklet October.indd 121

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RE-ORDERING: Post-Test, Part 2

3 minutes for this page





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LINKING ADDITION & SUBTRACTION: Pre-Test, Part 1

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LINKING ADDITION & SUBTRACTION: Pre-Test, Part 2

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WARM-UP

Quick addition: 1-digit numbers and 2-digit numbers

Choose a 2-digit number and ask learners to add different 1-digit numbers to it.





Note: Learners may count up and down quickly if adding or subtracting 2, 3, or 4, but should be encouraged to use the bridging through ten strategy for adding and subtracting 5, 6, 7, 8, and 9 using the mental image of a number line.

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At school

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Fast as you can



Add in your head.

29 + 4 = <u>33</u>	29 + 5 =
29 + 2 =	29 + 7 =
29 + 6 =	29 + 3 =

37 + 5 = <u>42</u>	37 + 6 =
37 + 9 =	37 + 3 =
37 + 4 =	37 + 7 =







Support Video https://youtu.be/nha592FZEAc



At home Fast as you can



56 + 4 =

Add in your head. 45 + 4 = 4945 + 7 = 45 + 8 = 45 + 3 = ____ 45 + 2 = ____ 45 + 6 = ____ 56 + 5 = 6156 + 7 = 56 + I = ____

56 + 7 = ____ 56 + 8 = ____







Linking Addition & Subtraction: Starter 1

Dear Parent/Guardian,

Your child will bring home mental maths tasks like this one to complete.

The tasks should take about 10 minutes. On the top of the page there is a QR code:

> Support Video https://youtu.be/nha592FZEAc



Each QR code will take you to a video that you can watch with your child to help them with the task. The tasks should take about 10 minutes. If you see your child making a mistake, ask them to spot the mistake before helping them to find the correct answer.

We hope your child enjoys working on these tasks.

WARM-UP

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Quick subtraction: 1-digit numbers from 2-digit numbers

Choose a 2-digit number and ask learners to subtract different 1-digit numbers from it.



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At school

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Fast as you can



Subtract in your head.

7I - I = 70	71 – 5 =
71 – 3 =	71 – 7 =
71-6 =	71-4 =

42 - 2 = 40	42 - 6 =
42 - 4 =	42 - 9 =
42-7 =	42 - 5 =





+ calculations	- calculations
7 + =	l6 – =
+ =	7 =
l6 = +	= 7
= +	= -

Support Video https://youtu.be/fKPfCfF0w11



At home





Subtract in your head.

23 - 3 = 20	23 - 6 =
23 – 5 =	23-4 =
23 – 7 =	23 - 8 =

67 – 7 = <u>60</u>	67 – 4 =
67-3 =	67 - 8 =
67 – 9 =	67 - 6 =





Linking Addition & Subtraction: Starter 2



At school

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Add in your head

Fast as you can

Add in your nead.	
36 + 4 = <u>40</u>	36 + 5 =
36 + 3 =	36 + 8 =
36 + 6 =	36 + 7 =

Subtract in your head.

42 - 2 = 40	42 - 6 =
42 - 4 =	42 - 9 =
42 – 7 =	42 - 5 =



Fill the numbers from ||+|=|2 and 5+5=|0| into the correct bars.

5 + 5 = 10



	+ = 2	5 + 5 = I0
	+ =	+ =
	+ =	+ =
+	= +	= +
	= +	= +
	=	=
	=	=
-	=	=
	=	=

Support Video https://youtu.be/r02iTWJMfP0



At home

Fast as you can



Add in vour head

, tala ini year mealar	
48 + 2 = <u>50</u>	48 + 4 =
48 + 5 =	48 + 3 =
48 + 7 =	48 + 8 =

Subtract in your head.

34 - 4 = 30	34 - 6 =
34 - 3 =	34 – 5 =
34 – 7 =	34 - 8 =



Fill the numbers from 3 + 4 = 7 and 9 = 2+ 7 into the correct bars.





Linking Addition & Subtraction: Starter 3

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Draw a bar diagram for any combination of 3 numbers in the range of 1-20. Two examples are given below. Draw the bar diagrams to be visually proportional to the numbers.



Now ask learners to give you different addition and subtraction number sentences that work for the bar diagram. As learners suggest the possible number sentences, point to the numbers on the bar diagram.

Make sure that learners suggest both addition and subtraction number sentences:



Encourage learners to also suggest number sentences where the 'answer' comes first, e.g.



Note: There are always 8 possible number sentences like the 8 above that work for each bar diagram. Learners do not have to suggest all 8 possible number sentences, but it is good to encourage them to suggest a variety of these.

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At school

Fast as you can





+ calculations	- calculations
+ = I0	10 =
+ = I0	10 =
10 = +	7 =
10 = +	3 =





From I7 to 2I, we're short by ____

17 + ____ = 21

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From 25 to 31, we're short by ____

25 + ____ = 31

Support Video https://youtu.be/KPsfH209EEM



At home

Fast as you can





+ calculations	– calculations
+ = I3	3 – =
+=	= =
I3 = +	4 =
=+	=



Linking Addition & Subtraction: Starter 4

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Name:



Linking Addition & Subtraction: Worksheet 1

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Draw a bar diagram for any combination of 3 numbers in the range of 1-20. Two examples are given below. Draw the bar diagrams to be visually proportional to the numbers.



Now ask learners to give you different addition and subtraction number sentences that work for the bar diagram. As learners suggest the possible number sentences, point to the numbers on the bar diagram.

Make sure that learners suggest both addition and subtraction number sentences:



Encourage learners to also suggest number sentences where the 'answer' comes first, e.g.



Note: There are always 8 possible number sentences like the 8 above that work for each bar diagram. Learners do not have to suggest all 8 possible number sentences, but it is good to encourage them to suggest a variety of these.

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At school

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Fast as you can



Match number sentences and bar diagrams.





Fill in the missing numbers into the bar diagram and complete the calculations below.



Support Video https://youtu.be/bkmaf0ArzuY



At home Fast as you can

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Complete the bar diagram for each number sentence.





Fill in the missing numbers into the bar diagram and complete the calculations below.



Linking Addition & Subtraction: Starter 5

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Draw a bar diagram for any combination of 3 numbers in the range of 1-20. Two examples are given below. Draw the bar diagrams to be visually proportional to the numbers.



Now ask learners to give you different addition and subtraction number sentences that work for the bar diagram. As learners suggest the possible number sentences, point to the numbers on the bar diagram.

Make sure that learners suggest both addition and subtraction number sentences:



Encourage learners to also suggest number sentences where the 'answer' comes first, e.g.



Note: There are always 8 possible number sentences like the 8 above that work for each bar diagram. Learners do not have to suggest all 8 possible number sentences, but it is good to encourage them to suggest a variety of these.

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At school

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Fast as you can



Match number sentences and bar diagrams.





Complete the bar diagram to find the missing number.



Support Video https://youtu.be/OnF8U7aBPOc



At home Fast as you can

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Complete the bar diagram for each number sentence .





Complete the bar diagram to find the missing number.



Linking Addition & Subtraction: Starter 6

a. Quick addition: 1-digit numbers and 2-digit numbers

Use some large numbers that will give answers just over 100 and 200, e.g.



b. Quick subtraction: 1-digit numbers from 2-digit numbers

Use some large numbers that will give answers just over 100 and 200, e.g.



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At school

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Fast as you can



Add in your head.

99 + 2 = <u>101</u>	99 + 4 =
98 + 5 =	196 + 5 =
197 + 4 =	199 + 3 =

Subtract in your head.

$ 0 - 2 = \underline{qq}$	103 - 4 =
102 - 3 =	203 - 4 =
201 – 3 =	202 – 5 =



Complete the bar diagram to find the missing number.



Support Video https://youtu.be/vIFAjz8cKMQ



At home

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Fast as you can



97 + 5 = 102	98 + 4 =
99 + 3 =	195 + 6 =
199 + 4 =	198 + 3 =

Subtract in your head.

102 - 4 = <u>98</u>	101 – 5 =
103 - 6 =	202 – 3 =
201 – 5 =	203 - 4 =



Complete the bar diagram to find the missing number.





Linking Addition & Subtraction: Starter 7

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Linking Addition & Subtraction: Worksheet 2

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a. Quick addition: 1-digit numbers and 2-digit numbers

Use some large numbers that will give answers just over 100 and 200, e.g.



b. Quick subtraction: 1-digit numbers from 2-digit numbers

Use some large numbers that will give answers just over 100 and 200, e.g.



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At school

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Fast as you can



Add in your head.

87 + 4 = <u>9</u>	66 + 5 =
48 + 3 =	135 + 6 =
127 + 5 =	189 + 7 =

Subtract in your head.

43 - 4 = 39	62 – 5 =
84 - 6 =	143 – 7 =
122 - 3 =	201 - 8 =



Write a calculation you can use to work out the missing number.

4 + = 105	+ 5 = 69
29 = 2	41 - 36 =

Support Video https://youtu.be/nYoOex4bibl



At home Fast as you can



Add in your head.

46 + 5 = <u>51</u>	37 + 8 =
93 + 9 =	146 + 7 =
158 + 4 =	109 + 6 =

Subtract in your head.

8I - 4 = 77	43 – 7 =
62 - 5 =	ll2 – 8 =
104 - 6 =	221 – 9 =



Write a calculation you can use to work out the missing number.



Linking Addition & Subtraction: Starter 8

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LINKING ADDITION & SUBTRACTION: Post-Test, Part 1

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LINKING ADDITION & SUBTRACTION: Post-Test, Part 2

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Mental Starters Grade 3: Learner's Workbook

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