# Year 3: Week 1, Day 3 <br> Adding mentally - in our heads! 

Each day covers one maths topic. It should take you about 1 hour or just a little more.

1. Start by reading through the Learning Reminders. They come from our PowerPoint slides.

2. Tackle the questions on the Practice Sheet. There might be a choice of either Mild (easier) or Hot (harder)!
Check the answers.

3. Finding it tricky? That's OK... have a go with a grown-up at A Bit Stuck?

4. Have I mastered the topic? A few questions to Check your understanding. Fold the page to hide the answers!

## Learning Reminders

Adding three 2-digit numbers using different strategies.


## Learning Reminders

Adding three 2-digit numbers using different strategies.


## Learning Reminders

Adding three 2-digit numbers using different strategies.


## Practice Sheet Mild <br> Addition and subtraction practice

You have $£ 1$ pocket money to spend. Which two stickers can you buy? Find as many pairs as you can.


## Practice Sheet Hot <br> Addition and subtraction practice

1. $36+23=$
2. $54+24=$
3. $67+21=$
4. $65+25=$
5. $36+47+54=$
6. $42+28+38=$
7. $53+27+41=$
8. $52+62+38=$
9. $42+37+48=$
10. $55+32+25=$
11. Ellie bought a skateboard for $£ 45$, a helmet for $£ 24$ and knee pads for $£ 19$.
How much did she spend altogether?
12. Daniel bought roller skates for $£ 56$, a helmet for $£ 24$ and arm pads for $£ 21$.
How much did he spend altogether?
13. $146+58+47=$
14. $241+27+18=$
15. $135+28+36=$
16. $127+54+31=$

## Challenge

Can you find three two-digit numbers that add up to a total of 200?

## Practice Sheet Answers

Addition and subtraction practice (Mild)
Possible combinations:

$$
\begin{gathered}
73 p+27 p=£ 1 \\
73 p+23 p=96 p \\
70 p+27 p=97 p \\
70 p+23 p=93 p \\
59 p+41 p=£ 1 \\
59 p+27 p=86 p \\
59 p+23 p=82 p \\
41 p+27 p=68 p \\
41 p+23 p=64 p \\
27 p+23 p=50 p
\end{gathered}
$$

Addition and subtraction practice (Hot)

1. $36+23=59$
2. $54+24=78$
3. $67+21=88$
4. $65+25=90$
5. $36+47+54=137$
6. $42+28+38=108$
7. $53+27+41=121$
8. $52+62+38=152$
9. $42+37+48=127$
10. $55+32+25=112$
11. $£ 45+£ 24+£ 19=£ 88$
12. $£ 56+£ 24+£ 21=£ 101$
13. $146+58+47=251$
14. $241+27+18=286$
15. $135+28+36=199$
16. $127+54+31=212$

## A Bit Stuck? Do the splits

## Work in pairs

Things you will need:

- A set of 10 s and 1 s place value cards
- A pencil



## What to do:

- Shuffle the 10 to 50 cards and place face down in a pile. Shuffle the 1 to 5 cards and place face down.
- Take the top card from each pile and put them together to make a 2-digit number.
- Take the next card from each pile to make another 2-digit number.
- One person collects the 10 s.

The other person collects the 1 s .
How much do you have each?
Now add your totals.

- Record the addition.
- How many split sums can you do before the time is up?

| $\bigcirc$ |  |
| :---: | :---: |
| $\bigcirc$ |  |
| $\bigcirc$ | $53+24$ |
| $\bigcirc$ | $=50+20+3+4$ |
| $\bigcirc$ | $=70+7$ |
| $\bigcirc$ | $=77$ |
| $\bigcirc$ |  |
| $\bigcirc$ |  |
| $\bigcirc$ |  |
| $\bigcirc$ |  |
| $\bigcirc$ |  |
| $\bigcirc$ |  |

## S-t-r-e-t-c-h:

Include the 6 to 9 cards so that sometimes the 1 s will come to more than 10.

## Learning outcomes:

- I can add pairs of 2-digit numbers using partitioning (1s < 10, 10s < 100)
- I am beginning to add pairs of 2-digit numbers where the 1 s come to more than 10.


 A -----.-.....-


## Check your understanding:

## Questions

Use a different strategy for each of these additions:
(a) $45+29$
(b) $45+34$
(c) $65+35$
(d) $78+28$

Explain why you chose a particular strategy for (a) and (c)

Complete the bar model diagrams:

| ? |  |
| :---: | :---: |
| 36 | 37 |


| ? |  |
| :---: | :---: |
| 57 | 39 |


|  | $?$ |
| :--- | :---: |
| 48 | 24 |

Fold here to hide answers:

## Check your understanding: <br> Answers

Use a different strategy for each of these additions:
(a) $45+29=74$
Add 30 and subtract 1
(b) $45+34=79$
Add 30 then 4 or add $40+30$, then $5+4$, then $70+9$
(c) $65+35=100$
Numbers which add to 10 or 100
(d) $78+28=106$
Easiest to do as $70+20$, then $8+8$, then $90+16$

Explain why you chose a particular strategy for (a) and (c)
Children may use other strategies but are they the most efficient? Encourage ways of doing each one to avoid making errors.

Complete the bar model diagrams:

| 73 |  |
| :---: | :---: |
| 36 | 37 |


| 96 |  |
| :---: | :---: |
| 57 | 39 |


| 72 |  |
| :---: | :---: |
| 48 | 24 |

© Hamilton Trust

