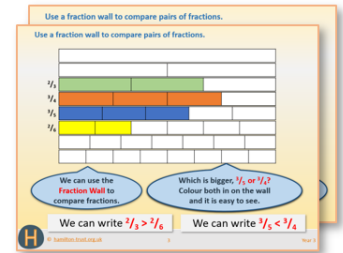


Week 7, Day 2

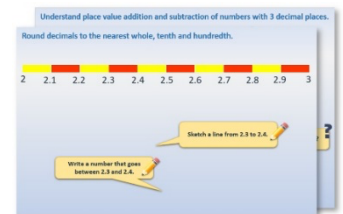
Add 2-digit numbers using partitioning

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

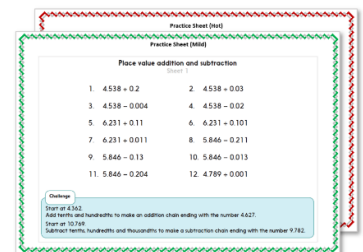
1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



OR start by carefully reading through the **Learning Reminders**.



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

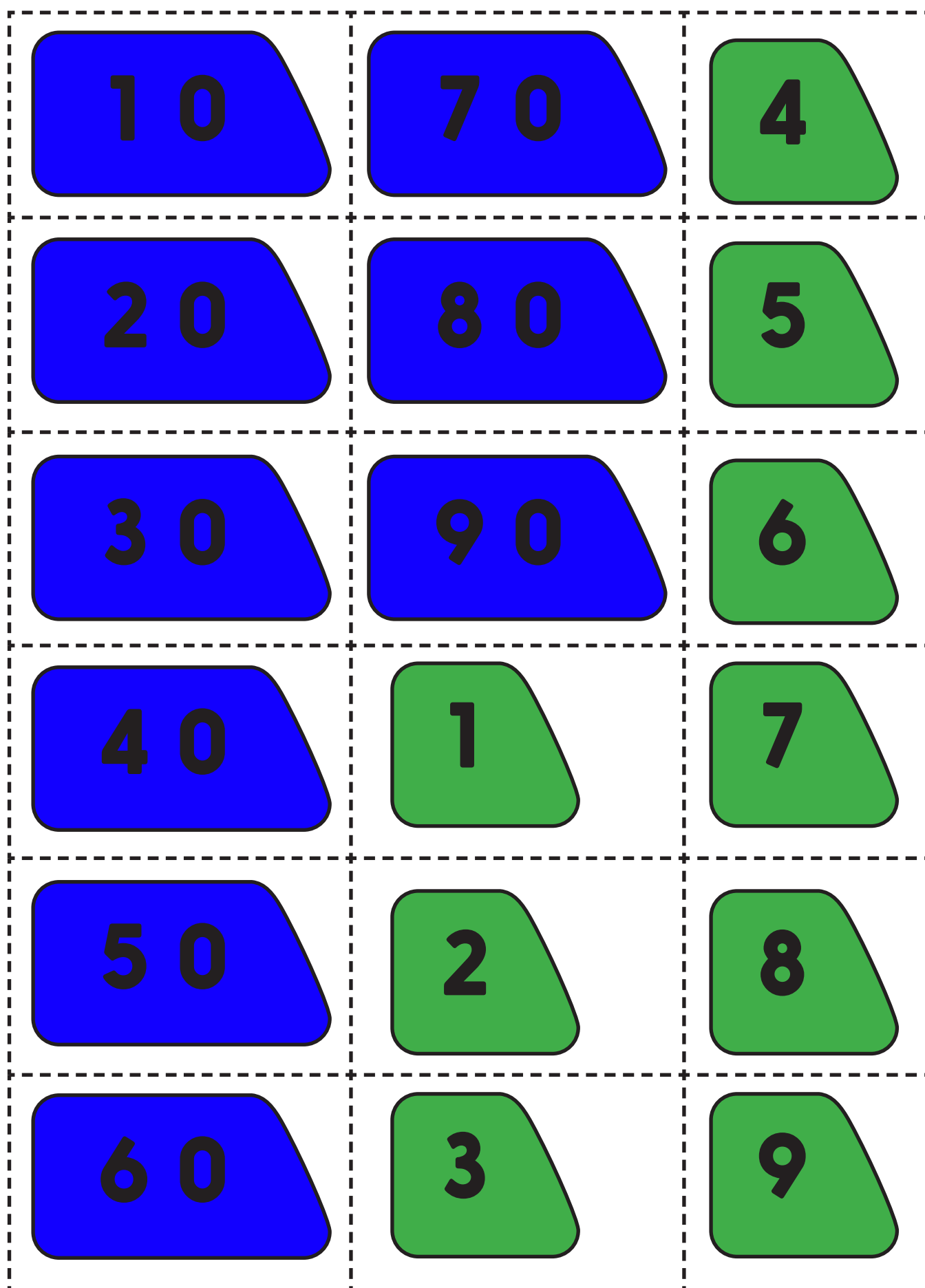


3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Think you've cracked it? Whizzed through the Practice Sheets?
Have a go at the **Investigation**...

Cut out these cards to use during this lesson.



Learning Reminders

Add pairs of 2-digit numbers by partitioning.

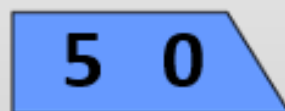
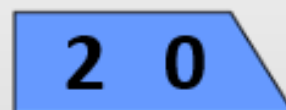
When we learnt to double numbers like 34, we used **partitioning**. Could we use this method to add 34 and 23?

Make 34 and 23 with **place value cards**.

Partition each number.
Re-order the numbers.
Can you see how?

Add the 10s then the 1s.

Re-combine the numbers.



$$34 + 23 = 57$$

We can record that as:
 $34 + 23 = 30 + 20 + 4 + 3$
 $= 50 + 7$
 $= 57$

Learning Reminders

Add pairs of 2-digit numbers by partitioning.

Let's try $46 + 25$.

What shall we do first?

4

6

2

5

What shall we do next?

4

0

2

0

6

5

What shall we do next?

7

0

1

1

Add the 60 and 10, then the 1.

$$46 + 25 = 71$$

We can record that as:

$$\begin{aligned} 46 + 25 &= 40 + 20 + 6 + 5 \\ &= 60 + 11 \\ &= 70 + 1 \\ &= 71 \end{aligned}$$

Practice Sheet Mild

Adding 2-digit numbers

Add each pair of two 2-digit numbers using partitioning. Record your jottings.

1. $53 + 25$

2. $36 + 32$

3. $72 + 17$

4. $41 + 34$

5. $67 + 22$

6. $54 + 43$

7. $46 + 25$

8. $68 + 34$

Challenge

Write a pair of 2-digit numbers with a total of 90. All four digits must be different!

Practice Sheet Hot

Adding 2-digit numbers

Add each pair of two 2-digit numbers using partitioning. Record your jottings.

1. $44 + 25$

2. $56 + 34$

3. $34 + 28$

4. $44 + 28$

5. $68 + 27$

6. $59 + 35$

7. $82 + 43$

8. $75 + 42$

Challenge

Write a pair of 2-digit numbers with a total of 100. All four digits must be different!

Practice Sheets Answers

Adding 2-digit numbers (mild)

1. $53 + 25 = 78$
2. $36 + 32 = 68$
3. $72 + 17 = 89$
4. $41 + 34 = 75$
5. $67 + 22 = 89$
6. $54 + 43 = 97$
7. $46 + 25 = 71$
8. $68 + 34 = 102$

Challenge

Write a pair of 2-digit numbers with a total of 90. All four digits must be different! e.g. $76 + 14$

Adding 2-digit numbers (hot)

1. $44 + 25 = 69$
2. $56 + 34 = 90$
3. $34 + 28 = 62$
4. $44 + 28 = 72$
5. $68 + 27 = 95$
6. $59 + 35 = 94$
7. $82 + 43 = 125$
8. $75 + 42 = 117$

Challenge

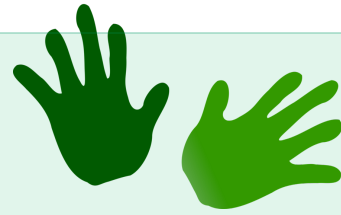
Write a pair of 2-digit numbers with a total of 100. All four digits must be different! e.g. $74 + 26$

A Bit Stuck? Do the splits

Work in pairs

Things you will need:

- A set of 10s and 1s 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 10s. The other person collects the 1s. 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?

$53 + 24$
$= 50 + 20 + 3 + 4$
$= 70 + 7$
$= 77$

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

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

