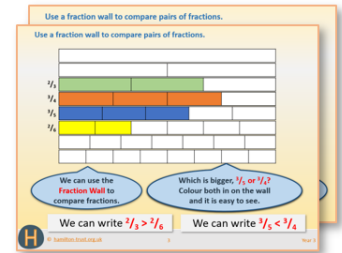


# Week 7, Day 2

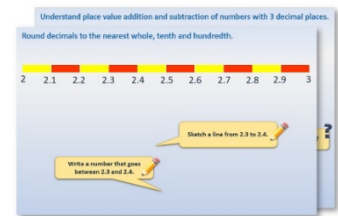
## Add 2-digit numbers using partitioning

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

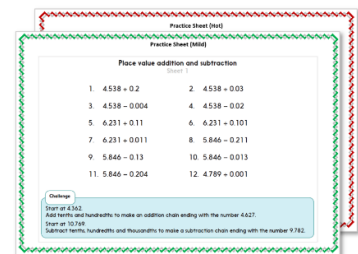
1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



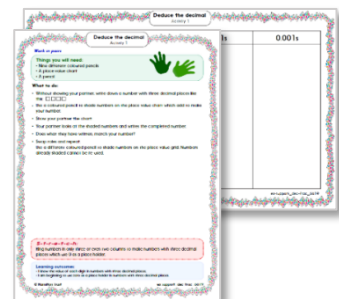
OR start by carefully reading through the **Learning Reminders**.



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

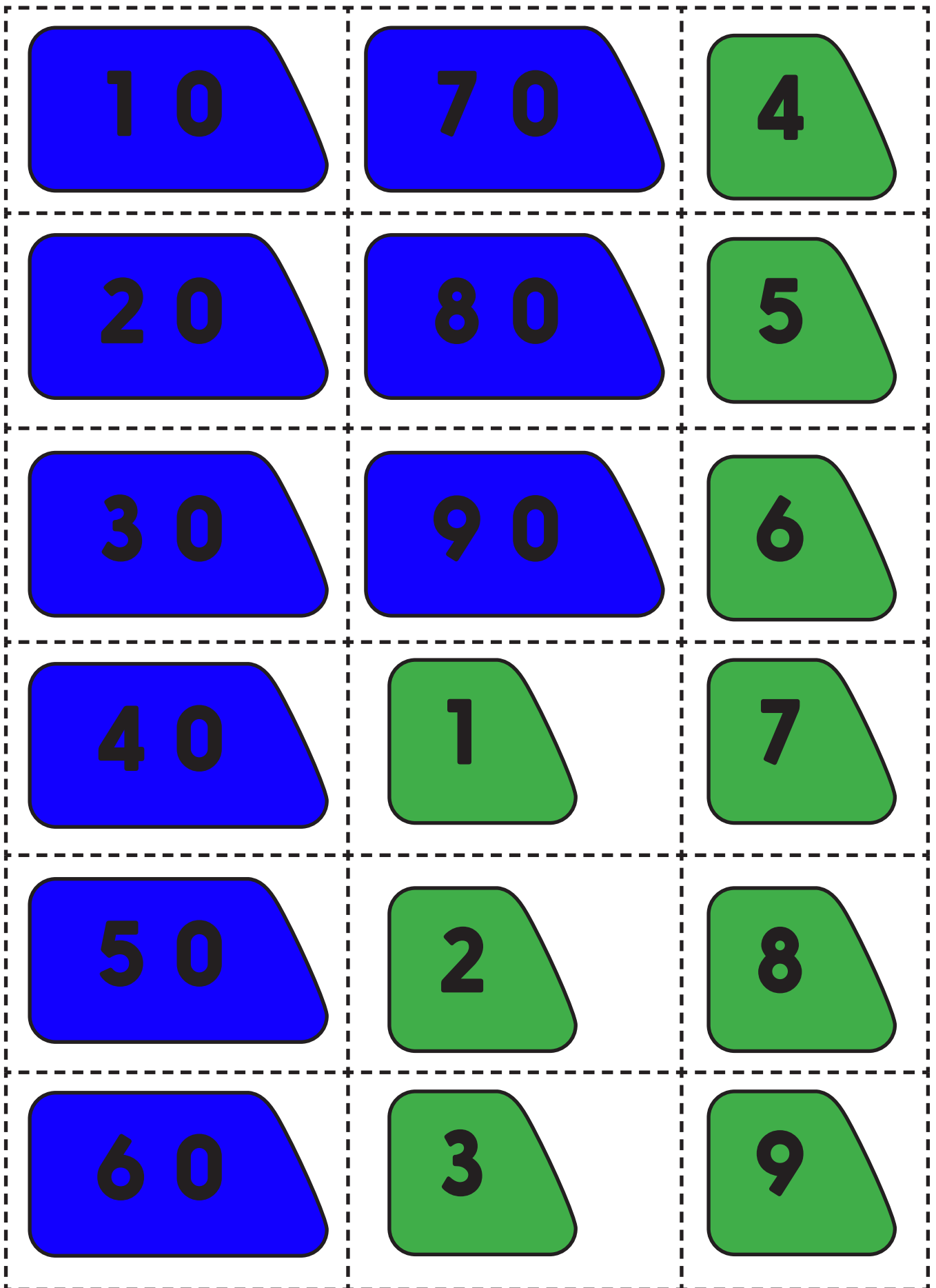


3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



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:

$$\begin{aligned} 34 + 23 &= 30 + 20 + 4 + 3 \\ &= 50 + 7 \\ &= 57 \end{aligned}$$

## Learning Reminders

Add pairs of 2-digit numbers by partitioning.

Let's try  $46 + 25$ .

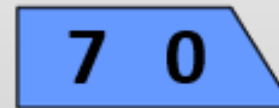
What shall we do first?



What shall we do next?



What shall we do next?



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

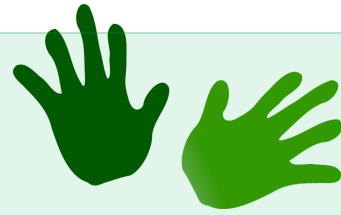
Write a pair of 2-digit numbers with a total of 100. All four digits must be different! e.g.  $74 + 26$

## 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.



