

# Year 1 and Year 2 Place Value, Addition and Subtraction Unit 1 (12814)

## Additional teacher instructions for practice sheets

These notes indicate which practice sheets are most appropriate for which groups.

### Day 1 Y1 Spider and fly sums Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Children use a counter on a 1-100 grid to help (see resources).

### Day 1 Y2 Adding 12 Sheet 2

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE use a counter on a 1-100 grid to help (see resources).

### Day 2 Y1 Spider and fly subtractions Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Children use a counter on a 1-100 grid to help (see resources).

### Day 2 Y2 2-digit numbers Sheet 2

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE use digit cards to help.

### Day 3 Y1 Compare and order 2-digit numbers Sheet 1

Working towards ARE / Working at ARE / Greater Depth

### Day 3 Y2 Mystery numbers on a number line Sheet 2

Working towards ARE / Working at ARE

### Day 3 Y2 Mystery numbers on a number line Sheet 3

Greater Depth

# Spider and fly sums

## Sheet 1

1. Write the answers.
2. Tick to show which digit changes.

|      | Sum  | 10s | 1s |
|------|--|-----|----|
| e.g. | $36 + 10 =$ <input style="width: 40px; text-align: center;" type="text" value="46"/> | ✓   |    |
|      | $36 + 1 =$ <input style="width: 40px;" type="text"/>                                 |     |    |
|      | $42 + 1 =$ <input style="width: 40px;" type="text"/>                                 |     |    |
|      | $54 + 10 =$ <input style="width: 40px;" type="text"/>                                |     |    |
|      | $63 + 10 =$ <input style="width: 40px;" type="text"/>                                |     |    |
|      | $28 + 1 =$ <input style="width: 40px;" type="text"/>                                 |     |    |
|      | $36 + 11 =$ <input style="width: 40px;" type="text"/>                                |     |    |
|      | $25 + 11 =$ <input style="width: 40px;" type="text"/>                                |     |    |
|      | $72 + 11 =$ <input style="width: 40px;" type="text"/>                                |     |    |
|      | $87 + 11 =$ <input style="width: 40px;" type="text"/>                                |     |    |

### Challenge

Who's been busy in these sums: Spider or Fly, or both?! Be a detective to fill in the missing numbers...

$29 + \square = 30$    
  $47 + \square = 57$    
  $70 = 59 + \square$    
  $50 = \square + 49$    
  $\square + 89 = 100$

# Adding 12

## Sheet 2

1.  $36 + 12 =$

2.  $83 + 12 =$

3.  $75 + 12 =$

4.  $47 + 12 =$

5.  $58 + 12 =$

6.  $29 + 12 =$

7.   $+ 12 = 62$

8.   $+ 12 = 74$

9.   $+ 12 = 99$

10.   $+ 12 = 67$

### Challenge

Dana started with a number on the top row of the 1-100 grid and kept adding 12 until she got to 39.

What number did she start on?

# Spider and fly subtractions

## Sheet 1

1. Write the answers.
2. Tick to show which digit changes.

|      | Sum  | 10s | 1s |
|------|--|-----|----|
| e.g. | $63 - 1 = $ <input style="width: 40px; text-align: center;" type="text" value="62"/> |     | ✓  |
|      | $63 - 10 = $ <input style="width: 40px;" type="text"/>                               |     |    |
|      | $32 - 10 = $ <input style="width: 40px;" type="text"/>                               |     |    |
|      | $46 - 1 = $ <input style="width: 40px;" type="text"/>                                |     |    |
|      | $94 - 1 = $ <input style="width: 40px;" type="text"/>                                |     |    |
|      | $87 - 10 = $ <input style="width: 40px;" type="text"/>                               |     |    |
|      | $63 - 11 = $ <input style="width: 40px;" type="text"/>                               |     |    |
|      | $57 - 11 = $ <input style="width: 40px;" type="text"/>                               |     |    |
|      | $39 - 11 = $ <input style="width: 40px;" type="text"/>                               |     |    |
|      | $41 - 11 = $ <input style="width: 40px;" type="text"/>                               |     |    |

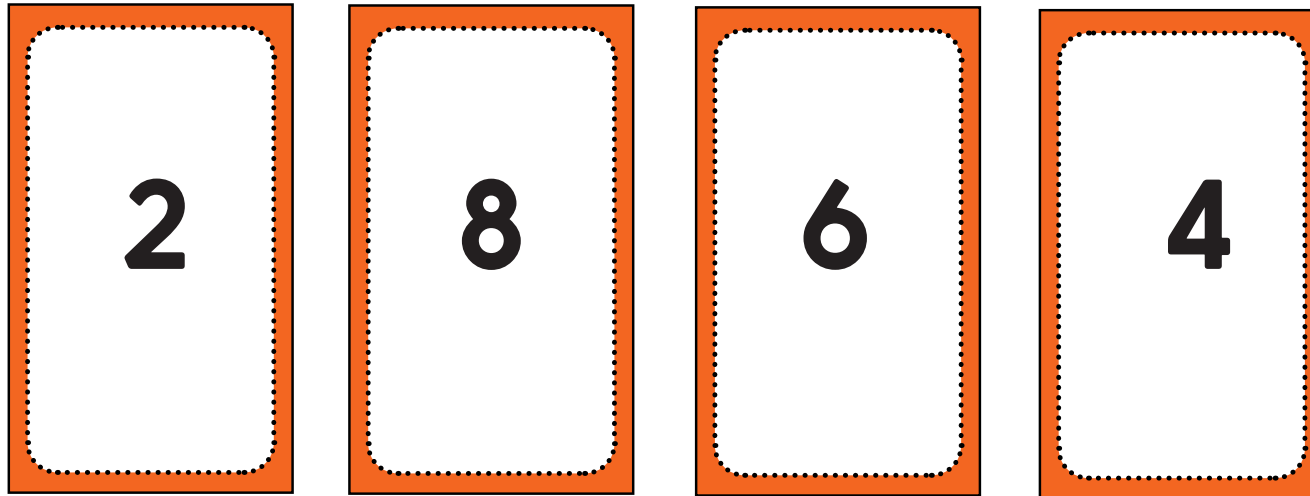
### Challenge

Who's been busy in these subtractions: Spider or Fly, or both?! Be a detective to fill in the missing numbers...

$43 -$    $= 33$     
  $62 -$    $= 61$     
  $91 -$    $= 80$     
  $75 =$    $- 11$     
  $77 =$    $- 1$

## 2-digit numbers

### Sheet 2



What is the smallest 2-digit number you can make using two of these cards?

What is the biggest number you can make using two of these cards?

How many numbers can you make with the digit 2 in the 10s place?

#### Challenge

With a partner, how many numbers can you make using these digits?  
Each card can only be used once in a number, so 24 is allowed but 22 is not.  
Write all your numbers in order, smallest first.

# Compare and order 2-digit numbers

## Sheet 1

Ring the biggest number in each pair.

1. 36 71
2. 28 24
3. 29 43
4. 74 47
5. 54 45

Write each trio of numbers in order, smallest first.

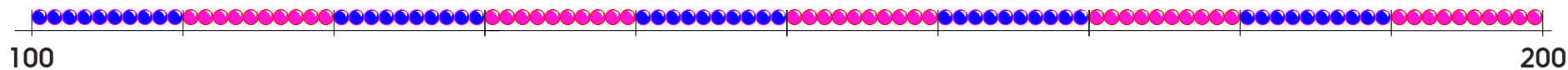
6. 25, 67, 41
7. 99, 34, 62
8. 19, 91, 46
9. 77, 36, 17
10. 38, 57, 14

### Challenge

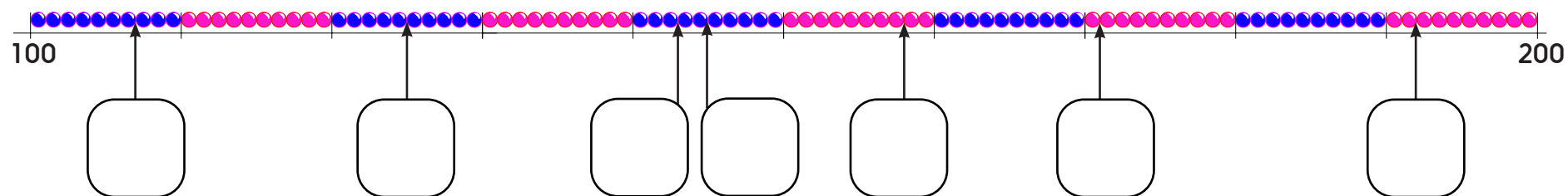
1. What is the smallest number in any of the ten questions?  
And the biggest?
2. Ollie has ringed the biggest number in each pair. Do you agree with him?  
71 17, 24 42, 65 56

# Mystery numbers on a number line

## Sheet 2



1. Which numbers are the arrows pointing to? Writing the tens numbers might be helpful.

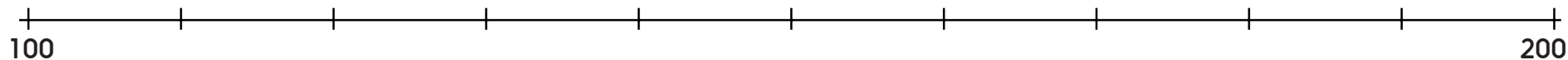


2. Mark these numbers on the line:

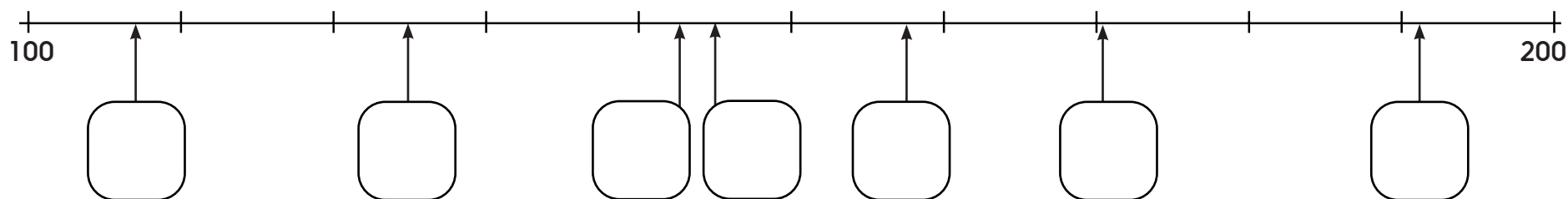
119, 178, 199, 154, 133, 167, 146, 181

# Mystery numbers on a number line

## Sheet 3



1. Which numbers are the arrows pointing to?



2. Mark these numbers on the line:

119, 178, 199, 154, 133, 167, 146, 181

### Challenge

Tell me how you decided where to place one of the numbers in question 2.



# Place Value, Addition and Subtraction

## Answers

### Day 1 Y1 Spider and fly sums Sheet 1

| Sum            | 10s | 1s |
|----------------|-----|----|
| $36 + 10 = 46$ | ✓   |    |
| $36 + 1 = 37$  |     | ✓  |
| $42 + 1 = 43$  |     | ✓  |
| $54 + 10 = 64$ | ✓   |    |
| $63 + 10 = 73$ | ✓   |    |
| $28 + 1 = 29$  |     | ✓  |
| $36 + 11 = 47$ | ✓   | ✓  |
| $25 + 11 = 36$ | ✓   | ✓  |
| $72 + 11 = 83$ | ✓   | ✓  |
| $87 + 11 = 78$ | ✓   | ✓  |

### Challenge

$$\begin{aligned}29 + 1 &= 30 \\47 + 10 &= 57 \\70 &= 59 + 11 \\50 &= 1 + 49 \\11 + 89 &= 100\end{aligned}$$

### Day 1 Y2 Adding 12 Sheet 2

- $36 + 12 = 48$
- $83 + 12 = 95$
- $75 + 12 = 87$
- $47 + 12 = 59$
- $58 + 12 = 70$
- $29 + 12 = 41$
- $50 + 12 = 62$
- $62 + 12 = 74$
- $87 + 12 = 99$
- $55 + 12 = 67$

### Challenge

Dana started with a number on the top row of the 1-100 grid and kept adding 12 until she got to 39. What number did she start on? **3**

### Day 2 Y1 Spider and fly subtractions Sheet 1

| Sum            | 10s | 1s |
|----------------|-----|----|
| $63 - 1 = 62$  |     | ✓  |
| $63 - 10 = 53$ | ✓   |    |
| $32 - 10 = 22$ | ✓   |    |
| $46 - 1 = 45$  |     | ✓  |
| $94 - 1 = 93$  |     | ✓  |
| $87 - 10 = 77$ | ✓   |    |
| $63 - 11 = 52$ | ✓   | ✓  |
| $57 - 11 = 46$ | ✓   | ✓  |
| $39 - 11 = 28$ | ✓   | ✓  |
| $41 - 11 = 30$ | ✓   | ✓  |

### Challenge

$$\begin{aligned}43 - 10 &= 33 \\62 - 1 &= 61 \\91 - 11 &= 80 \\75 &= 86 - 11 \\77 &= 78 - 1\end{aligned}$$

# Place Value, Addition and Subtraction

## Answers

### Day 2 Y2 2-digit numbers Sheet 2

Smallest number is **24**.

Biggest number is **86**.

How many numbers with the digit 2 in 10s place? **3 numbers 24, 26, 28.**

#### Challenge

It is possible to make 12 numbers using the number cards.

**24, 26, 28, 42, 46, 48, 62, 64, 68, 82, 84, 86**

### Day 3 Y1 Compare and order 2-digit numbers Sheet 1

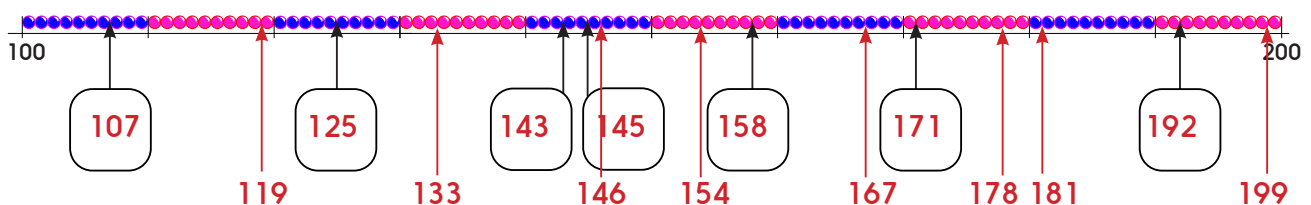
1. 36 **71**
2. **28** 24
3. 29 **43**
4. **74** 47
5. **54** 45

- |     |            |            |
|-----|------------|------------|
| 6.  | 25, 67, 41 | 25, 41, 67 |
| 7.  | 99, 34, 62 | 34, 62, 99 |
| 8.  | 19, 91, 46 | 19, 46, 91 |
| 9.  | 77, 36, 17 | 17, 36, 77 |
| 10. | 38, 57, 14 | 14, 38, 57 |

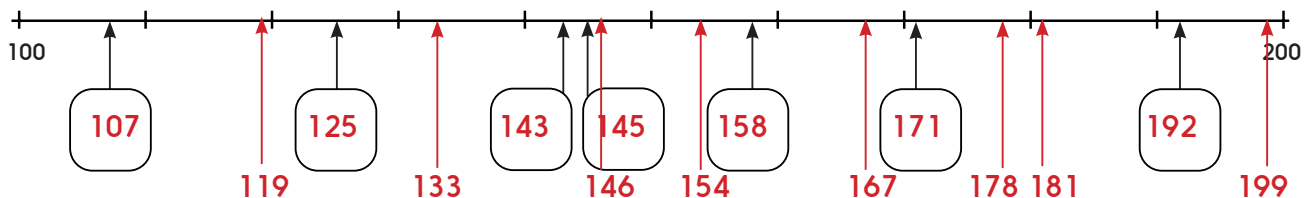
#### Challenge

1. **14** is the smallest number.  
**99** is the biggest number.
2. **No, we don't agree with Ollie - he has ringed the smaller number in each pair. If he made each number with number shapes (e.g. Numicon) he would 'see' the different amounts of 10s and 1s in each number. This would help him compare them.**

### Day 3 Y2 Mystery numbers on a number line Sheet 2



### Day 3 Y2 Mystery numbers on a number line Sheet 3



#### Challenge

Listen to the vocabulary the children use. Are they using the language of place value and comparison, e.g. tens, ones, hundred, more than, less than, half way...?