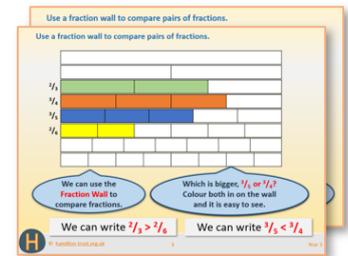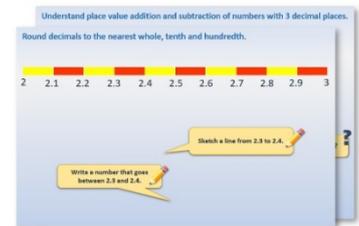# Week 10, Day 1
Subtract 3-digit numbers (counting up)

Each day covers one maths topic. It should take you about 1 hour or just a little more.
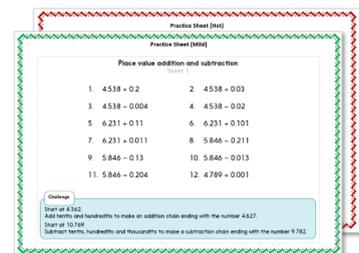
1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.

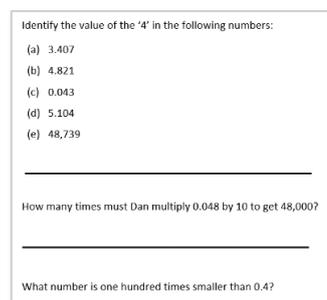   OR start by carefully reading through the **Learning Reminders**.

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

Learning Reminders

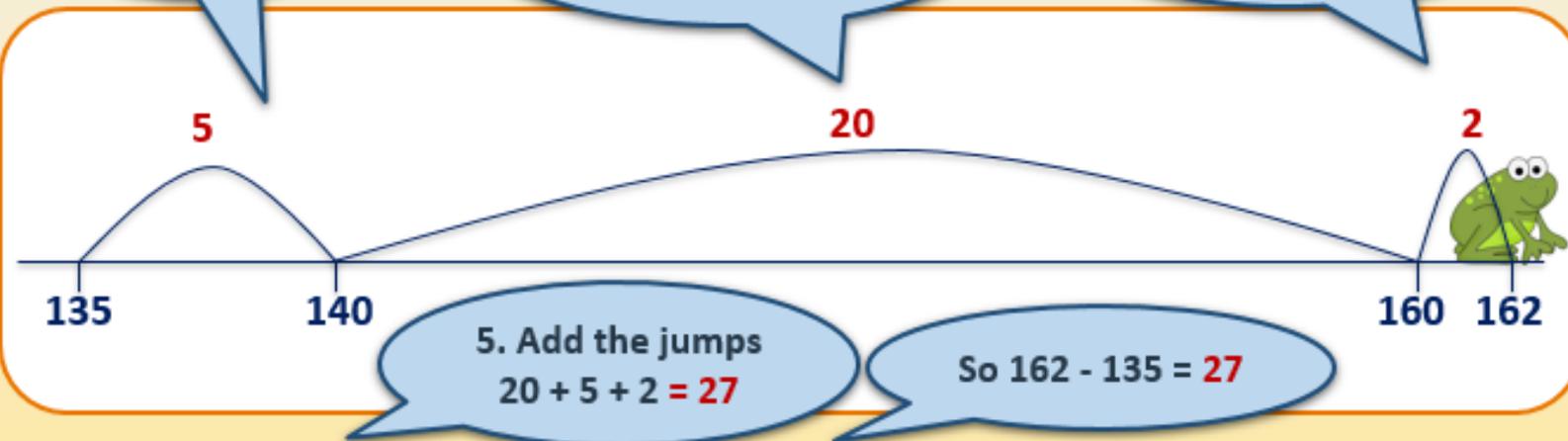**Find a difference between pairs of numbers within the same century.**

Today Frog is going to find the difference between two 3-digit numbers. Let's try 162 - 135.

1. Mark 135 on the left and 162 on the right.

2. Frog first jumps **5** to 140...

3. Then **20** from 140 to 160...

4. Then **2** from 160 to 162.

5   **20**   **2**

135   140   160   162

5. Add the jumps
20 + 5 + 2 **= 27**
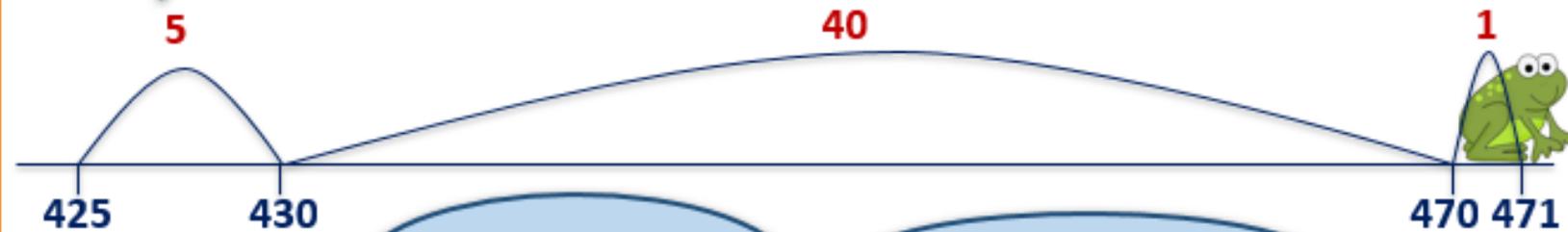
So 162 - 135 **= 27**

Learning Reminders

Find a difference between pairs of numbers within the same century.

Now let's try 471 − 425.

Frog starts at 425 and jumps **5** to 430...

... and then **40** from 430 to 470...

... then **1** from 470 to 471.
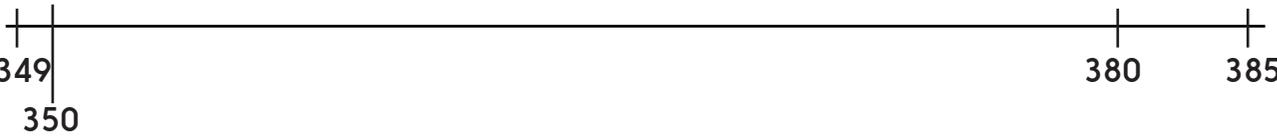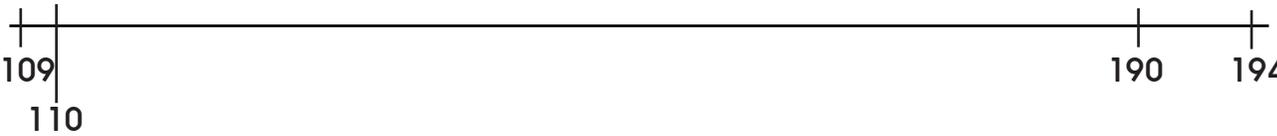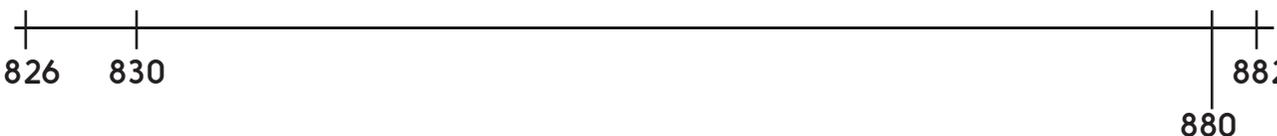
```
     5                          40                        1
   425      430                                      470 471
```

Add the jumps 40 + 5 + 1 = **46**

471 − 425 = **46**

a. 270 − 225 = [ ]

225 230   270

b. 385 − 349 = [ ]

349   380   385
350

c. 585 − 538 = [ ]

538   580   585
540

d. 783 − 715 = [ ]

715 720   780   783

e. 194 − 109 = [ ]

109   190   194
110

f. 882 − 826 = [ ]

826 830   882
880

a. 382 – 316 = [   ]

316   382

b. 385 – 349 = [   ]

e. 194 – 109 = [   ]

c. 585 – 538 = [   ]

f. 882 – 826 = [   ]

d. 783 – 715 = [   ]

g. 195 – 188 = [   ]

Practice Sheet Answers

Practice Sheet (Mild)

a.   270 – 225 = 45
b.   385 – 349 = 36
c.   585 – 538 = 47
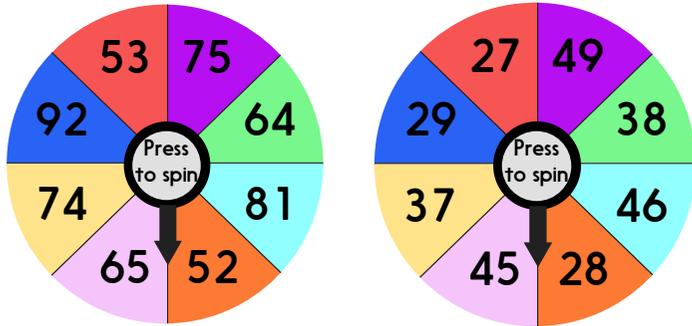d.   783 – 715 = 68
e.   194 – 109 = 85
f.   882 – 826 = 56

Practice Sheet (Hot)

a.   382 – 316 = 66
b.   385 – 349 = 36
c.   585 – 538 = 47
d.   783 – 715 = 68
e.   194 – 109 = 85
f.   882 – 826 = 56
g.   195 – 188 = 7

Work in pairs

What to do:

Things you will need:
- A pencil
- Landmarked lines

Spinner 1: 53, 75, 64, 81, 52, 65, 74, 92 (Press to spin)
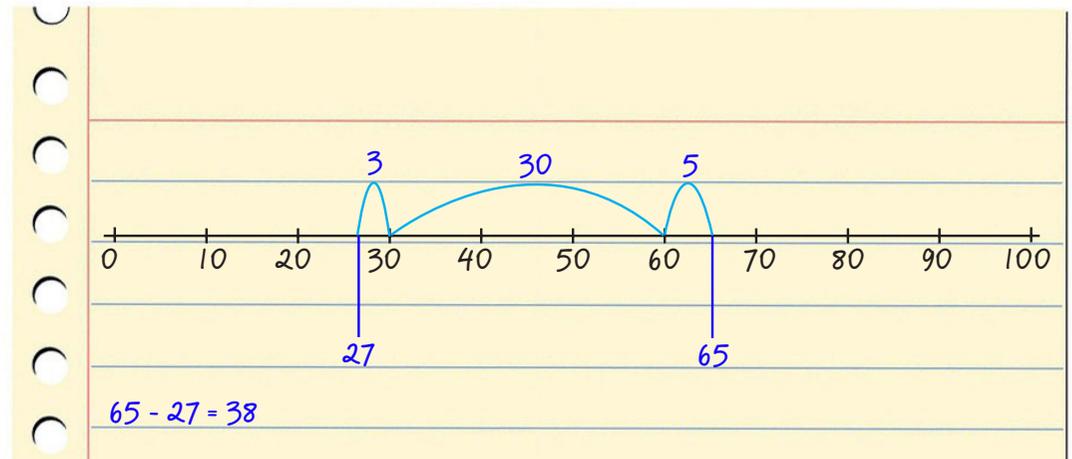
Spinner 2: 27, 49, 38, 46, 28, 45, 37, 29 (Press to spin)

- Choose a number from each spinner.
- Use Frog to find the difference between the two numbers.
- Draw Frog's hops on a landmarked line.
- Write the complete subtraction.

Number line jotting:
- Hops labelled 3, 30, 5
- Points labelled 27 at 30 and 65 at 65
- Line marked 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

$65 - 27 = 38$

- Your challenge is to find at least two subtractions with answers of less than 20 and at least two subtractions with answers of more than 20.
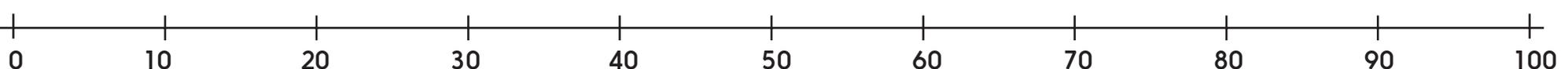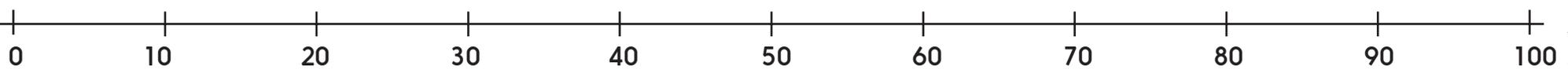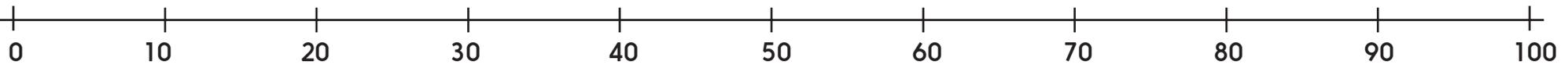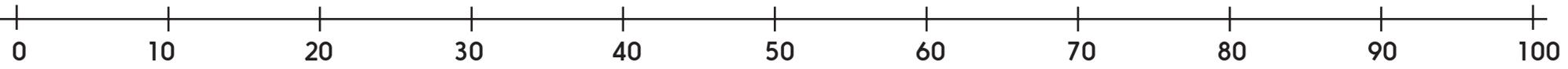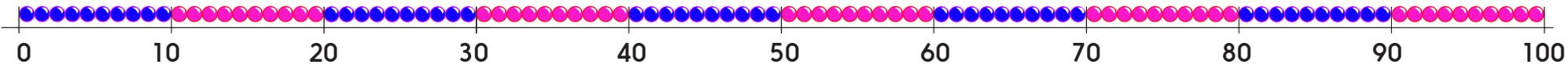
S-t-r-e-t-c-h:
Draw your own number line jottings rather than use the landmarked lines.

Learning outcomes:
- I can use counting up (Frog) to subtract pairs of 2-digit numbers with a bigger gap, e.g. 84 – 37, using a landmarked line to help.
- I am beginning to draw my own number line jottings to subtract.

0   10   20   30   40   50   60   70   80   90   100

0   10   20   30   40   50   60   70   80   90   100

0   10   20   30   40   50   60   70   80   90   100

0   10   20   30   40   50   60   70   80   90   100

Check your understanding:
Questions

Use 'Frog' to help you calculate the missing numbers:

- 571 = 518 + ☐

- 127 + ☐ = 163

- 836 = 862 – ☐

- 375 – ☐ = 328

Complete these bar model diagrams:

283	
227	?

585	
518	?

Fold here to hide answers:

Check your understanding:
Answers

571 = 518 + 53   127 + 36 = 163   836 = 862 – 26   375 - 47 = 328

Errors may arise from:
 - not putting the smaller number at the left of the number line jotting, especially when the larger number is given first in the question;
 - incorrect or inefficient hops and jumps;
 - adding the jumps incorrectly;
 - missing a hop when there should be several.

Complete these bar model diagrams:

283	
227	56

585	
518	67