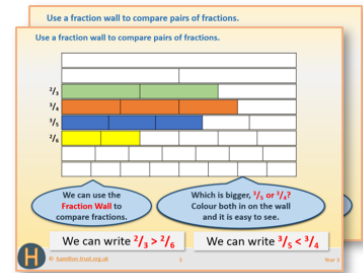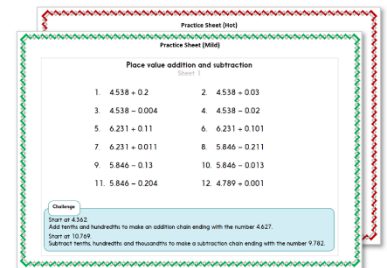# Week 10, Day 3
Use different ways to subtract 3-digit numbers
Each day covers one maths topic. It should take you about 1 hour or just a little more.

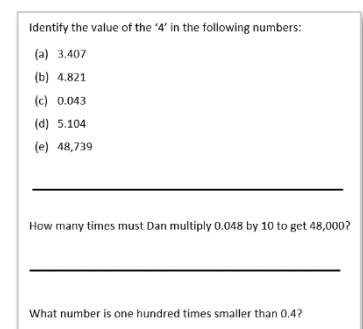1. Start by carefully reading through the **Learning Reminders**.

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

Use different ways to subtract 3-digit numbers.

We can use **expanded or compact** column subtraction to work out **722 - 347.**

For both methods it is important to set out the numbers neatly in columns.

This time we had to make two moves!

```
              110
     600   10  12
     700   20   2
   - 300   40   7
   ─────────────────
     300   70   5
```

722 - 347 = 375

```
        11
     6  7 12
     7  2  2
   - 3  4  7
   ──────────
     3  7  5
```

Explore more Hamilton Trust Learning Materials at https://wrht.org.uk/hamilton

Learning Reminders

Use different ways to subtract 3-digit numbers.

403 - 267

If the larger number is close to a **multiple of 100**, it might be most efficient to *find the difference* by **counting up**. Use a number line jotting to keep track of Frog's hops...

Add the jumps!
103 + 30 + 3 = 136

Frog jumps **3** to 270...

... and then **30** to 300...

... then **103** to 403.

3   30   103

267 270   300   403

Explore more Hamilton Trust Learning Materials at https://wrht.org.uk/hamilton

Subtraction

Choose at least two subtractions to calculate by counting up on a number line.

Choose at least four subtractions to calculate using column subtraction.

804 – 578	834 – 416	879 – 725	964 – 521	645 – 271
720 – 685	845 – 428	637 – 454	914 – 698	724 – 518

Practice Sheet Hot
Subtraction

Solve all 10 questions using either:
        a) counting up on a number line, or
        b) by column subtraction.
You must have at least three of each type!

804 – 578   834 – 416   879 – 725   964 – 521   645 – 271

720 – 685   845 – 428   637 – 454   914 – 698   724 – 518

Practice Sheets Answers

Subtraction (mild)

804 - 578 = 226   834 - 416 = 418

879 - 725 = 154   964 - 521 = 443

645 - 271 = 374   720 – 685 = 35

845 - 428 = 417   637 - 454 = 183

914 - 698 = 216   724 - 518 = 206

Subtraction (hot)

804 - 578 = 226   834 - 416 = 418

879 - 725 = 154   964 - 521 = 443

645 - 271 = 374   720 – 685 = 35

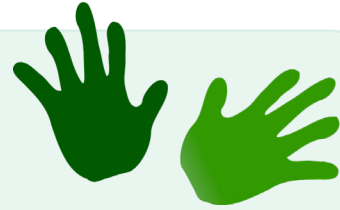845 - 428 = 417   637 - 454 = 183

914 - 698 = 216   724 - 518 = 206
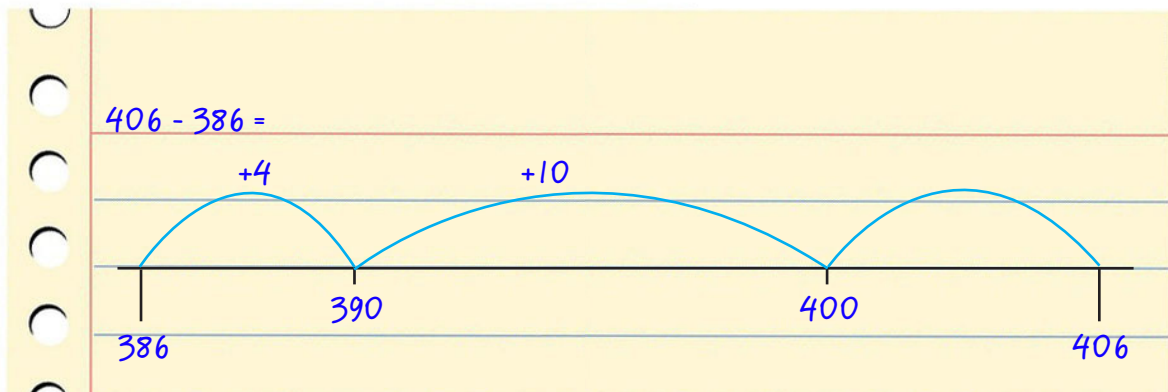
Work in pairs

Things you will need:
• A pencil

What to do:

• Take it in turns to be the teacher and to be the Frog.
  Choose a subtraction.
  Tell your partner, one step at a time, how to work out the answer to the subtraction.

• Complete as many subtractions as you can.

Hop, hop	**Hop, jump, hop**
305 – 298	406 – 386
802 – 794	203 – 175
603 – 597	501 – 468
506 – 495	604 – 559

406 - 386 =

+4   +10

386   390   400   406

S-t-r-e-t-c-h:
Choose two subtractions from the hop, hop section to check using addition.

Learning outcomes:
• I can use counting up (Frog) to subtract 3-digit numbers either side of a multiple of 100, e.g. 304 – 297, then 304 – 267.
• I am beginning to use addition to check subtraction.

Check your understanding
Questions

Write these two numbers in expanded form, i.e. as hundreds + tens + ones:

- 749
- 321

Mentally find the difference between them. Write the answer.

_____

Solve using column subtraction:

    (i)   538 - 264

    (ii)   783 - 427

    (iii)   446 - 382

    (iv)   621 - 355

_____

Write the missing digits in this calculation:

88☐ - 3☐7 = 535

_____

Check your understanding
Answers

Write these two numbers in expanded form, i.e. as hundreds + tens + ones:

- 749   700 + 40 + 9 (NOT 7 + 4 + 9).
- 321   300 + 20 + 1 (NOT 3 + 2 + 1).

Mentally find the difference between them. Write the answer. 428

Solve using column subtraction:

(i)   538 – 264 = 274

(ii)   783 – 427= 356

(iii)   446 – 382= 64

(iv)   621 – 355= 266

Answers of 334, 364, 144 and 334 respectively suggest that children are treating each column as single digits and finding the difference between the two. Some arithmetical errors are possible but most errors are likely to be due to incorrect exchanges between columns.

Write the missing digits in this calculation:

882 - 347 = 535