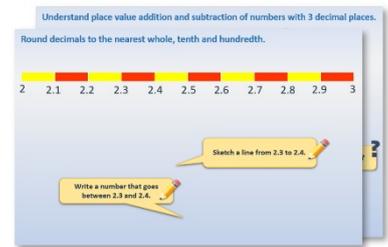


Week 9, Day 2

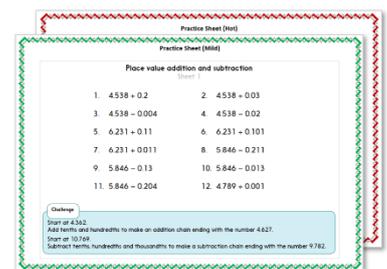
Subtract 1-digit numbers from 3-digit numbers

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

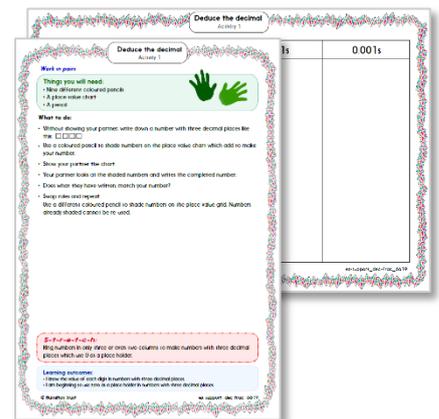
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



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...**

Learning Reminders

Subtract 1-digit numbers from 3-digit numbers.

$$342 - 6 = 336$$

Is this answer correct? How do you know?

We can work out $336 + 6$ to check.

To work out the answer, we could just count back 6 from 342... 341, 340, 339, 338, 337, **336**, but is there a better way?

We could use **number facts**:
 $12 - 6 = 6$ so $342 - 6 = 336$,
can you see why?

We could '**bridge the 10**',
subtracting 6 in two steps:
 $342 - 2 - 4 = 336$

Learning Reminders

Subtract 1-digit numbers from 3-digit numbers.

Now try $352 - 7$ using each of those strategies.

We could use **number facts**:
 $12 - 7 = 5$ so $352 - 7 = 345$.
Can you see why?

We could '**bridge the 10**',
subtracting 7 in two steps:
 $352 - 2 - 5 = 345$

$352 - 7 = 345$. We can
check by using the **inverse**
operation!

What is $345 + 7$? We can use one
of the **strategies for addition** we
used in the last lesson.

Practice Sheet Mild

Subtracting 1-digit numbers from 3-digit numbers

Section A

$245 - 2 =$

$457 - 2 =$

$184 - 3 =$

$428 - 3 =$

$869 - 5 =$

$666 - 5 =$

Section B

$342 - 5 =$

$233 - 7 =$

$872 - 4 =$

$764 - 9 =$

$385 - 8 =$

$413 - 7 =$

$264 - 6 =$

$922 - 8 =$

Challenge

Can you describe what each group of calculations has in common?
Now it's your turn! Make up two more subtractions for each section.

Practice Sheet Hot

Subtracting 1-digit numbers from 3-digit numbers

Section A

$632 - 4 =$

$451 - 6 =$

$734 - 8 =$

$762 - 7 =$

$963 - 5 =$

$535 - 8 =$

$874 - 6 =$

$391 - 5 =$

Section B

$702 - 5 =$

$201 - 7 =$

$103 - 4 =$

$505 - 9 =$

$803 - 5 =$

$405 - 7 =$

$202 - 8 =$

$304 - 6 =$

Challenge

Can you describe what each group of calculations has in common?
Now it's your turn! Make up two more subtractions for each section.

Practice Sheet Answers

Practice Sheet (Mild)

Section A

$245 - 2 = 243$

$457 - 2 = 455$

$184 - 3 = 181$

$428 - 3 = 425$

$869 - 5 = 864$

$666 - 5 = 661$

Section B

$342 - 5 = 337$

$233 - 7 = 226$

$872 - 4 = 868$

$764 - 9 = 755$

$385 - 8 = 377$

$413 - 7 = 406$

$264 - 6 = 258$

$922 - 8 = 914$

Challenge

Section A: Use number facts to subtract from the 1s digit.

Section B: 'Bridge' across a multiple of 10.

Practice Sheet (Hot)

Section A

$632 - 4 = 628$

$451 - 6 = 445$

$734 - 8 = 726$

$762 - 7 = 755$

$963 - 5 = 958$

$535 - 8 = 527$

$874 - 6 = 868$

$391 - 5 = 384$

Section B

$702 - 5 = 697$

$201 - 7 = 194$

$103 - 4 = 99$

$505 - 9 = 496$

$803 - 5 = 798$

$405 - 7 = 398$

$202 - 8 = 194$

$304 - 6 = 298$

Challenge

Section A: 'Bridge' across a multiple of 10.

Section B: 'Bridge' across a multiple of 100.

A Bit Stuck? Hops to fives

Work in pairs, but record your work on your own sheet.

Things you will need:

- A sheet of 0 to 100 beaded lines
- A pencil



What to do:

- Choose a set of three subtractions to work out on one beaded line. Score 1 point for each correct answer, but 10 points for any answers ending in 5, e.g. 15, 25, 35... 85!
- Now choose another set to work out on the next beaded line.
- Keep going. Can you score more than 30 points?

$13 - 6 \quad 23 - 6 \quad 43 - 6$

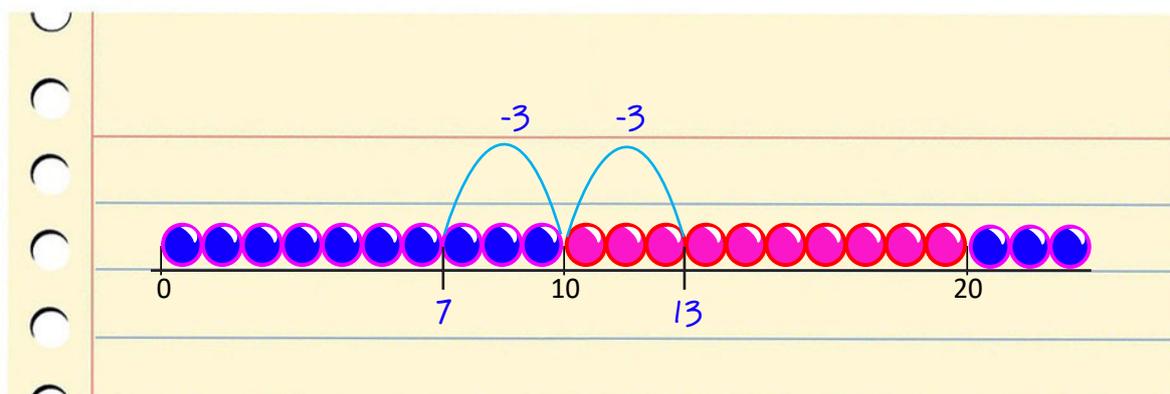
$15 - 8 \quad 35 - 8 \quad 65 - 8$

$11 - 6 \quad 31 - 6 \quad 51 - 6$

$43 - 8 \quad 63 - 8 \quad 83 - 8$

$22 - 7 \quad 52 - 7 \quad 82 - 7$

$24 - 6 \quad 54 - 6 \quad 94 - 6$



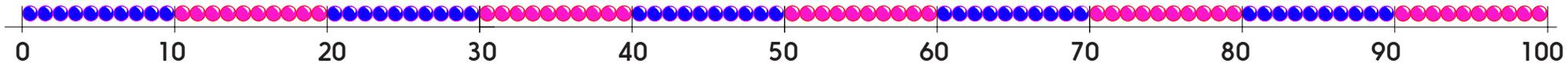
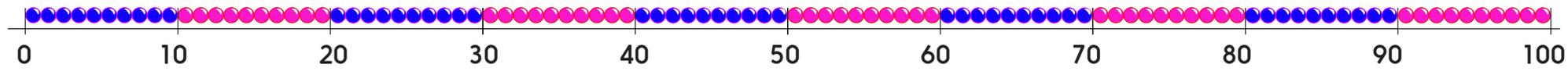
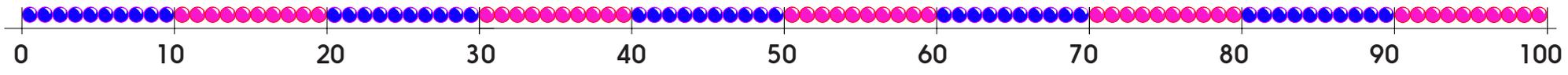
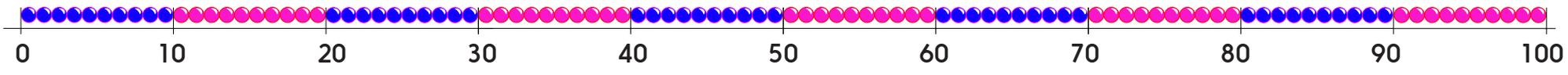
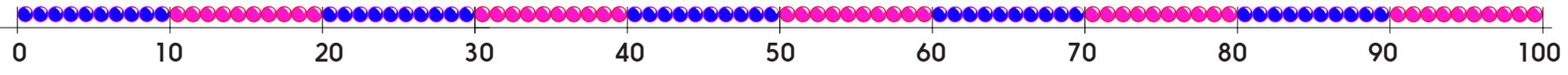
S-t-r-e-t-c-h:

Use landmarked lines instead of beaded lines.

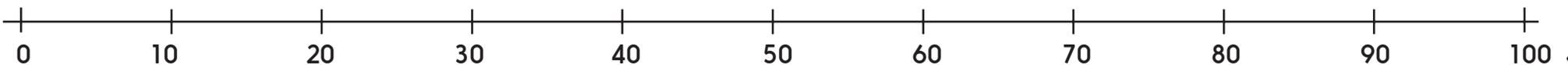
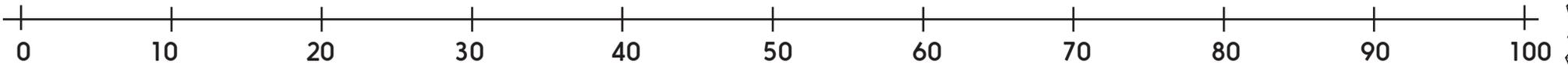
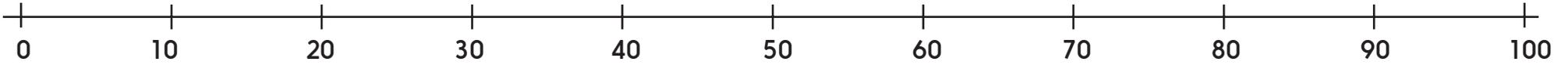
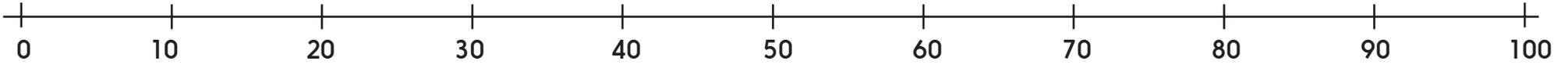
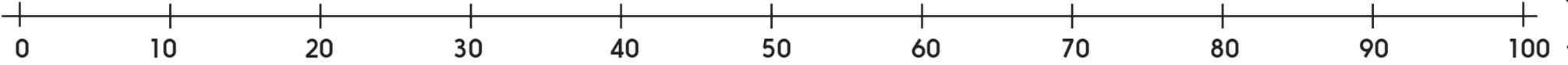
Learning outcomes:

- I can bridge 10 when subtracting 1-digit numbers from 2-digit numbers, e.g. $43 - 5$, using a beaded line to help.
- I am beginning to bridge 10 when subtracting 1-digit numbers from 2-digit numbers, e.g. $43 - 5$, using a landmarked line to help.

A Bit Stuck? Hops to fives



A Bit Stuck?
Hops to fives



Investigations

Magical subtractions

1. Write a three-digit number.
2. Find its digital root. Add the digits together until you reach a single-digit number.
3. Subtract the digital root from the number itself.
4. Add the digits of your answer to find its digital root.
5. Try a new three-digit number and repeat.
6. Do this at least six times.

472
$4 + 7 + 2 = 13$
$1 + 3 = 4$
$472 - 4 =$

Try numbers containing 0 in the tens or a 0 in the ones.

Does it make any difference what the digital root is? Have you tried any numbers with a digital root of 1?

What about two-digit numbers? Or four-digit numbers?