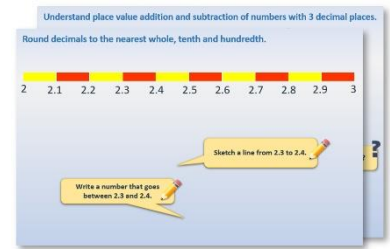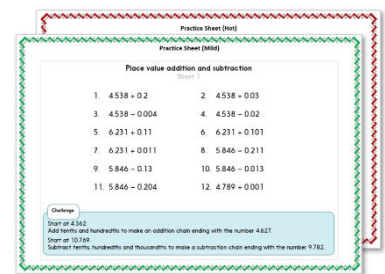# Year 4: Week 2, Day 4
Subtraction using Frog

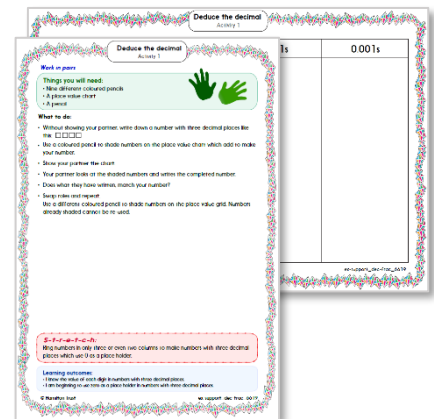**Each day covers one maths topic. It should take you about 1 hour or just a little more.**

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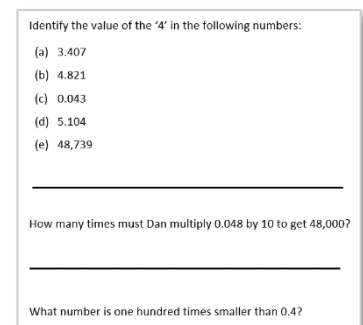
Learning Reminders

Count up to solve 3-digit subtractions.
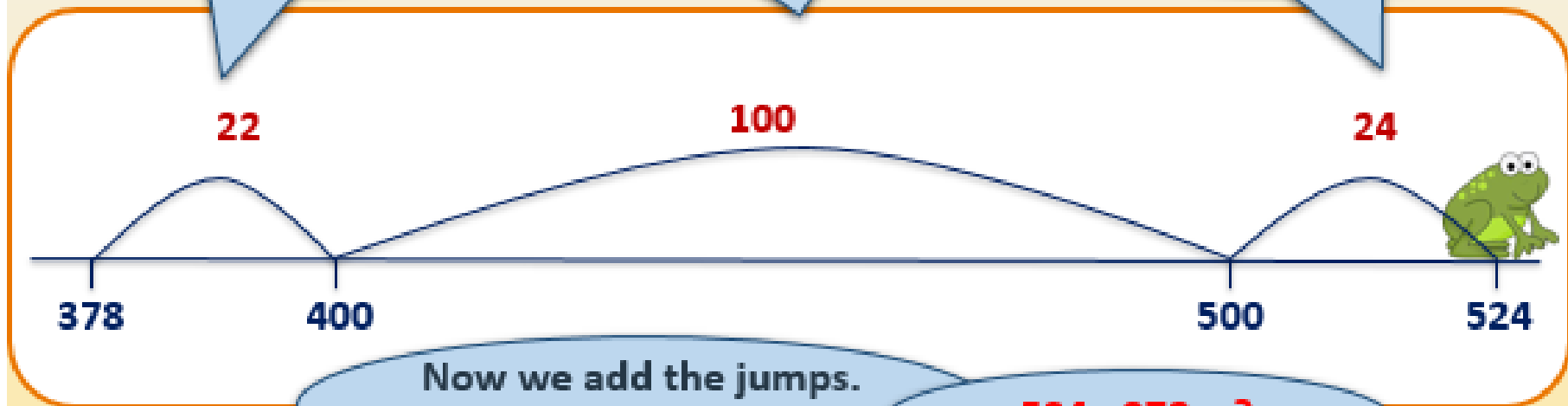
Let's work out **524 - 378** using Frog.

First we draw a number line and mark on 378 and 524...

Frog starts on 378. How far to the next 100?

How far to 500?

How far to 524?

22　　　　　　　　**100**　　　　　　　　**24**

378　　　400　　　　　　　　500　　524

Now we add the jumps.
100 + 24 + 22 = ?

524 - 378 = ?

Learning Reminders

Count up to solve 3-digit subtractions.

Some cyclists are cycling from John O'Groats in northern Scotland to Land's End in Cornwall, over 10 days. It's **874 miles!** So far, they have cycled **625 miles.** How far have they still got to cycle?

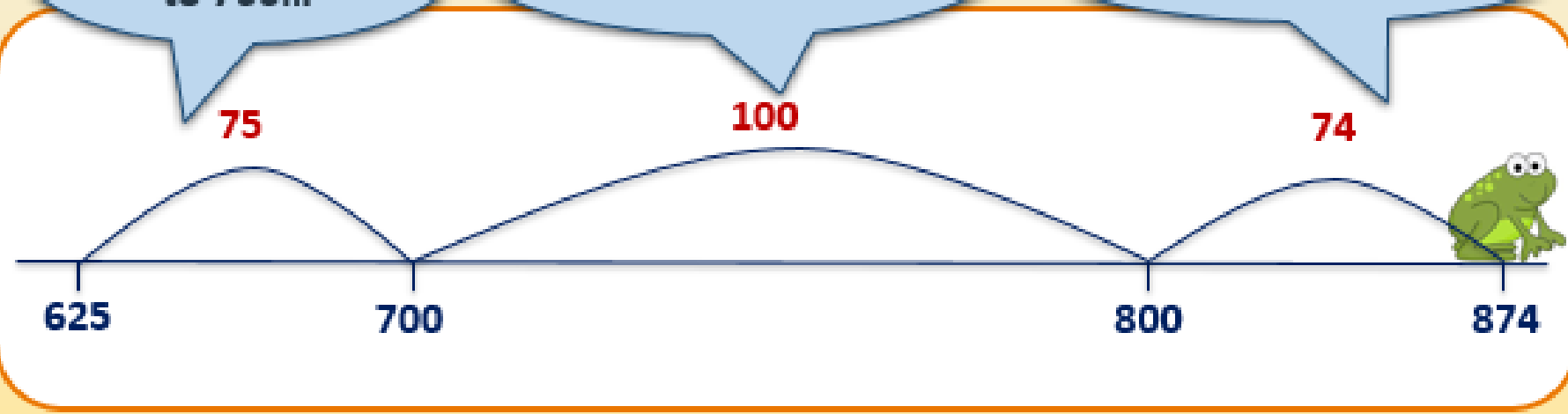How can we find the **difference** between 874 and 625?

We can use Frog!

Draw a number line and mark on 625 and 874…

Add **100, 75 and 74** to find how many miles left.

Frog jumps **75** to 700…

… and then **100** to 800…

… then **74** to 874.

75   **100**   **74**

625   700   800   874

Practice Sheet Mild
Counting up

Practise using counting up to solve these subtractions.
Sketch empty number lines to show your steps.

712 – 655

623 – 589

535 – 478

615 – 575

722 – 684

525 – 449

616 – 535

607 – 569

925 – 795

814 – 685

Practice Sheet Hot
Counting up

Sketch an empty number line to help you to calculate these subtractions.

1. 745 - 588

2. 762 - 584

3. 925 - 767

4. 623 - 489

5. 755 - 448

6. 826 - 682

7. 535 - 378

8. 756 - 437

9. 537 - 373

10. 615 - 476

11. 634 - 469

12. 1002 - 735

Challenge

Subtract 989 from 1000. Then subtract 878 from 1000. Then 767, then 656 etc. each from 1000. Describe the pattern of the answers.

Practice Sheet Answers

Counting up (mild)

712 – 655 = 57

535 – 478 = 57

722 – 684 = 38

616 – 535 = 81

925 – 795 = 130

623 – 589 = 34

615 – 575 = 40

525 – 449 = 76

607 – 569 = 38

814 – 685 = 129

Counting up (hot)

1.   745 – 588 = 157

3.   925 – 767 = 158

5.   755 – 448 = 307

7.   535 – 378 = 157

9.   537 – 373 = 164

11.   634 – 469 = 165

2.   762 – 584 = 178

4.   623 – 489 = 134

6.   826 – 682 = 144

8.   756 – 437 = 319

10.   615 – 476 = 139

12.   1002 – 735 = 267

Challenge

1000 - 989 = 11   1000 - 878 = 122

1000 - 767 = 233   1000 - 656 = 344

1000 - 565 = 455

Watch out for the children using appropriate PV vocabulary in their explanations.

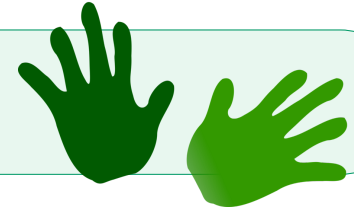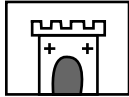## A Bit Stuck?
Are we nearly there yet?
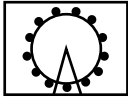
What to do:

• Families are going for a day out.
The children keep asking, "Are we nearly there yet?"

• Work out how much further each family need to travel. Use Frog to help you.

Things you will need:
• A pencil

95 miles

103 miles

92 miles

104 miles

89 miles

102 miles

65 miles

101 miles

72 miles

105 miles

58 miles

106 miles

S-t-r-e-t-c-h:
Draw your own jottings to work out 204 – 197 and 204 – 89.

Learning outcomes:
• I can use Frog to subtract numbers either side of 100, e.g. 102 – 97 and 102 – 78.
• I am beginning to subtract numbers either side of 200.

Check your understanding
Questions

Complete each diagram.

604	
387	

912	
	868

1003	
578	

Here is Ali's homework.

1. 403 – 265
2. 648 – 356
3. 752 – 199
4. 812 – 754

Advise him on the most efficient or error-proof subtraction strategy to calculate each one, explaining why you are suggesting that method.
Work out the answers.

Check your understanding
Answers

Complete each diagram.

604	
387	**217**

912	
44	868

1003	
578	**425**

Here is Ali's homework.

1. 403 – 265
2. 648 – 356
3. 752 – 199
4. 812 – 754

Advise him on the most efficient or error-proof subtraction strategy to calculate each one, explaining why you are suggesting that method.
Work out the answers.

1.   138 – most efficiently solved by Frog.
2. 292 – also solve by Frog, some may prefer column subtraction for this one as neither number is close to a hundreds number, and only one column needs to be adjusted.
3. 553 – subtract 200 and add 1 back.
4. 58 – count up with Frog.