

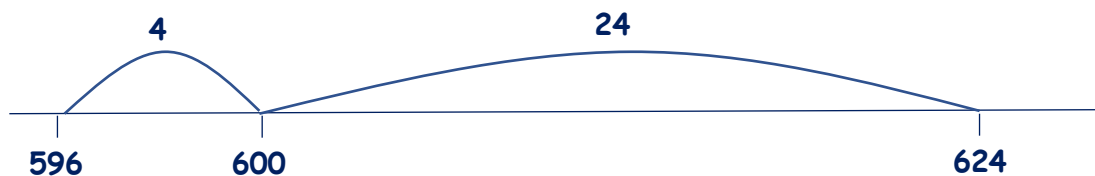
## Hops and jumps

### Week 2 - Activity 1

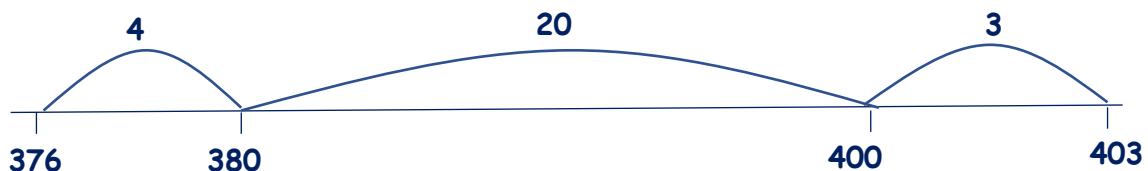
**Focus of activity:** Subtract numbers either side of a multiple of 100 using Frog, e.g.  $624 - 596$ ,  $403 - 376$  and  $512 - 487$ .

#### Working together: conceptual understanding

- Write the following subtractions on the flipchart:  $624 - 596$ ,  $403 - 376$  and  $512 - 487$ . Point out that in each subtraction the two numbers lie either side of a multiple of 100.
- Explain that you are going to use Frog (counting up) to work out the answer to each. Point to the first. *Where will Frog start and where is he aiming to get to?*
- Draw a line from 596 to 624. *Which 100s number is between these two numbers? Where will Frog hop to first?* Agree that Frog will hop to 600. Mark on 600 and ask a child to label the hop. *Where will Frog go to next?* Make sure that children realise that they can use place value to jump from 600 to six hundred AND twenty-four – the size of jump is 24! Ask children what Frog needs to do next – add up the hops.



- Repeat with  $403 - 376$ . Point out that Frog has got further to go to get to the next 100 this time. Children can either do a big jump of 24 to get from 376, or a little hop to 380, then a jump from 380 to 400.



- Repeat with  $512 - 487$ . Make sure children use place value to jump from 500 to 512.
- Look back over the three subtractions. Point out that we use number facts to help Frog to the next 100 (sometimes hopping to the next 10 first) and then place value to get from the next 100 to the bigger number.

#### Up for a challenge?

Challenge children to come up with their own subtractions of numbers either side of a multiple of 100. Share them and work some of them out.

#### Now it's the children's turn:

- Children practise using Frog to subtract pairs of 3-digit numbers, either side of a multiple of 100. They choose subtractions from each section, taking it in turns to be the teacher and 'teach' their partner (the Frog).
- Go round the group and mark their subtractions as they do them, e.g. after one from each section.

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

If children cope well, ask them to choose two subtractions from the first section to check with addition.

### **Things to remember**

*Remember that Frog starts on the smaller number, and hops to the next 10 or 100. We can use place value to work out his jump from a multiple of 100 to the bigger number. We must remember to add up all the hops and jumps at the end or we will have done all that hard work and not worked out the answer to the subtraction!* Ask a child to play the role of Frog's teacher and teach him how to work one of the subtractions they answered in their activity.

You may want to add something that has emerged from the activity. This may refer to misconceptions or mistakes made.

<b>Resources</b>	<b>Outcomes</b>
<ul style="list-style-type: none"><li>• Flipchart and pens</li></ul>	<ol style="list-style-type: none"><li>1. Children can use counting up (Frog) to subtract 3-digit numbers either side of a multiple of 100, e.g. <math>624 - 596</math>, <math>403 - 376</math> and <math>512 - 487</math>.</li><li>2. Children begin to use addition to check subtraction.</li></ol>