## Year 3: Week 1, Day 1 Numbers on lines

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



Learning Reminders


## Practice Sheet Mild

Numbers on lines
Mark the numbers on the number line where you think they should go.


Use three of these digits to make a number which belongs between 900 and 1000 and place it on the line: $3,5,7$, 9 . Repeat for as many numbers as you can.

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## Practice Sheet Hot <br> Numbers on lines

Mark the 100s intervals on the number line.
Write the numbers on the number line where you think they should go.


| 690 | 105 | 499 | 505 |
| :---: | :---: | :---: | :---: |
| 385 | 275 | 25 | 370 |
| 420 | 935 | 745 | 860 |

## Challenge

Roll three 0-9 dice. Use the digits to make 4 more different numbers to place on your line. Repeat.
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## A Bit Stuck? In-betweenies

## Work in pairs

Things you will need:

- A set of 1 to 9 digit cards
- 0 to 100 landmarked lines
- Two coloured pencils



## What to do:

- Shuffle the cards and place face down. Take the top four.
- Use them in any order that you like to make two 2-digit numbers. Use your coloured pencil to mark these on the line, writing the numbers underneath the marks.
- Your partner takes the next two cards and uses them in either order to make a 2-digit number. They use their coloured pencil to mark this number on the line. Can they make a number which goes between your two numbers? If so they win a point. If not, you win the point.
- Play again on a new line, but your partner shuffles the cards and takes the first four this time.
- Keep playing, taking it in turns to take the first four cards.



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

Think about the best order to use your digit cards to make it difficult for the other person to make a number in between your two numbers on the line.

## Learning outcomes:

- I can place 2-digit numbers on a 0 to 100 landmarked line.
- I am beginning to have an idea about whether numbers are close or far apart on the number line.
- I am beginning to identify mystery numbers on 0 to 100 landmarked lines.


## Check your understanding: Questions

Sketch a line 0-1000 and mark 500 on it.
Mark 350, 700 and 990 on the line.
How can you demonstrate that you have marked these accurately?

## True or false

- Between any pair of next-door multiples of 100 , there are always 98 whole numbers.
- The middle of a $500-1000$ line is 800 .
- There are ten numbers ending in 3 between 300 and 400.
- The digit 0 is used 18 times between 600 and 700 .


## Check your understanding:

## Answers

Sketch a line 0-1000 and mark 500 on it.
Mark 350, 700 and 990 on the line.
How can you demonstrate that you have marked these accurately?
350 is around a third of 1000, 700 almost three quarters and 990 is almost 1000; children's markings should reflect this.

## True or false

- Between any pair of next-door multiples of 100, there are always 98 whole numbers. False, there are 99, for example between 200 and 300 the numbers 201-299 (99 numbers).
- The middle of a 500-1000 line is 800 . False, it would be 750 .
- There are ten numbers ending in 3 between 300 and 400.

True - 303, 313, 323, 333, 343, 353, 363, 373, 383, 393. Some may miss 303.

- The digit 0 is used 18 times between 600 and 700. True, in the numbers 601 - 609 (9 times) and 610, 620 ... 690 (9 times).
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