




LI	<p><i>WALT: Identify the scale of a number line</i></p> <p><i>Place numbers onto a number line</i></p>	
	I can explain why I have placed the number on the line	
	I can explain how to find the scale of a number line	
	I can explain why I have placed the number on the line	
	I can use a number line to place numbers in order.	
Nasty Maths	No Nasty Maths	

**Today we are looking at number lines**

**Number lines are lines that we can place numbers onto.**

**0 to 100 Number Line**



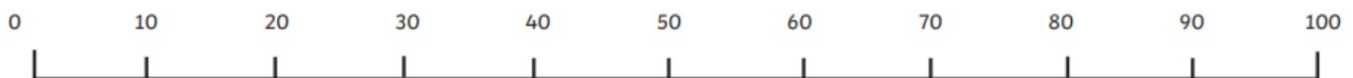
## Activity

Place these numbers onto your number line.

Talk with your partner to explain how you decided where to place the numbers.

10      13      21      45      58      72      89

### 0 to 100 Number Line



## Activity

Now try it with a blank number line. What numbers could you put at the start and the end of your number line?

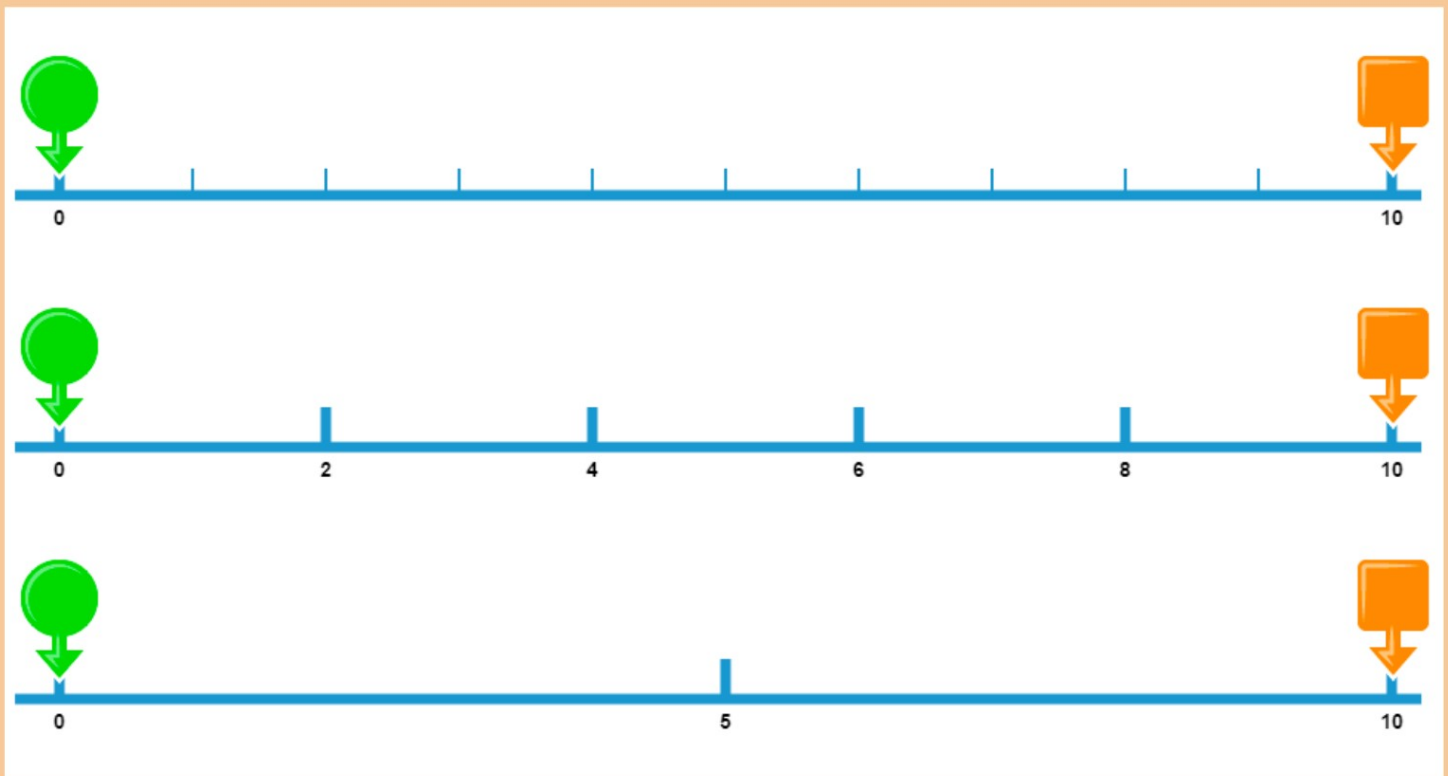
**Talk with your partner to explain how you decided where to place the numbers.**

10      13      21      45      58      72      89

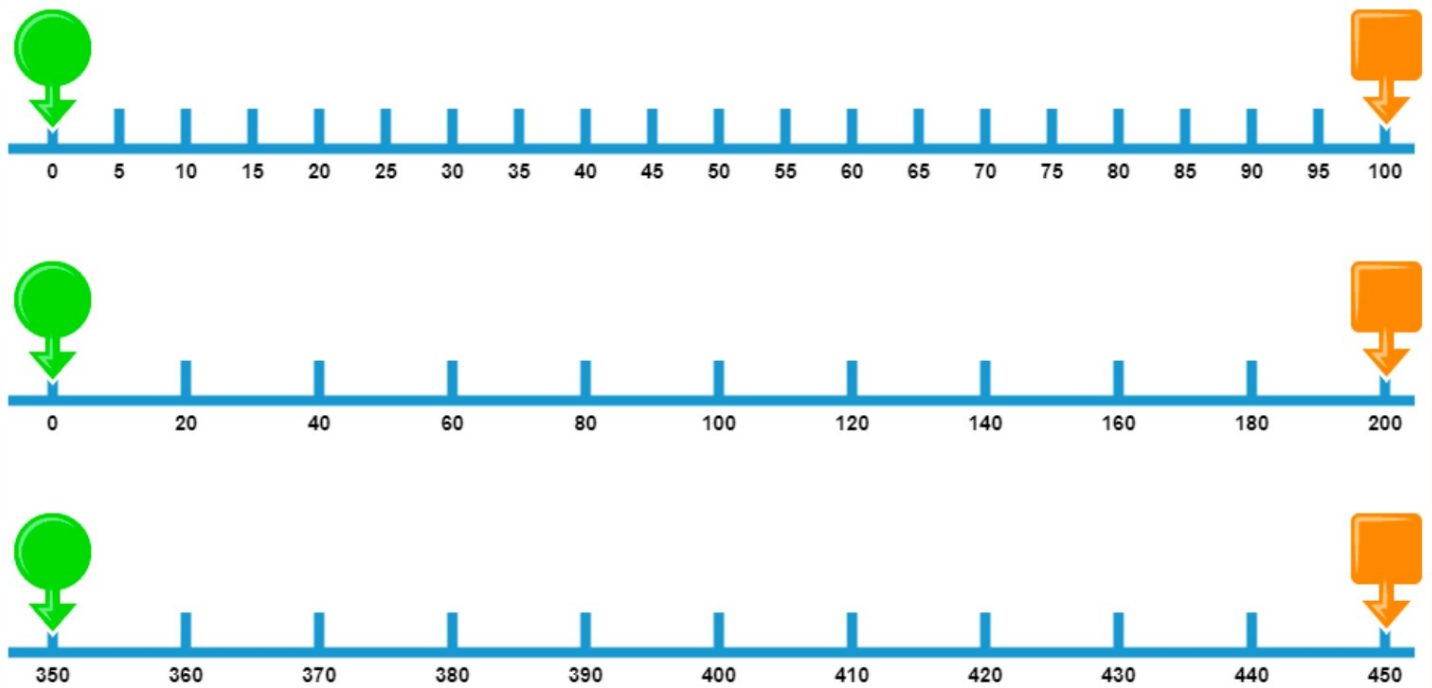
My Number Line

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**Are these number lines showing the same amount?**



**What are the number lines counting up in?  
How do you know?**



**I do**

**What can we do if the numbers in the middle are missing?**



**We do**

**What can we do if the numbers are missing?**





**You do**

**What can we do if the numbers are missing?**






## **Tuesday**

**Teacher notes: On 'place a number on a number line' choose 0 - 1000.**

**Click on 'show divisions'. Ask children what scale the numberline is using.**

**Ask children to place the numbers on the line and explain their thinking.**

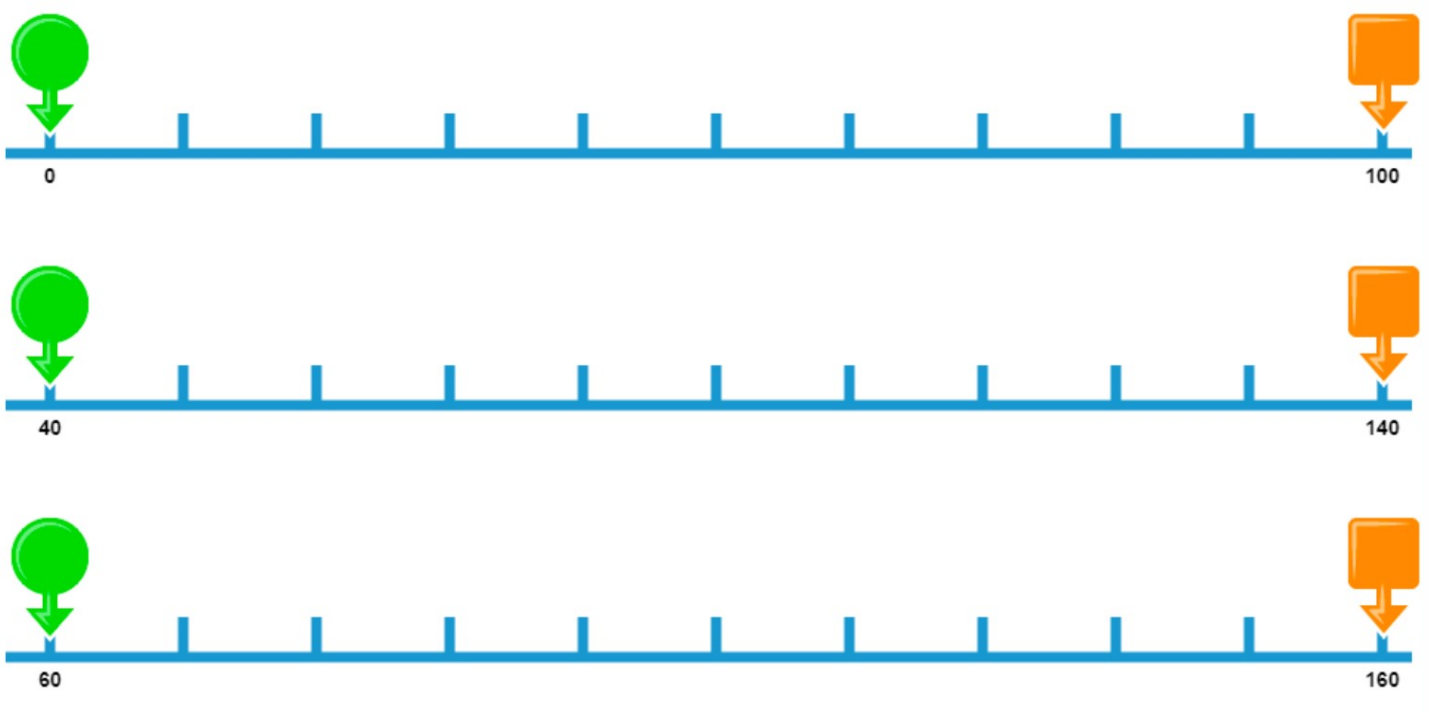
L2	WALT: <i>place three-digit numbers on marked number lines with a variety of scales.</i>	
	I can work out the scale of a number line.	
	I can then place 3-digit numbers accurately onto a number line.	
	I can use numbers I can see to find the scale of a number line.	
	I can place numbers accurately onto a number line	
	Put 2 digit numbers into the correct order	
Nasty Maths	No Nasty Maths	

## **Activity**

**Play 'place a number on a number line'**



**I do      Place 90 on the number line**



**We do    Place 320 on the number line**



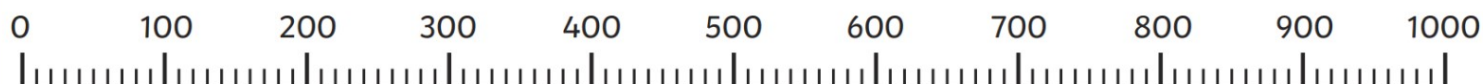
**You do      Place 542 on the number line**



# Plenary

## Instructions

1. Take turns to pick three cards from your pile of face-down number cards.
2. Use these three numbers to make a three-digit number. e.g if 3, 5 and 4 are picked, you could make '345', '354', '435', '453' '534' or '543'.
3. Write your chosen number in the correct place on the number line.
4. The aim of the game is to get three numbers in order on the number line without your partner squeezing a number in between them!





## **Wednesday**

**3 digit numbers between multiples of 10**




**When playing 'place a number on a number line' choose between multiples of 10.**

**Allow children to place the number and then tell you which multiples of 10 it sits between.**

### **Language focus**

"The previous multiple of 100 is 600. The next multiple of 100 is 700."

"The previous multiple of 10 is 680. The next multiple of 10 is 690."

L3	identify which pair of multiples of 10 a three-digit number is between																																						
	I can explain what multiple of 10 a number is between																																						
	I can show what multiple of 10 a number is between																																						
	I can put numbers and objects into the correct order																																						
Nasty Maths	<p>10 More/less</p> <p>Complete the tables</p> <p>Challenge</p> <table border="1"> <thead> <tr> <th>Which number is 10 less than the start number?</th> <th>Start Number</th> <th>Which number is 10 more than the start number?</th> </tr> </thead> <tbody> <tr><td></td><td>40</td><td></td></tr> <tr><td></td><td>90</td><td></td></tr> <tr><td></td><td>200</td><td></td></tr> <tr><td></td><td>390</td><td></td></tr> <tr><td></td><td>430</td><td></td></tr> </tbody> </table> <p>Mega Challenge</p> <table border="1"> <thead> <tr> <th>Which number is the previous multiple of 10 before the start number?</th> <th>Start Number</th> <th>Which number is the next multiple of 10 after the start number?</th> </tr> </thead> <tbody> <tr><td></td><td>52</td><td></td></tr> <tr><td></td><td>168</td><td></td></tr> <tr><td></td><td>199</td><td></td></tr> <tr><td></td><td>231</td><td></td></tr> <tr><td></td><td>991</td><td></td></tr> </tbody> </table>			Which number is 10 less than the start number?	Start Number	Which number is 10 more than the start number?		40			90			200			390			430		Which number is the previous multiple of 10 before the start number?	Start Number	Which number is the next multiple of 10 after the start number?		52			168			199			231			991	
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## 10 More/less

Complete the tables

### Challenge

Which number is 10 less than the start number?	Start Number	Which number is 10 more than the start number?
	40	
	90	
	200	
	390	
	430	

### Mega Challenge

Which number is the previous multiple of 10 before the start number?	Start Number	Which number is the next multiple of 10 after the start number?
	52	
	168	
	199	
	231	
	991	

## **Starter activity**

**Play 'place a number on a number line multiples of 10 and 100.'**

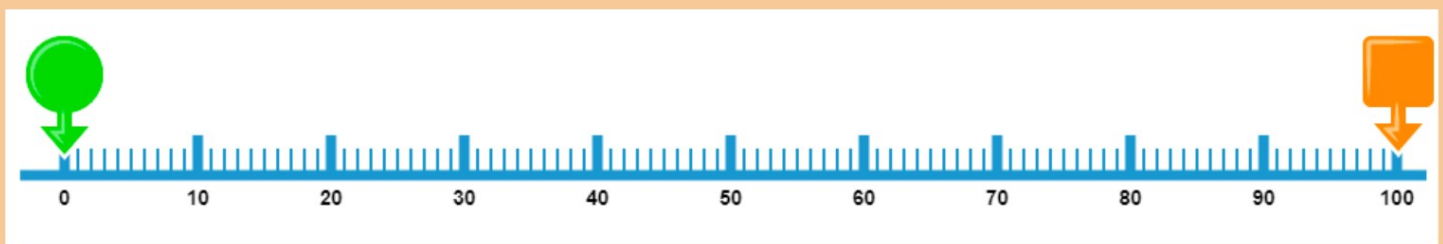


**Tell me where the numbers go.**

**Tell me the previous and next multiple of 10 that the number sits between.**

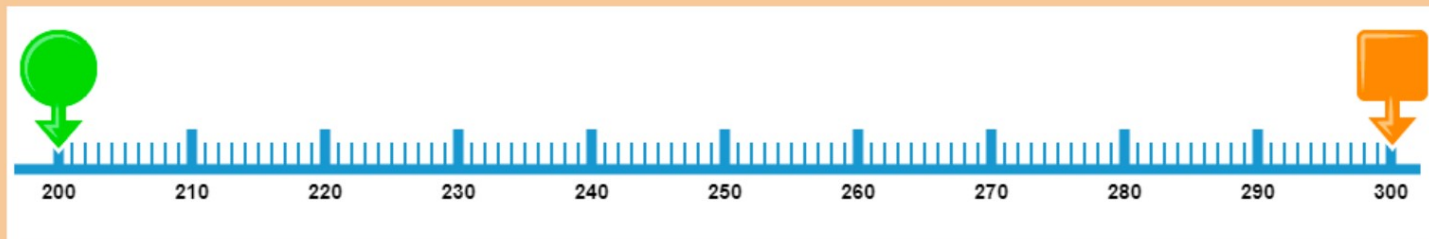
**Place 36 on the number line.**  
**What multiples of 10 is it between?**

**I do**



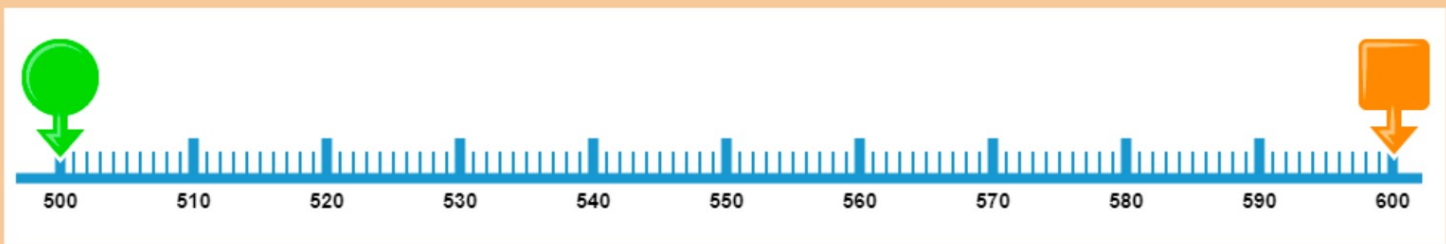
**We do**

**Place 263 on the number line.  
What multiples of 10 is it between?**



**You do**

**Place 571 on the number line.  
What multiples of 10 is it between?**



### Instructions

1. Take turns to pick three cards from your pile of face-down number cards.
2. Use these three numbers to make a three-digit number. e.g if 3, 5 and 4 are picked, you could make '345', '354', '435', '453', '534' or '543'.
3. Write your chosen number in the correct place on the number line.
4. The aim of the game is to get three numbers in order on the number line without your partner squeezing a number in between them!

**Once someone has won the game, stick the number line into your book.**  
**Tell me the previous and next multiple of 10 for each number.**





# Thursday

**Teacher notes 3 digit numbers between multiples of 100**




**When playing 'place a number on a number line' choose between multiples of 100.**

**Allow children to place the number and then tell you which multiples of 100 it sits between.**

## Language focus

"The previous multiple of 100 is 600. The next multiple of 100 is 700."

"The previous multiple of 10 is 680. The next multiple of 10 is 690."

L6	<i>WALT: Identify which pair of multiples of 100 a three-digit number is between.</i>																																					
	I can explain the previous and next multiple of 100 that a 3 digit number is closest to																																					
	I can show the previous and next multiple of 100 that is closest to a 3 digit number																																					
	I can count up in multiples of 10																																					
Nasty Maths	<p>100 More/Less</p> <p>Complete the tables</p> <p>Challenge</p> <table border="1"> <thead> <tr> <th>Which number is 100 less than the start number?</th> <th>Start Number</th> <th>Which number is 100 more than the start number?</th> </tr> </thead> <tbody> <tr><td></td><td>100</td><td></td></tr> <tr><td></td><td>300</td><td></td></tr> <tr><td></td><td>600</td><td></td></tr> <tr><td></td><td>800</td><td></td></tr> <tr><td></td><td>900</td><td></td></tr> </tbody> </table> <p>Mega Challenge</p> <table border="1"> <thead> <tr> <th>Which number is the previous multiple of 100 before the start number?</th> <th>Start Number</th> <th>Which number is the next multiple of 100 after the start number?</th> </tr> </thead> <tbody> <tr><td></td><td>292</td><td></td></tr> <tr><td></td><td>437</td><td></td></tr> <tr><td></td><td>555</td><td></td></tr> <tr><td></td><td>901</td><td></td></tr> <tr><td></td><td>199</td><td></td></tr> </tbody> </table>		Which number is 100 less than the start number?	Start Number	Which number is 100 more than the start number?		100			300			600			800			900		Which number is the previous multiple of 100 before the start number?	Start Number	Which number is the next multiple of 100 after the start number?		292			437			555			901			199	
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## 100 More/less

Complete the tables

### Challenge

Which number is 100 less than the start number?	Start Number	Which number is 100 more than the start number?
	100	
	300	
	600	
	800	
	900	

### Mega Challenge

Which number is the previous multiple of 100 before the start number?	Start Number	Which number is the next multiple of 100 after the start number?
	292	
	437	
	555	
	901	
	199	

## **Starter activity**

**Play 'place a number on a number line multiples of 10 and 100.'**



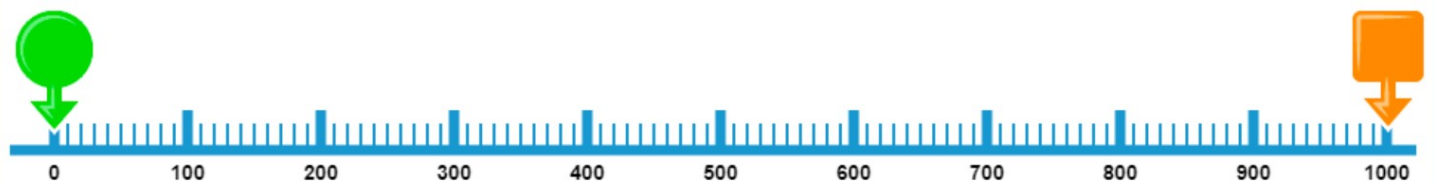
**Tell me where the numbers go on the number line.**

**Tell me the previous and next multiple of 100 that the number sits between.**

I do

**Place 341 on the number line.**

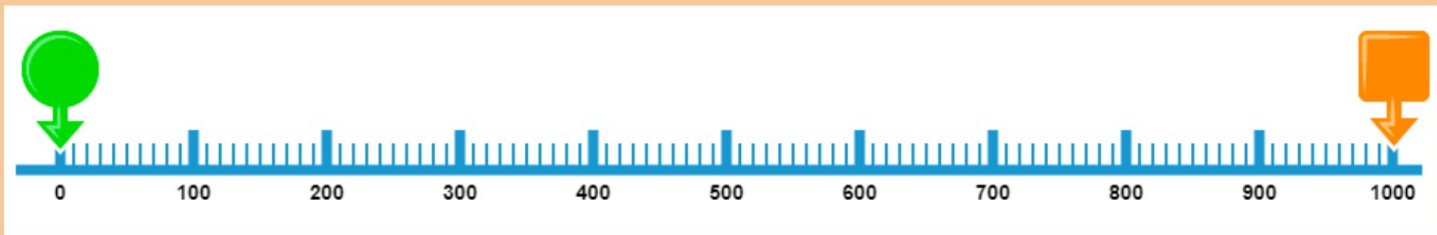
Tell me the previous and the next multiple of 100.



**We do**

**Place 870 on the number line.**

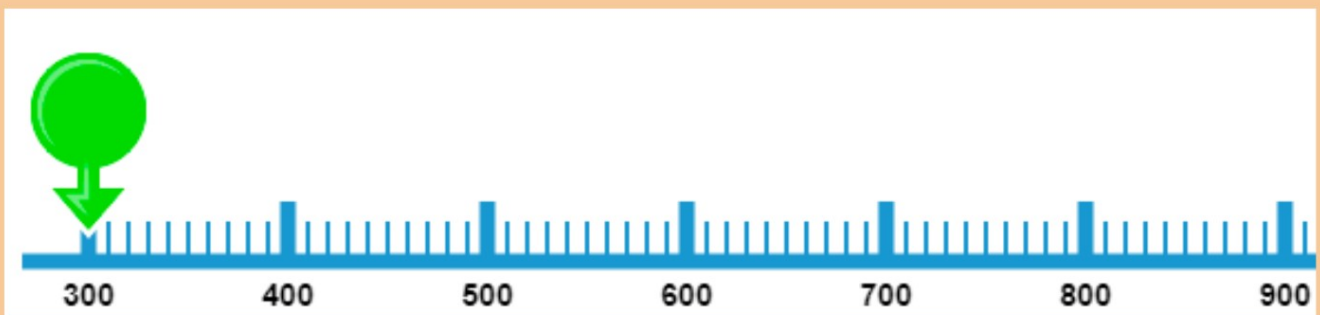
Tell me the previous and next multiple of 100



**You do**

**Place 578 on the number line.**

Tell me the previous and next multiple of 100.



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3. Write your chosen number in the correct place on the number line.
4. The aim of the game is to get three numbers in order on the number line without your partner squeezing a number in between them!

**Once someone has won the game, stick the number line into your book.**  
**Tell me the previous and next multiple of 100 for each number.**








## **Friday - estimates**

**Teacher notes - play 'compare numbers on a number line'.  
Choose numbers 0 -1000 and show divides.**

**Encourage children to draw comparisons between the 2  
number lines and reason their choices as to which number  
is bigger. If required, remind children how to work out the  
scale of the number line. Also direct them to identifying the  
previous and next multiples of 10 and 100 to identify the  
biggest number.**

**During the input when trying to work out the size of the red line,  
encourage children to think of it as estimating what number the  
end of the red line has reached.**

L5	WALT: <i>Estimate the value of a number by comparing it to a number line</i>	
	I can use a number line to estimate the value of another line I can explain using fractions why I think this is true	
	Compare different size lines to a number line to find out the value I can use a number line to estimate the value of another line	
	I <i>can</i> <u>count up</u> in multiples of 100	
Nasty Maths	No Nasty Maths.	

**Play compare numbers on a number line**



**Think carefully about which is the biggest number. Use the scale of the number line and the nearest multiples of 10 and 100 to help you.**

**I do**



**Can you use the number line to estimate the value of the red line?**

**We do**



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**Can you use the number line to estimate the value of the red line?**

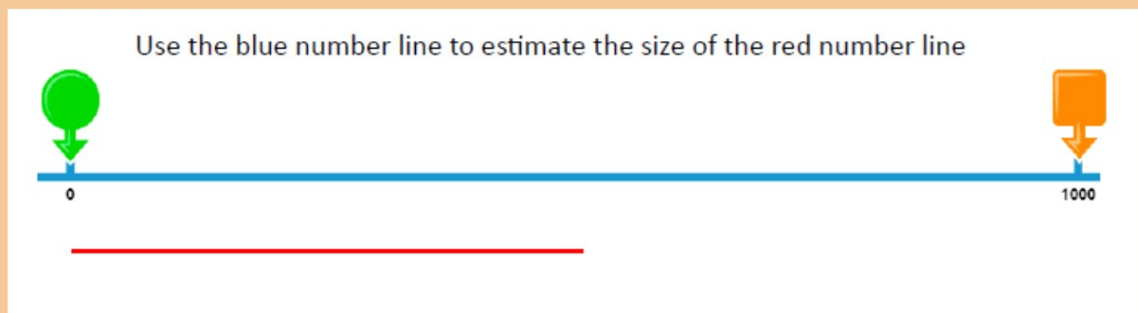
**You do**



**Can you use the number line to estimate the value of the red line?**

## Number line challenge

**First**



**Then**

**Make a blank number line of 0 - 100, 0 - 1000 and 500 - 800**  
**Place these numbers onto the lines.**  
**If they do not fit, leave them off.**

**25, 32, 50, 75, 99, 120, 300, 750, 510, 347, 682**

**Finally**

**Complete reasoning questions**

