

Year 4 Maths 25/3/20  
LO: multiply and divide numbers by 10 and 100

RECALL:

Thousands	Hundreds	Tens	Units	Decimal Point	Tenths	Hundredths
				.		
				.		
				.		

Fill each gap with either **bigger** or **smaller**.

When we multiply a number, it gets \_\_\_\_\_. When we divide a number it gets \_\_\_\_\_.

As we move digits to the left in the place value table, their value gets \_\_\_\_\_.

As we move digits to the right in the place value table, their value gets \_\_\_\_\_.

Mar 24-16:54

Thousands	Hundreds	Tens	Units	Decimal Point	Tenths	Hundredths
				.		
				.		
				.		

**X** ←      → **÷**

When we multiply a number by ten, we move all its digits one place to the left.  
When we multiply a number by a hundred, we move all its digits two places to the left.

When we divide a number by ten, we move all its digits one place to the right.  
When we divide a number by a hundred, we move all its digits two places to the right.

Mar 24-17:00

Thousands	Hundreds	Tens	Units	Decimal Point	Tenths	Hundredths
				.		
				.		
				.		

**X** ←      → **÷**

When we multiply a number by ten, we move all its digits one place to the left.  
When we multiply a number by a hundred, we move all its digits two places to the left.

When we divide a number by ten, we move all its digits one place to the right.  
When we divide a number by a hundred, we move all its digits two places to the right.

Mar 24-17:00

Thousands	Hundreds	Tens	Units	Decimal Point	Tenths	Hundredths
				.		
				.		
				.		

<p>ONE CHILLI:</p> <p>4 divided by 10 =</p> <p>8 multiplied by 10 =</p> <p>6 divided by 100 =</p> <p>7 multiplied by 100 =</p>	<p>TWO CHILLIES:</p> <p>52 divided by 10 =</p> <p>0.5 multiplied by 10 =</p> <p>60 divided by 100 =</p> <p>0.72 multiplied by 100 =</p>	<p>THREE CHILLIES:</p> <p>? divided by 10 = 0.9</p> <p>? multiplied by 10 = 6</p> <p>? divided by 100 = 0.3</p> <p>? multiplied by 100 = 4</p>
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SUPER CHALLENGE:  
306 has become 3.06  
What operation has been applied to it?

Mar 24-17:03

## ANSWERS

Thousands	Hundreds	Tens	Units	Decimal Point	Tenths	Hundredths
				.		
				.		
				.		

<p>ONE CHILLI:</p> <p>4 divided by 10 = <b>0.4</b></p> <p>8 multiplied by 10 = <b>80</b></p> <p>6 divided by 100 = <b>0.06</b></p> <p>7 multiplied by 100 = <b>700</b></p>	<p>TWO CHILLIES:</p> <p>52 divided by 10 = <b>5.2</b></p> <p>0.5 multiplied by 10 = <b>5</b></p> <p>60 divided by 100 = <b>0.6</b></p> <p>0.72 multiplied by 100 = <b>72</b></p>	<p>THREE CHILLIES:</p> <p>9 divided by 10 = 0.9</p> <p><b>0.6</b> multiplied by 10 = 6</p> <p><b>30</b> divided by 100 = 0.3</p> <p><b>0.04</b> multiplied by 100 = 4</p>
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SUPER CHALLENGE:  
306 has become 3.06  
What operation has been applied to it? It has been divided by 100.

Mar 24-17:03

<p>DIVE DEEPER 1</p> <p>Describe the pattern.</p> <p style="text-align: center;">7,000 ÷ 100 = 70 700 ÷ 100 = 7 70 ÷ 100 = 0.7 7 ÷ 100 = 0.07</p> <p>Can you complete the pattern starting with 5,300 divided by 100?</p>	<p>DIVE DEEPER 2</p> <p>Teddy says,</p> <p style="border: 1px solid orange; border-radius: 15px; padding: 5px; display: inline-block;">45 divided by 100 is 0.45 so I know 0.45 is 100 times smaller than 45</p> <p>Mo says,</p> <p style="border: 1px solid orange; border-radius: 15px; padding: 5px; display: inline-block;">45 divided by 100 is 0.45 so I know 45 is 100 times bigger than 0.45</p> <p>Who is correct? Explain your answer.</p>
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Mar 24-17:13

## ANSWERS

<p>Describe the pattern.</p> $7,000 \div 100 = 70$ $700 \div 100 = 7$ $70 \div 100 = 0.7$ $7 \div 100 = 0.07$ <p>Can you complete the pattern starting with 5,300 divided by 100?</p>	<p>Children will describe the pattern they see e.g. 7,000 is 10 times bigger than 700, therefore the answer has to be 10 times bigger as the divisor has remained the same.</p> <p>For 5,300:</p> $5,300 \div 100 = 53$ $530 \div 100 = 5.3$ $53 \div 100 = 0.53$ $5.3 \div 100 = 0.053$	<p>Teddy says,</p> <div style="border: 1px solid orange; border-radius: 15px; padding: 5px; display: inline-block; margin-bottom: 10px;"> <math>45 \div 100 = 0.45</math>              so I know 0.45 is 100 times smaller than 45         </div> <p>Mo says,</p> <div style="border: 1px solid orange; border-radius: 15px; padding: 5px; display: inline-block; margin-bottom: 10px;"> <math>45 \div 100 = 0.45</math>              so I know 45 is 100 times bigger than 0.45         </div> <p>Who is correct? Explain your answer.</p>	<p>Teddy and Mo are both correct. Children may use a place value chart to help them explain their answer.</p>
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