


25th January 2021

Tuesday, January 19, 2021 1:35 PM

25.01.21TBQ: Can I use place value knowledge to divide by 10 and 100?

STEPS TO SUCCESS	
	
I can explain the value of any digit.	
I can divide by 10 and 100 and explain why the answer is accurate.	
I can check my answer using the inverse.	
I can explain what a tenth and hundredth is.	

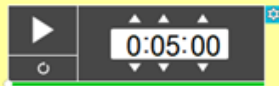
Key Vocabulary	
tenth	whole number
hundredth	rounding
thousandth	equivalent
decimal point	order

Counting

Count forwards in 25's from -150.

How far can you go?

What patterns do you notice?

5 minute challenge**5 minute challenge!**

$9642 - 6420 =$



$6^2 + 9^3 =$

What are the factors of 18?

Round 8652 to the nearest 10.



$836 \div 4 =$



Starter

Can you complete the sequences below

Starter

mild	5	11	17	23	29	?	?
hot	6	-1	-8	-15	22	?	?
flaming hot	0.5	0.56	0.62	0.68	?	?	
	$\frac{1}{5}$	$\frac{3}{5}$	1	$1\frac{1}{5}$?	?	

Main Session

We are going to start looking at decimal numbers over the next few weeks. When would decimal numbers need to be used? Watch the video below to find out!

<https://www.bbc.co.uk/teach/skillswise/decimals/zmfbhbk>

$36 \div 100 = 0.036$

Prove it in at least 2 ways

Rex says that when dividing by 10 you just take a 0 from the answer. For example: $60 \div 10 = 6$.

Reasoning



Is Rex's explanation correct? Explain your answer.

Play the game below. Remember to use a place value chart to help you if needed!

<https://www.topmarks.co.uk/Flash.aspx?f=bingotimesordivide>

Chilli Challenges

Mild - Decide whether the multiplying and dividing by 10 and 100 questions are correct or incorrect and prove your answer.

Hot - Decide whether the multiplying and dividing by 100 and 1000 questions are correct or incorrect and prove your answer.

Flaming Hot - Read the worded problems and decide whether the answer to them will be solved by dividing by 100 or 1000, explaining why.

Mild	Hot
1) $36 \div 10 = 0.36$	1) $47 \div 100 = 0.47$
2) $12 \div 100 = 0.012$	2) $3.5 \div 100 = 0.35$
3) $264 \div 10 = 0.264$	3) $297 \div 1000 = 2.97$
4) $795 \div 10 = 7.95$	4) $79 \div 1000 = 0.079$
5) $634 \div 100 = 6.34$	5) $6.5 \div 100 = 0.065$
6) $3.2 \div 10 = 0.32$	6) $324 \div 1000 = 3.24$

Flaming hot:

In which of these problems will the answer be found by dividing by 1000? Calculate the answers.

1. 1000 people attend a football match. All tickets are the same price. The total received is £12 500. How much is each ticket?

2. A swimming pool attendant fills a swimming pool with 1000 equal buckets of water. There is 4520 litres in the pool. How much water is in each bucket?

3. A baker makes 1000 pies in a week. Each pie is sold for £1.45. All the pies are sold. How much does the baker take for all the pies?