


How does place value help us to multiply and divide by 10 and 100?

Resources that may help complete the work

Place Value Grid (physically moving numbers sometimes helps develop the understanding of this)

Ten Thousands, Thousands, Hundreds, Ten and Ones Place Value Grid 				
TTh	Th	H	T	O
Ten Thousands	Thousands	Hundreds	Tens	Ones
10 000	1000	100	10	1

Quick Overview and Prompt

<b>x100</b>	<b>x10</b>	<b>÷10</b>	<b>÷100</b>
Move 2 places to the left.	Move 1 place to the left.	Move 1 place to the right.	Move 2 places to the right.

Brief overview

Page 2 is for all pupils – we use magic 5 in school so children do not need to complete all questions if they have a good understanding.

Pages 3 – 5 show different levels of challenge. Questions gradually get harder as they move through the pages. Children do not need to complete all levels and may choose to start on page 4.

**Fluency (Magic 5)** – Children only need to complete 5 of the questions before checking and moving on to the next challenge. If they struggle they could complete the remaining 5.

# Multiplying Whole Numbers by 100

$82 \times 100 = \underline{\hspace{2cm}}$

$372 \times 100 = \underline{\hspace{2cm}}$

$66 \times 100 = \underline{\hspace{2cm}}$

$816 \times 100 = \underline{\hspace{2cm}}$

$14 \times 100 = \underline{\hspace{2cm}}$

$711 \times 100 = \underline{\hspace{2cm}}$

$58 \times 100 = \underline{\hspace{2cm}}$

$287 \times 100 = \underline{\hspace{2cm}}$

$42 \times 100 = \underline{\hspace{2cm}}$

$224 \times 100 = \underline{\hspace{2cm}}$

**Fluency (Magic 5)** – Children only need to complete 5 of the questions before checking and moving on to the next challenge. If they struggle they could complete another 5 until they have a secure understanding.

$1) 13 \times \underline{\hspace{1cm}} = 1300$

$2) \underline{\hspace{1cm}} \times 100 = 1800$

$3) 100 \times \underline{\hspace{1cm}} = 1500$

$4) \underline{\hspace{1cm}} \times 19 = 1900$

$5) 25 \times 100 = \underline{\hspace{1cm}}$

$6) \underline{\hspace{1cm}} \times 42 = 4200$

$7) 100 \times \underline{\hspace{1cm}} = 3600$

$8) \underline{\hspace{1cm}} \times 100 = 5500$

$9) 100 \times \underline{\hspace{1cm}} = 3000$

$10) \underline{\hspace{1cm}} \times 28 = 2800$

$11) 100 \times \underline{\hspace{1cm}} = 7400$

$12) \underline{\hspace{1cm}} \times 100 = 3900$

## Multiply by 100

1a. Draw the counters to complete the calculation  $100 \times 34$ .

Th	H	T	O
		● ● ●	● ● ● ●

Th	H	T	O



VF

2a. Match each place value chart with the correct calculation.

A.

Th	H	T	O
● ●	● ● ● ● ● ●		

B.

Th	H	T	O
● ● ● ● ●	● ● ●		

$$26 \times 100$$

$$100 \times 53$$



VF

3a. Which statement is correct?

Th	H	T	O
● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●		

A.  $89 \times 100 > 98 \times 100$

B.  $89 \times 100 < 90 \times 100$



VF

4a. True or false?  $67 \times 100 =$

Th	H	T	O
● ● ● ● ● ● ●	● ● ● ● ● ●		



VF

## Multiply by 100

1a. Complete the calculation below and draw matching counters on the place value chart.

Th	H	T	O

$$4 \square \times 100 = 4 \square 0 0$$



PS

2a. Julia needs 1,781 pens for her company. They come in boxes of 100. She has used a place value chart for support.



I need to order 17 boxes.

Th	H	T	O
●	● ● ● ● ● ● ●		

Is Julia correct? Explain your answer.



R

3a. Peter has used a place value chart to display the following statement.

Th	H	T	O
●	● ● ● ● ● ● ●		

$$>$$

Th	H	T	O
● ● ●	●		

$$17 \times 100 > 41 \times 100$$

Is he correct? Explain your reasoning. Find and correct any errors.



R

## Multiply by 100

5a. Draw the counters to complete the calculation  $100 \times 46$ .

Th	H	T	O



VF

6a. Match each calculation with the correct answer.

A.  $13 \times 100$        $300$

B.  $30 \times 100$        $1,300$

C.  $3 \times 100$        $3,000$



VF

7a. Which statements are correct?

A.  $42 \times 100 > 24 \times 100$

B.  $16 \times 100 = 100 \times 16$

C.  $51 \times 100 < 19 \times 100$



VF

8a. True or false?

$$100 \times 91 = 19,000$$



VF

## Multiply by 100

4a. Use the digit cards to complete the calculations. You can use each card more than once.



$$6 \square \times 100 = 6 \square 0 0$$

$$\square 2 \times 100 = \square \square \square 0$$

Investigate the possible calculations.



PS

5a. Emily is going to order some pencils in boxes of 100. There are 1,850 pupils in the whole school.



I need to order 18 boxes.

Is Emily correct? Explain your answer.



R

6a. Ruby has completed the statement below.

$$53 \times 100 < 51 \times 100$$

Is she correct? Explain your reasoning. Find and correct any errors.



R

## Multiply by 100

9a. Complete the calculations below.

A.	$54 \times 10 \times 10 =$
B.	$45 \text{ ones} \times 100 =$
C.	$84 \text{ ones} \times 10 \times 10 =$



VF

10a. Match each calculation with the correct answer.

A.	$4 \text{ tens} \times 100$	$800$
B.	$8 \text{ tens} \times 100$	$4,000$
C.	$8 \times 10 \times 10$	$8,000$



VF

11a. Which statements are correct?

- A.  $6 \text{ tens} \times 100 > 9 \text{ ones} \times 100$
- B.  $45 \text{ ones} \times 100 = 100 \times 45$
- C.  $7 \text{ tens} \times 100 < 89 \times 100$



VF

12a. True or false?

$$5 \text{ tens and } 6 \text{ ones} \times 10 \times 10 = 6,500$$



VF

## Multiply by 100

7a. Use the digit cards to complete the calculations. You can use each card more than once.



$$\square \times 8 \times 100 > 4 \times \square \square \times 100$$

$$\square \times 6 \times 10 \times 10 < 3 \times \square \square \times 100$$

Investigate the possible calculations.



PS

8a. Theresa is going to order rulers for the whole school. Each ruler costs 10p and they come in packs of 10.



I need 793 rulers so I will spend 800p.

Is Theresa correct? Explain your answer.



R

9a. Naila has completed the statement below.

$$7 \text{ tens and } 5 \text{ ones} \times 10 \times 10 > 6 \text{ tens and } 18 \text{ ones} \times 100$$

Is she correct? Explain your reasoning. Find and correct any errors.



R