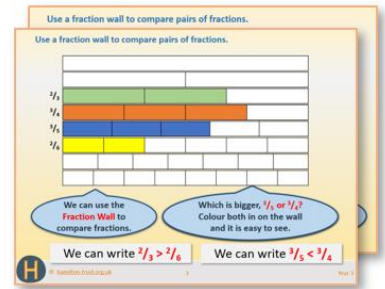


# Week 7, Day 1

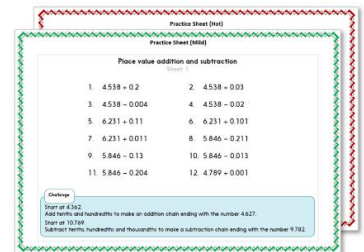
## Multiply and divide decimals by 10, 100 and 1000.

Each day covers one maths topic. It should take you about 1 hour or just a little more.

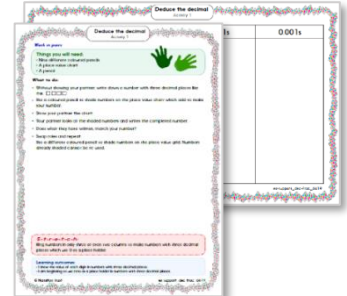
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



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. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation...**

## Learning Reminders

### Multiply and divide by 10, 100 and 1000.

We can use a place value grid to multiply  $4.52 \times 10$ , then  $4.52 \times 100$ , then  $4.52 \times 1000$ .

1000s	100s	10s	1s	0.1s $\frac{1}{10}$ s	0.01s $\frac{1}{100}$ s
			4	5	2
		4	5	2	
	4	5	2		
4	5	2	0		

When we **multiply** by 10, 100 and 1000, the digits all move together, 1, 2, or 3 place value columns to the **left**.

## Learning Reminders

### Multiply and divide by 10, 100 and 1000.

We can use a place value grid to divide  $2340 \div 10$ , then  $2340 \div 100$ , then  $2340 \div 1000$ .

1000s	100s	10s	1s	0.1s $\frac{1}{10}$ s	0.01s $\frac{1}{100}$ s
2	3	4	0		
	2	3	4		
		2	3	4	
			2	3	4

When we **divide** by 10, 100 and 1000, the digits move together, 1, 2, or 3 place value columns to the **right**.

The final zero is not needed after the decimal point.

But be careful with numbers like 507 where the zero is not at the end:

$$507 \div 100 = 5.07 \text{ NOT } 5.7$$

## Practice Sheet Mild

### Multiply and divide by 10, 100 and 1000

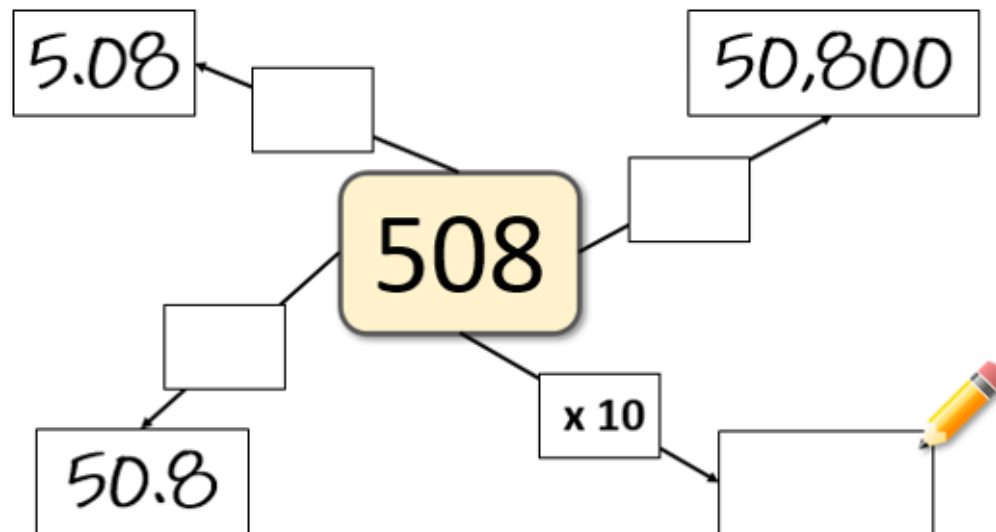
A  $245 \times 10$        $245 \times 100$        $245 \div 10$        $245 \div 100$

B  $54.3 \times 10$        $54.3 \times 100$        $54.3 \div 10$        $54.3 \div 100$

C  $3.47 \times 10$        $3.47 \times 100$        $3.47 \times 1000$

D  $7640 \div 10$        $7640 \div 100$        $7640 \div 1000$

### Challenge



# Place value grid

1000s	100s	10s	1s	● 0.1s	$\frac{1}{10}$ s	0.01s	$\frac{1}{100}$ s

## Practice Sheet Hot

### Multiply and divide by 10, 100 and 1000

A

$3.47 \times 10$

$3.47 \times 100$

$3.47 \times 1000$

B

$7640 \div 10$

$7640 \div 100$

$7640 \div 1000$

C

$845 \times \underline{\hspace{2cm}} = 845,000$

$845 \div \underline{\hspace{2cm}} = 8.45$

D

$\underline{\hspace{2cm}} \times 10 = 36.2$

$\underline{\hspace{2cm}} \div 100 = 36.2$

E

$24.5 \times 10 \div 100 \times 1000 \div \underline{\hspace{2cm}} = 24.5$

#### Challenge

Write your own chain of at least four steps which starts and ends on the same number, like Section G.