Week 7, Day 4
Use grid and short multiplication to multiply 4-digit by 1-digit numbers.

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.

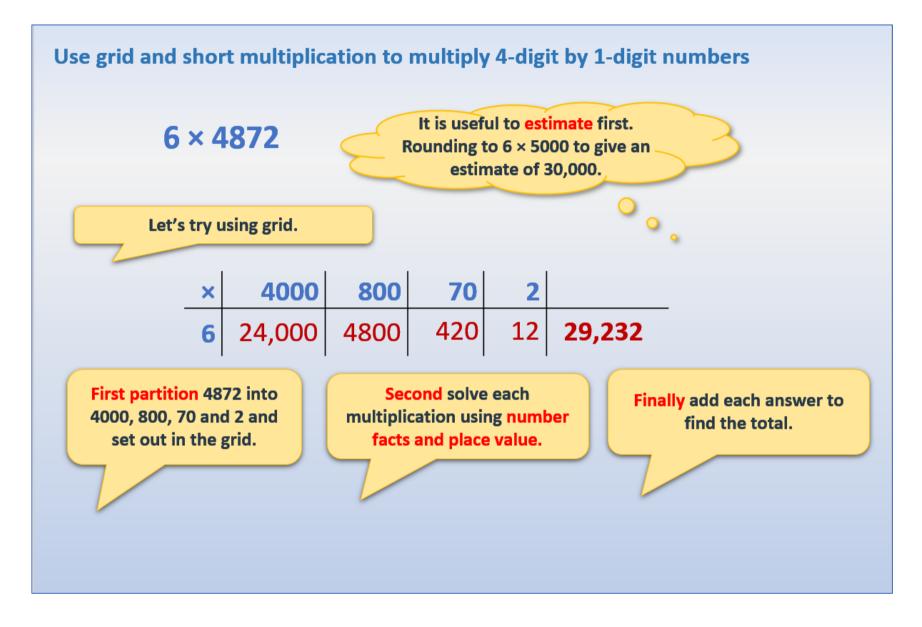3. Finding it tricky? That's OK… have a go with a grown-up at **A Bit Stuck?**

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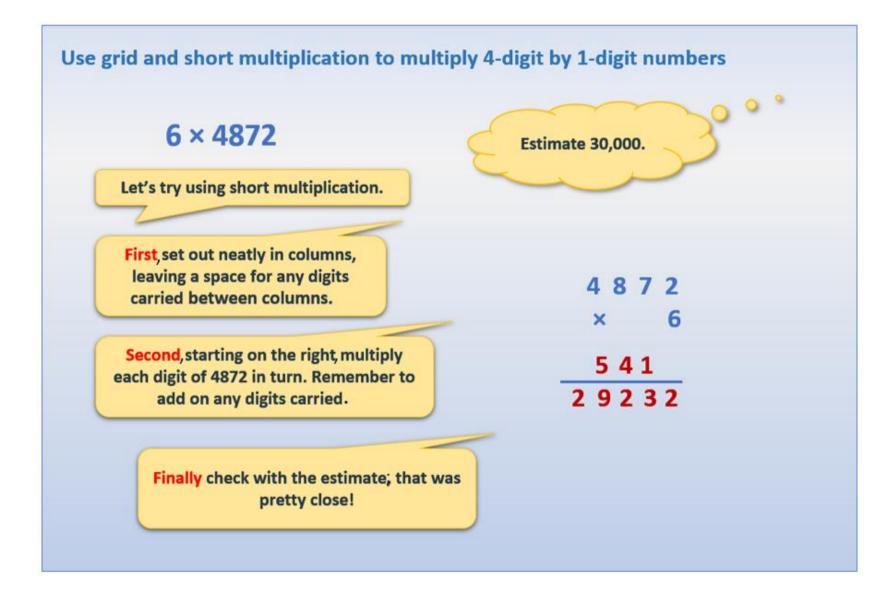
Learning Reminders

Use grid and short multiplication to multiply 4-digit by 1-digit numbers

6 × 4872

It is useful to **estimate** first.
Rounding to 6 × 5000 to give an
estimate of 30,000.

Let's try using grid.

×	4000	800	70	2	
6	24,000	4800	420	12	**29,232**

First partition 4872 into
4000, 800, 70 and 2 and
set out in the grid.

Second solve each
multiplication using **number
facts and place value.**

Finally add each answer to
find the total.

Learning Reminders

Use grid and short multiplication to multiply 4-digit by 1-digit numbers

6 × 4872

Estimate 30,000.

Let's try using short multiplication.

First, set out neatly in columns, leaving a space for any digits carried between columns.

Second, starting on the right, multiply each digit of 4872 in turn. Remember to add on any digits carried.

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  4 8 7 2
×       6
  5 4 1
2 9 2 3 2
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Finally check with the estimate; that was pretty close!

Practice Sheet Mild
Grid multiplication

Estimate which of these multiplications will give answers:
- less than 1000.
- between 1000 and 3000.
- between 3000 and 5000.
- between 5000 and 7000.
- greater than 7000.

1. 3×642
2. 5×527
3. 6×253
4. 3×275
5. 8×524
6. 3×314
7. 7×823
8. 9×851

Now use grid multiplication to work out the answers!

Challenge

Which of these two multiplications do you think will have the biggest answer?
Check to see if you are right.

9. 3×5364

10. 6×2348

Practice Sheet Hot
Short multiplication

Estimate first, then use short multiplication to find the exact answers.

1. 4×6234
2. 7×5382
3. 8×4734
4. 5×7856
5. 6×8431
6. 9×5408
7. 3×8796
8. 7×6857

Challenge

Write a different multiplication with an answer between 20,000 and 30,000.
Write a different multiplication with an answer between 50,000 and 60,000.