

Thursday - maths

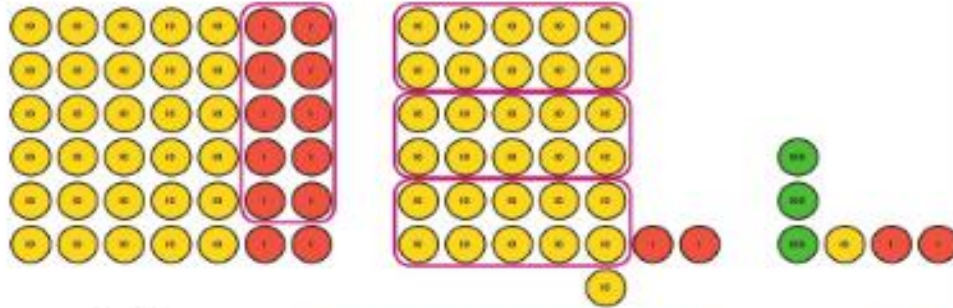
Power up



- 1** a) There are 6 rows of seats in each section. Each row has 52 seats.
How many seats are there in a section?
- b) There are 3 sections in the stadium.
How many seats are there in total?

Power up answer

a) There are 6 rows of seats in each section.



$$\begin{array}{r} 52 \\ \times 6 \\ \hline 312 \end{array}$$

I wonder if I could use this method to multiply a 3-digit number by a 1-digit number.



$$6 \times 52 = 312$$

There are 312 seats in a section.



b) There are 3 sections in the stadium. Each section contains 312 seats.



$$\begin{array}{r} 312 \\ \times 3 \\ \hline 936 \end{array}$$

$$312 \times 3 = 936$$

There are 936 seats in total.

LO: To use short multiplication

We have looked at written methods for short multiplication by 2 digits x 1 digit, now we are going to look at multiplication with 3 digits x 1 digit.

STILL ...

Remember to put the digits in the correct place value columns

Remember to start to multiply the ones by the divisor first

Remember to carry if you need to

Remember to add in any numbers carried when you multiply the tens by the divisor

LO: To use short multiplication

$$145 \times 3$$

	H	T	O
x			

Notice that here you need to carry twice!

LO: To use short multiplication

$$232 \times 7$$

	H	T	O
x			

**Notice that here
you need to carry
across into the
thousand column!**

LO: To use short multiplication

347x9

	H	T	O
x			

LO: To use short multiplication

Is this correct? Think... why/why not?

	3	1	3
x			3
	9	3	5

LO: To use short multiplication

	3	1	3
x			3
	9	3	5

**First step: $3 \times 3 = 9$
NOT 5**

LO: To use short multiplication

- Line up digits carefully
- Multiply ones
- Multiply tens
- Show numbers carried
- Remember to add in numbers carried

LO: To use short multiplication

<u>Fluency 1</u>	<u>Fluency 2</u>
24x4	142 x 4
21x3	225 x 5
27x5	143 x 3
46x4	658 x 8
23x6	715 x 6
52x3	553 x 4
Mark your own, if you get them all right move onto Fluency 2 . If you get more than 1 wrong speak to an adult for help then complete the questions below.	Mark your work If you get them all right move on to reasoning If you get more than 1 wrong speak to an adult for help then complete the questions below.
43x3	345 x 4
17x7	195 x 5
61x6	438 x 9
28x4	844 x 6
91x8	275 x 3

Check Fluency 1 answers on next slide!

LO: To use short multiplication

Fluency 1

$$24 \times 4 = 96$$

$$21 \times 3 = 63$$

$$27 \times 5 = 135$$

$$46 \times 4 = 184$$

$$23 \times 6 = 138$$

$$52 \times 3 = 156$$

Now if you are mostly correct, carry on with your fluency, then move on to reasoning questions.

If you are unsure, then ask for some help and try a few more on your own.

Fluency 2

$$142 \times 4 = 568$$

$$225 \times 5 = 1125$$

$$143 \times 3 = 429$$

$$658 \times 8 = 5264$$

$$715 \times 6 = 4290$$

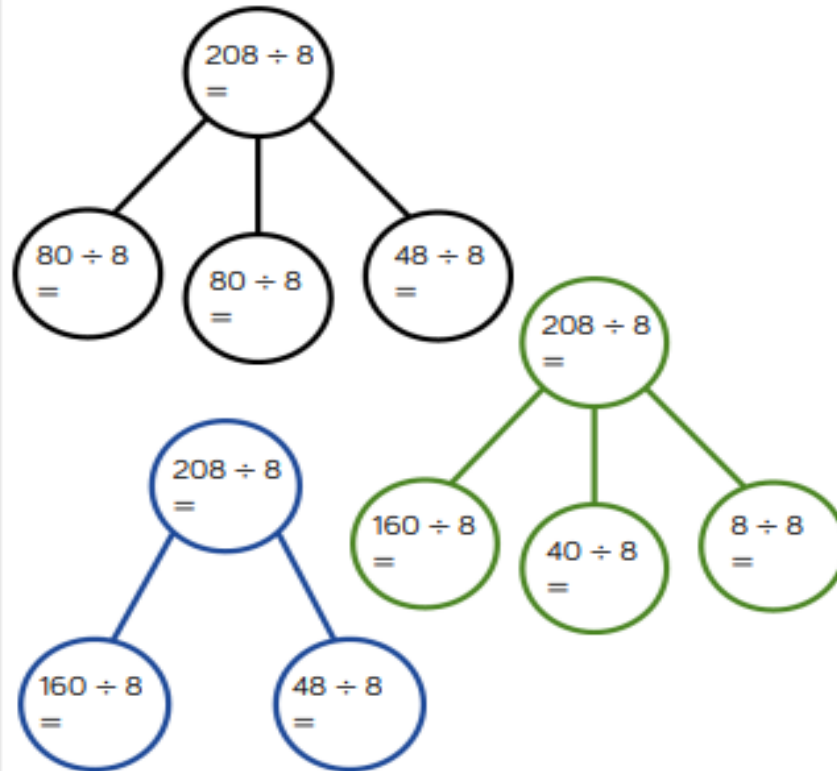
$$553 \times 4 = 2212$$

LO: To use short multiplication

Complete the reasoning question

Dexter is calculating $208 \div 8$ using part-whole models.

Can you complete each model?



How many part-whole models can you make to calculate $132 \div 4$?

LO: To use short multiplication Answers

Rest of Fluency 1 and

$$43 \times 3 = 129$$

$$17 \times 7 = 119$$

$$61 \times 6 = 366$$

$$28 \times 4 = 112$$

$$91 \times 8 = 728$$

Fluency 2

$$345 \times 4 = 1380$$

$$195 \times 5 = 975$$

$$438 \times 9 = 3942$$

$$844 \times 6 = 5064$$

$$275 \times 3 = 825$$

Reasoning

$$208 \div 8 = 26$$

$$80 \div 8 = 10$$

$$48 \div 8 = 6$$

$$160 \div 8 = 20$$

$$40 \div 8 = 5$$

$$8 \div 8 = 1$$

Children can then make a range of part-whole models to calculate $132 \div 4$

e.g.

$$100 \div 4 = 25$$

$$32 \div 4 = 8$$