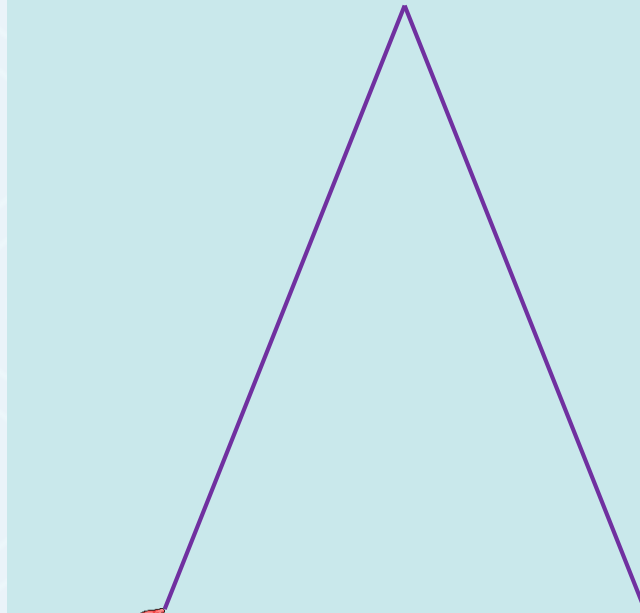
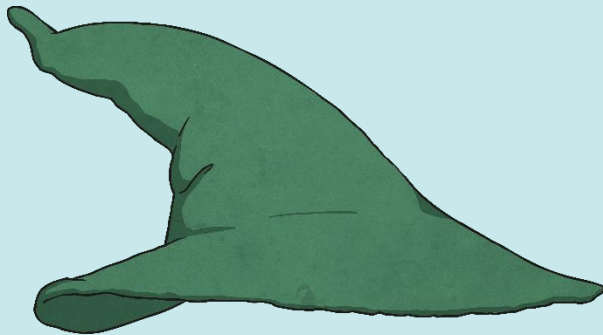


Year 3 Maths

Mental Multiplication
Method and questions to try

Draw the Hat to Find the Fact



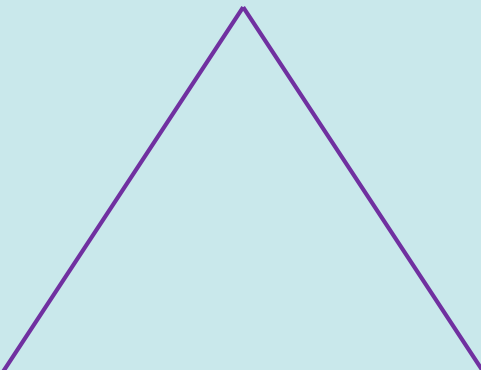
It's Magic!

Multiplication Magic

60 × 4 =

Draw the hat to find the facts to calculate.

Multiplication Magic


$$\underline{6}0 \times \underline{4} = 6 \times 4 = 24$$

Use your multiplication facts to calculate.

Multiplication Magic

$$\underline{60} \times \underline{4} =$$

If we know 6×4
...then we know
 60×4 !

Use your multiplication facts to calculate.

Multiplication Magic

$$\underline{6}0 \times \underline{4} =$$

$$\begin{aligned} 6 \times 4 &= 24 \\ 60 \times 4 &= 240 \end{aligned}$$

How do we know this?

The Maths Behind the Magic

How does Multiplication Magic work?

$$40 \times 3 =$$

We look for the facts and ignore the tens, so we calculate:

$$4 \times 3 = 12$$

However, 4 really means 40, not 4. Therefore, we need to move the digits one place to the left and add a zero as a place holder.

$$\text{So } 40 \times 3 = 120$$

H	T	O
	1	0

Multiplication Magic

$40 \times 5 = 4 \times 5 = 20$

When we calculate 4×5 , the answer already ends in a zero.

Does this change anything?

Multiplication Magic

$$\underline{40} \times \underline{5} =$$

$$\begin{array}{l} 4 \times 5 = 20 \\ 40 \times 5 = 200 \end{array}$$

$$\begin{array}{ccccccc} & & & & \text{H} & \text{T} & \text{O} \\ \underline{40} & \times & \underline{5} & = & \underline{20} & & \end{array}$$

Now It's Your Turn To Use Multiplication Magic



Now you try:



$$50 \times 8 = ?$$

$$3 \times 60 = ?$$

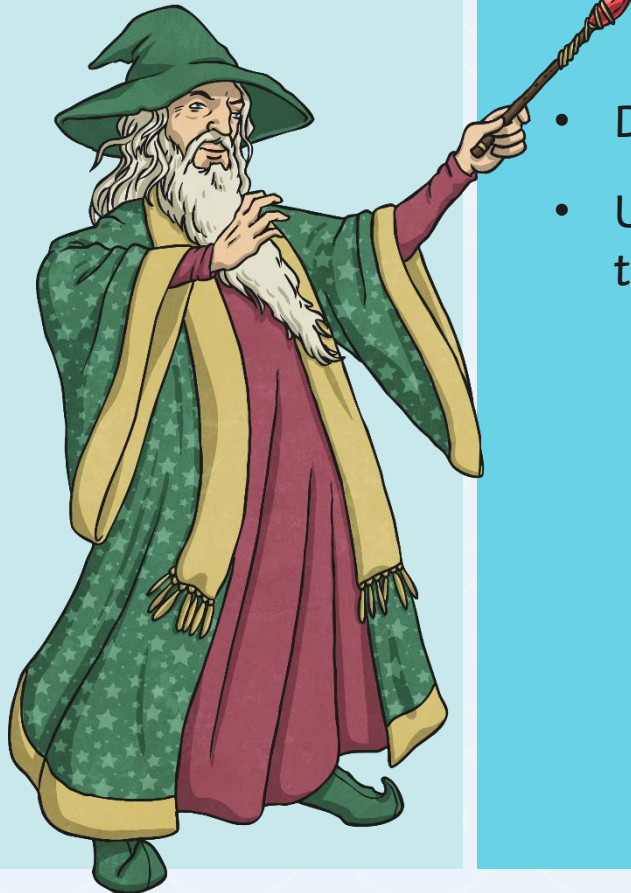
$$70 \times 4 = ?$$

Challenge:

$$30 \times 40 = ?$$

$$20 \times 80 = ?$$

$$90 \times 30 = ?$$



Remember

- Draw the hat.
- Use your multiplication facts to calculate.

$$5 \times 8 = 40$$

$$50 \times 8 = 400$$

$$50 \times 80 = 4000$$

$$500 \times 80 = 40000$$