Maths

Multiplication and Division

Multiplication Magic

Aim

- I can multiply multiples of 10 using Multiplication Magic.

Success Criteria

- I can draw the wizard's hat to join the facts.
- I can calculate the facts using multiplication tables.

Beat the Clock

Your teacher will tell you which columns to complete.
The stopwatch will stop after **5 minutes**.

If you finish before the clock, shout '**finished!**' and your teacher will tell you your time. Write this at the top of the sheet.

When your work is marked your teacher will give you a score.

If you didn't get all the questions right, next time focus on improving your score.

If you got them all correct - well done! Next time try to improve your time or choose a more tricky multiplication table.

Remember that you are racing against yourself. Don't worry about what your friends are doing!

Beat the Clock

Beat the Clock

Score: _____ Time: _____

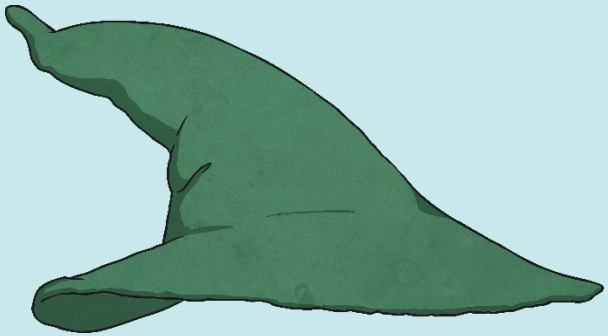
x	3	4	8	5	10
4					
2					
6					
12					
3					
7					
1					
5					
11					
10					
9					
8					

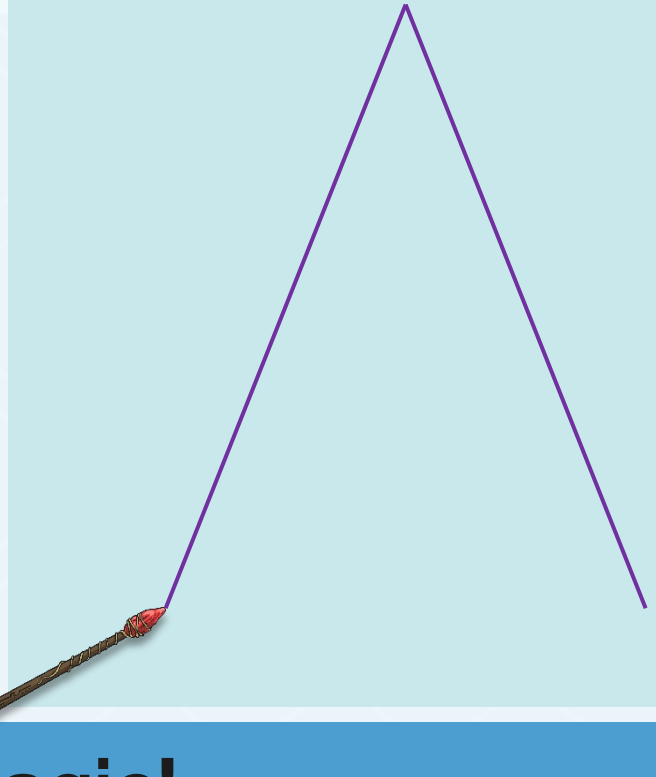
My target for next time is

Multiplication Magic

Multiplication Magic is special trick that makes multiplying numbers in the 10× table really easy.

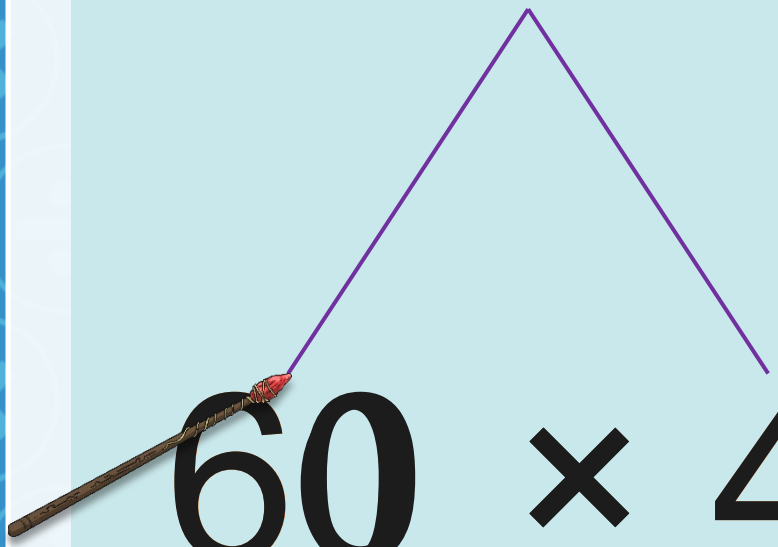
Draw the Hat to Find the Fact





It's Magic!

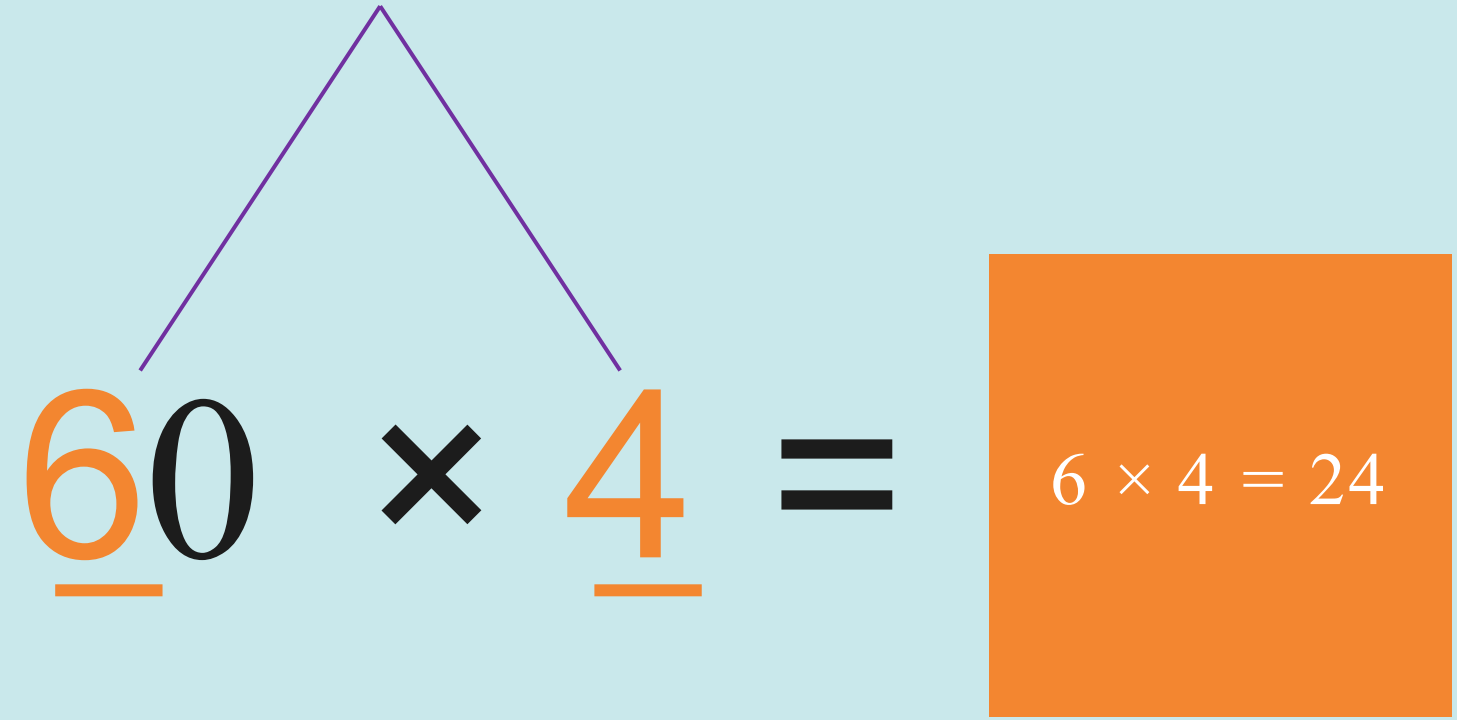
Multiplication Magic



$60 \times 4 =$

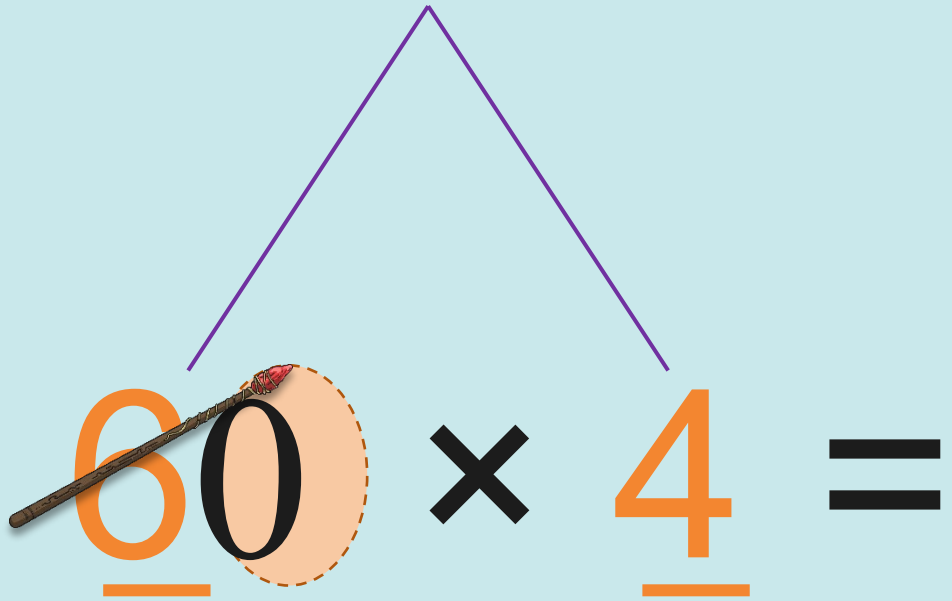
Draw the wizard's hat to find the facts to calculate.

Multiplication Magic



Use your multiplication facts to calculate.

Multiplication Magic

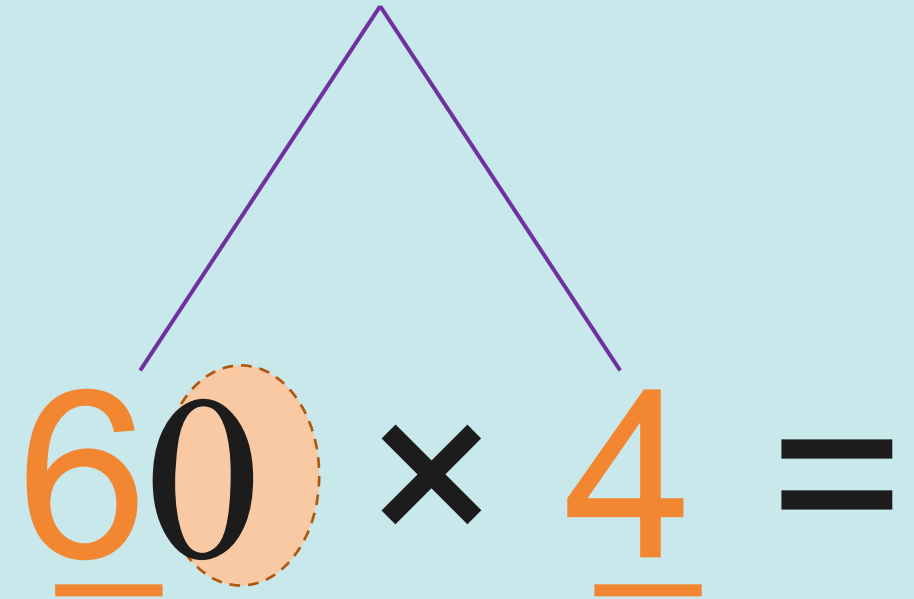


If we know 6 × 4

..then we know
60 × 4!

Use your multiplication facts to calculate.

Multiplication Magic



$6 \times 4 = 24$

$60 \times 4 = 240$

How do we know this?

The Maths Behind the Magic

How does Multiplication Magic work?

40 × 3 =

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

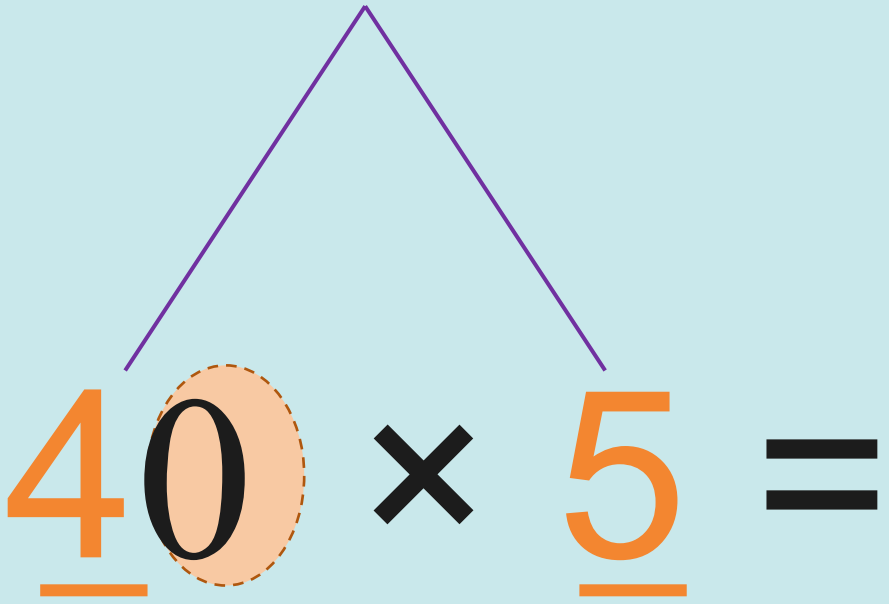
4 × 3 = 12

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.

So 40 × 3 = 120

H	T	O
	1	2 0

Multiplication Magic

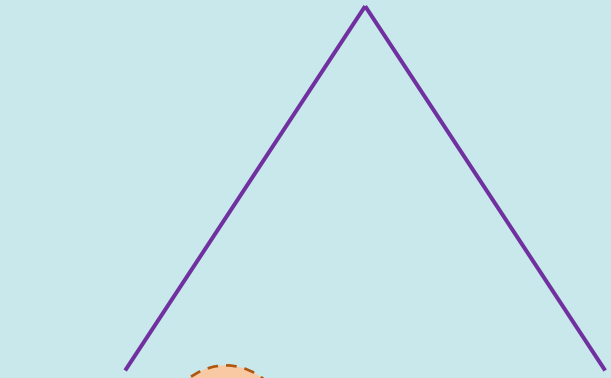


$4 \times 5 = 20$

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

Does this change anything?

Multiplication Magic



$40 \times 5 =$

$4 \times 5 = 20$

$40 \times 5 = 200$

H	T	O
	2	0

$40 \times 5 = 20$

Now It's Your Turn To Use Multiplication Magic

Whole Class

Now you try :

50 × 8 = ?

3 × 60 = ?

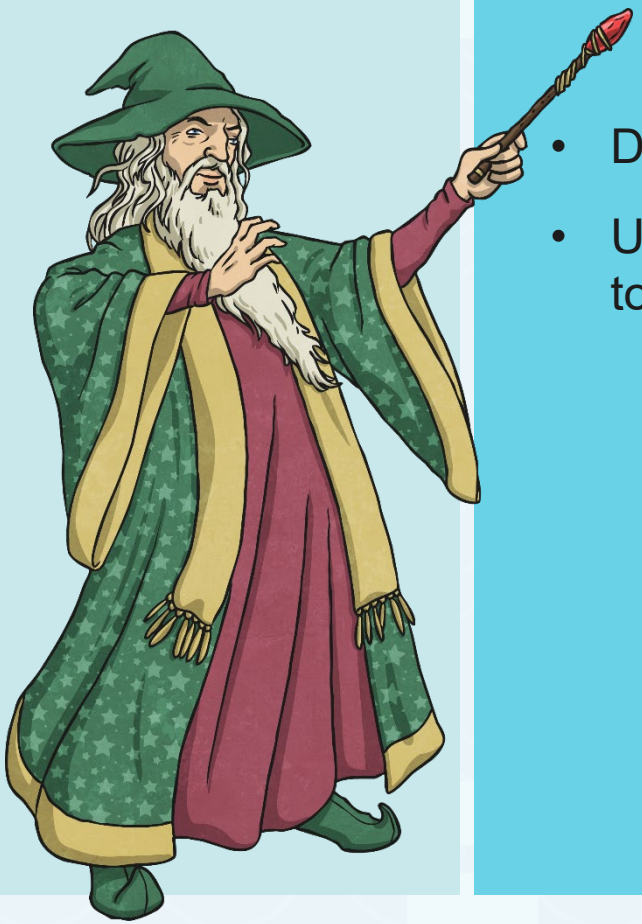
70 × 4 = ?

Challenge:

30 × 40 = ?

20 × 80 = ?

90 × 30 = ?



Remember

- Draw the wizard's hat.
- Use your multiplication facts to calculate.

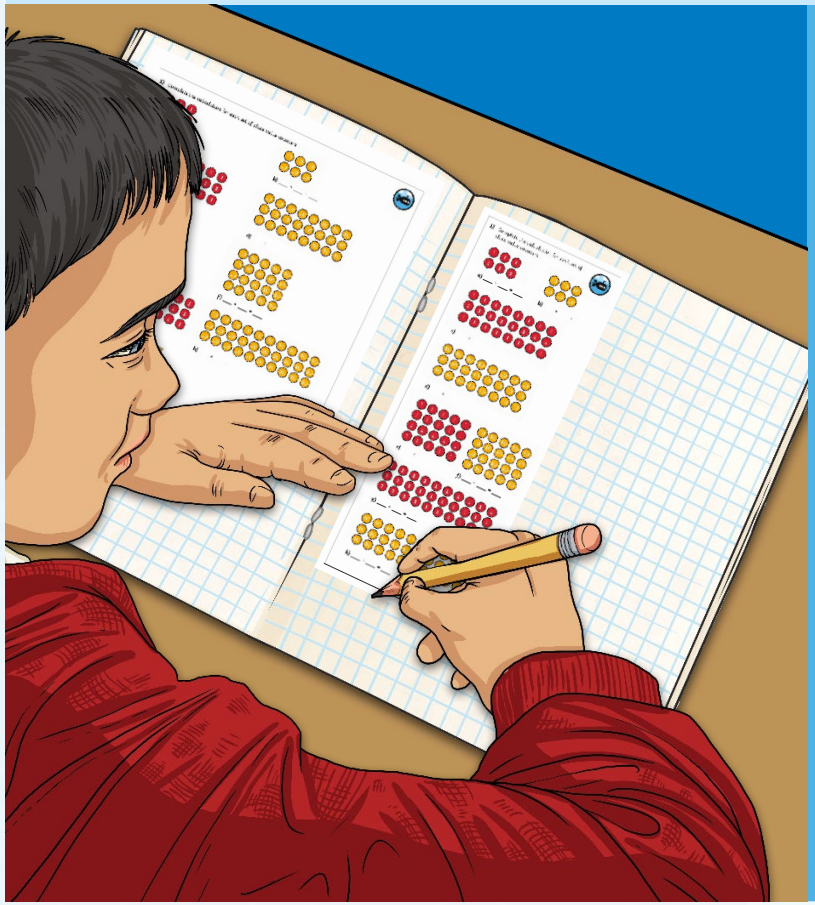
5 × 8 = 40
50 × 8 = 400
50 × 80 = 4000
500 × 80 = 40000

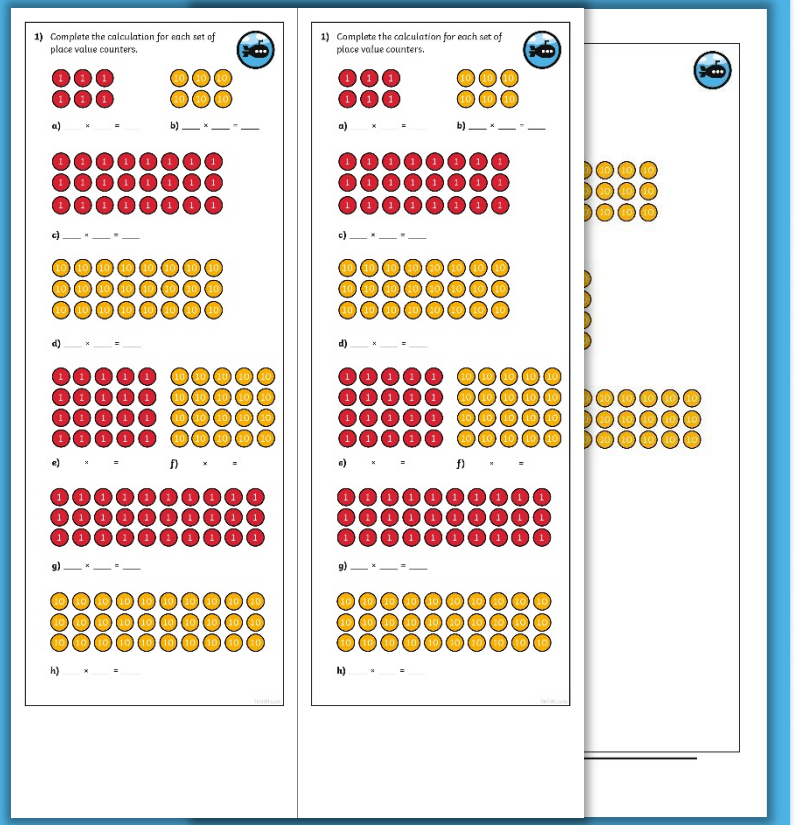
Multiplication Magic Activity

40 × 3	30 × 4	30 × 3(	8 × 60 =
80 × 4	3 × 70	3 × 100	30 × 11 =
8 × 30	90 × 8	1 × 40(	11 × 4 =
20 × 3	120 × 4	6 × 30	30 × 50 =

Diving into Mastery

Dive in by completing your own activity!





What Is Multiplication Magic?

How do you use the Multiplication Method? Explain to your partner.

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