

Multiplication Magic



Beat the Clock



Look at the sheet 'Beat the clock' and complete. Set your timer for 5 minutes

If you finish before the clock, shout '**finished!**' and write the time at the top of the sheet.

With a calculator, mark your work and give yourself 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					

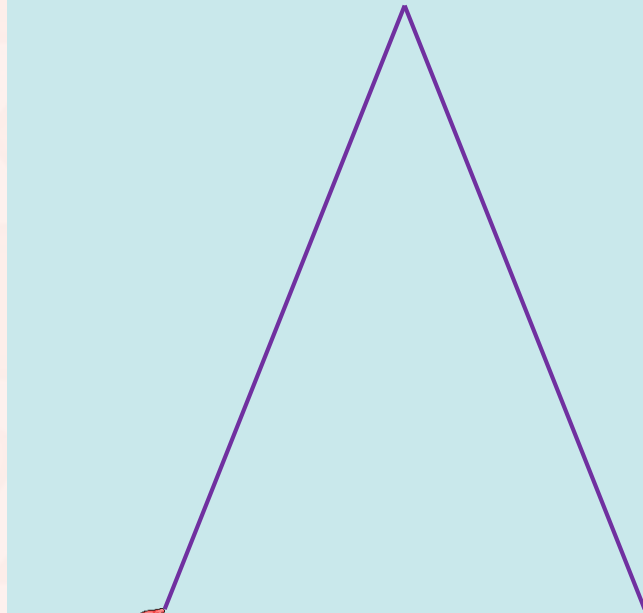
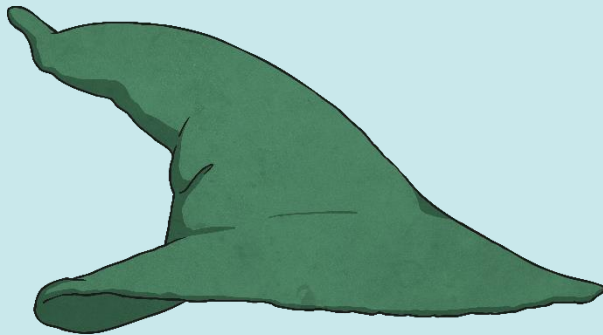
My target for next time is _____

Multiplication Magic

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

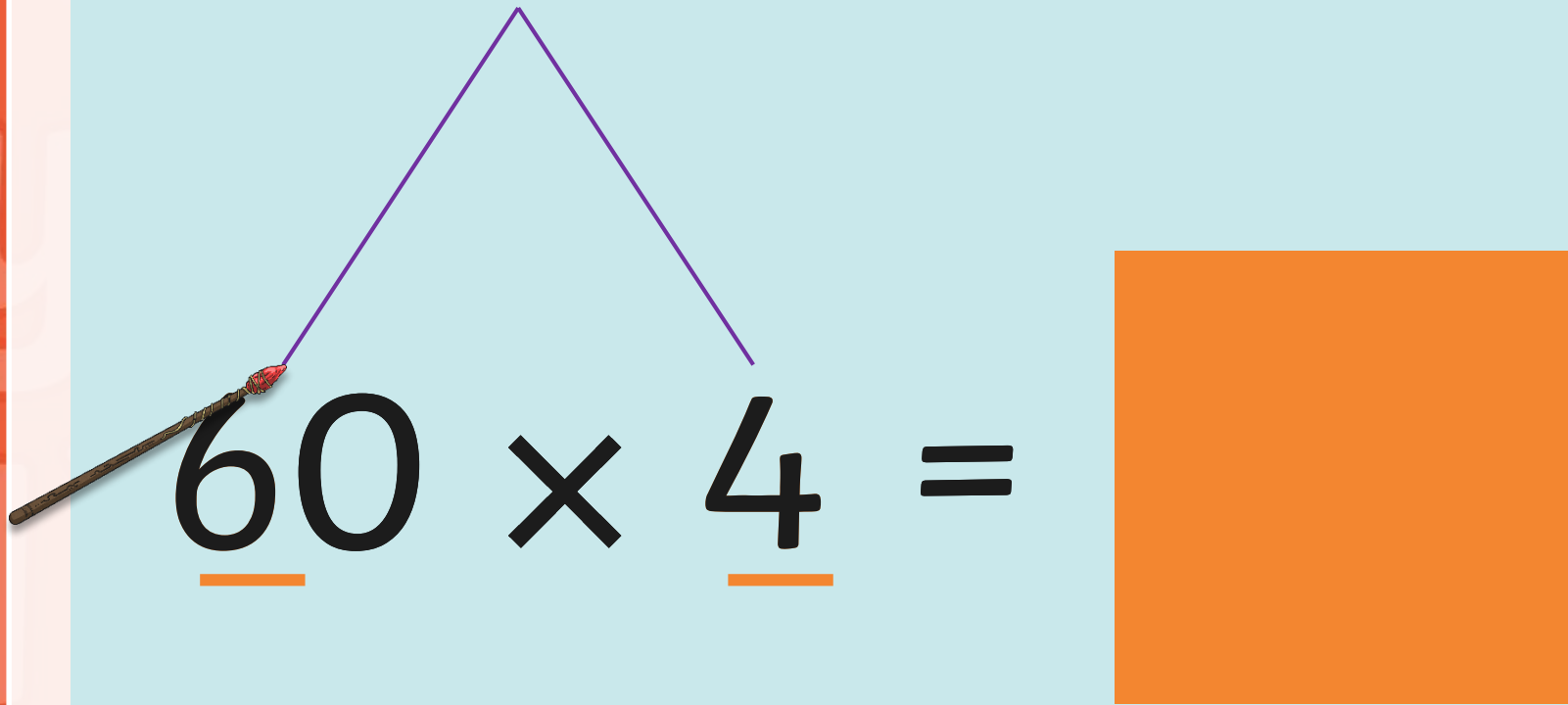


Draw the Hat to Find the Fact



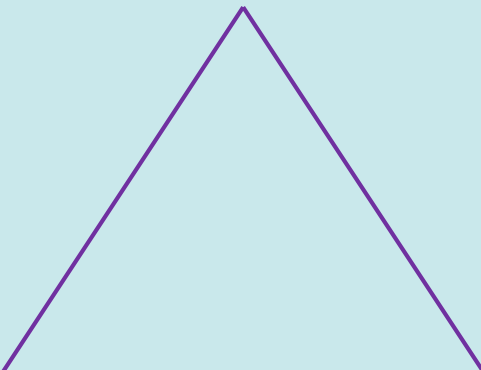
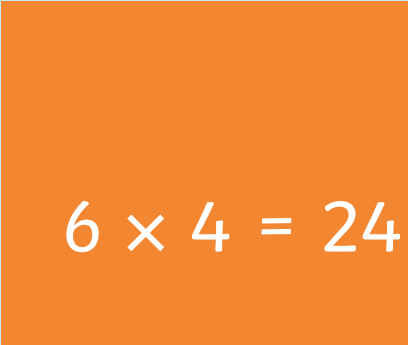
It's Magic!

Multiplication Magic



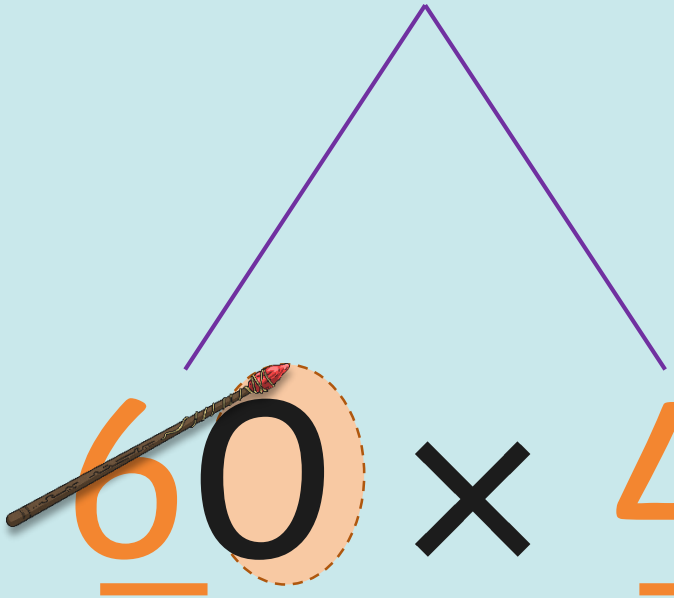
Draw the wizard's hat to find the facts to calculate.

Multiplication Magic


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

$$6 \times 4 = 24$$

Use your multiplication facts to calculate.

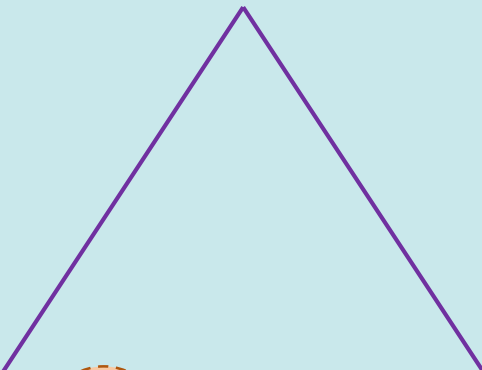
Multiplication Magic


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

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

Use your multiplication facts to calculate.

Multiplication Magic


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

$$\begin{array}{r} 6 \times 4 = 24 \\ 60 \times 4 = 240 \end{array}$$

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:

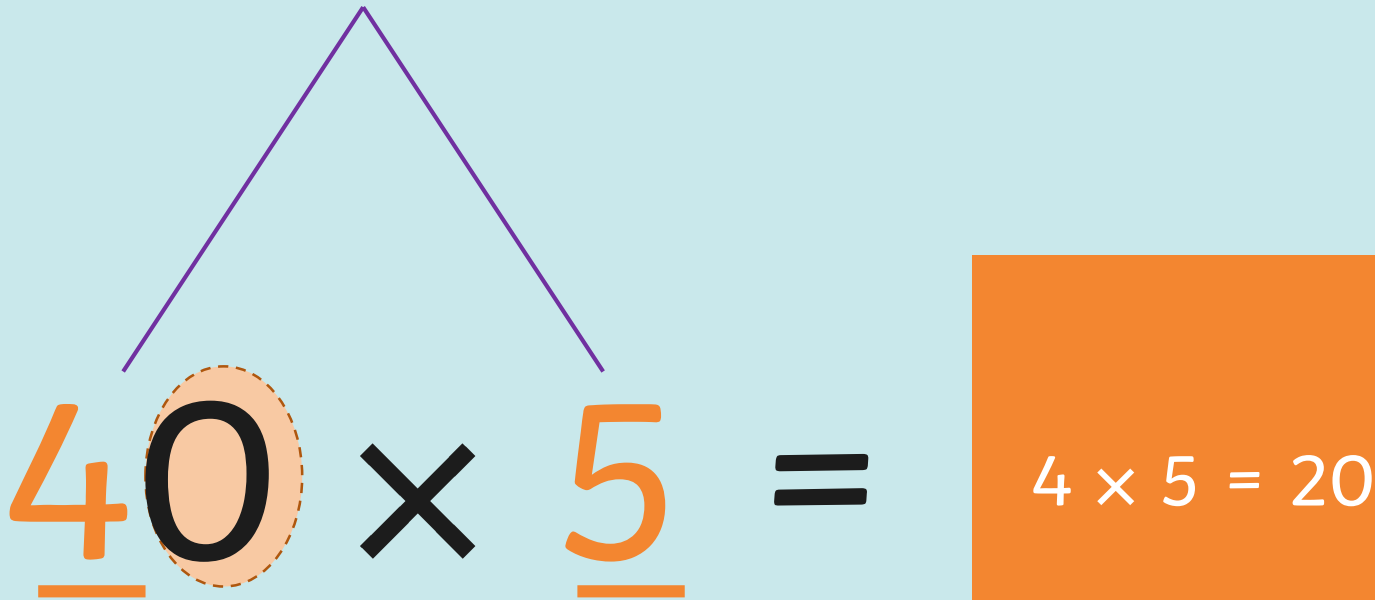
$$4 \times 3 = 12$$

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

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

H	T	O
	1	0

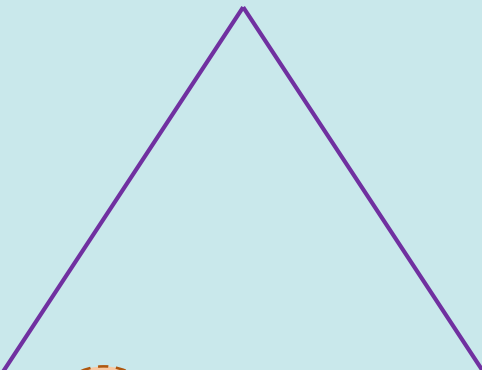
Multiplication Magic


$$\underline{40} \times \underline{5} = \boxed{4 \times 5 = 20}$$

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

Does this change anything?

Multiplication Magic


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

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

$$\begin{array}{c} \text{H} \quad \text{T} \quad \text{O} \\ 40 \times 5 \quad 20 \end{array}$$

=

Now It's Your Turn



Now you try:



$$50 \times 8 = ?$$

$$3 \times 60 = ?$$

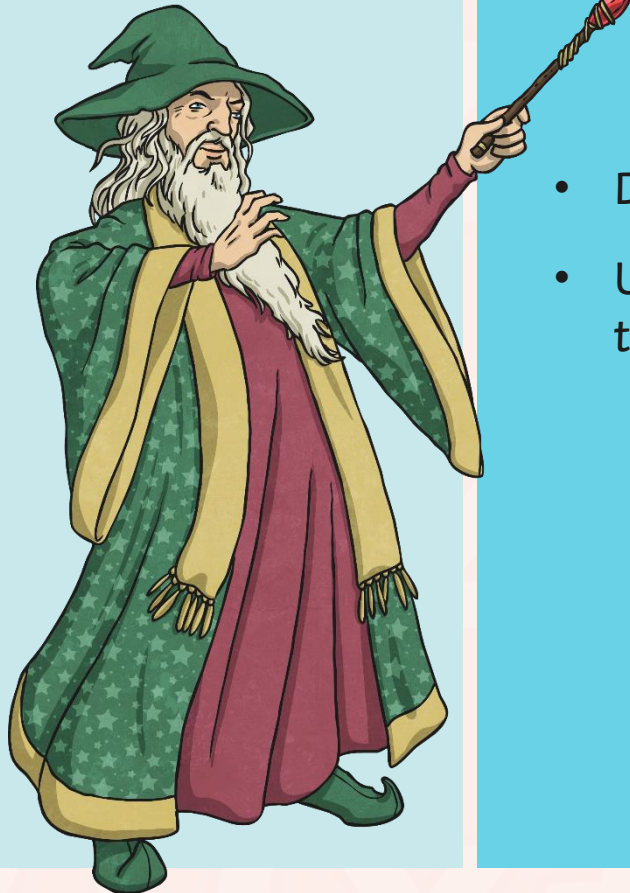
$$70 \times 4 = ?$$

Challenge:

$$30 \times 40 = ?$$

$$20 \times 80 = ?$$

$$90 \times 30 = ?$$



Remember

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

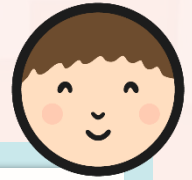
$$5 \times 8 = 40$$

$$50 \times 8 = 400$$

$$50 \times 80 = 4000$$

$$500 \times 80 = 40000$$

Multiplication Magic Activity



$40 \times$



$30 \times$



$30 \times$



$8 \times 60 =$



$80 \times$



$3 \times$



3×1



$30 \times 11 =$



$8 \times$



$90 \times$



1×4



$11 \times 4 =$



$20 \times$



120



$6 \times$



$30 \times 50 =$



What Is Multiplication Magic?



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



Aim



- To 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.

twinkl