



Key Instant Recall Facts

Year 6 - Autumn 2

I can apply place value to times tables.

By the end of this term, children should be able to quickly find answers to questions like the ones below, applying their knowledge of times tables and place value.

$4 \times 7 = 28$

$0.4 \times 7 = 2.8$

$0.4 \times 0.7 = 0.28$

$0.04 \times 7 = 0.28$

$40 \times 7 = 280$

$40 \times 70 = 2800$

$400 \times 70 = 28,000$

$400 \times 700 = 280,000$

$8 = 4 \times 2$

$0.8 = 0.4 \times 2$

$0.08 = 0.4 \times 0.2$

$0.08 = 0.04 \times 2$

$80 = 40 \times 2$

$800 = 40 \times 20$

$8000 = 400 \times 20$

$80,000 = 400 \times 200$

$8 \div 2 = 4$

$0.8 \div 2 = 0.4$

$0.08 \div 2 = 0.04$

$80 \div 2 = 40$

$800 \div 20 = 40$

$8000 \div 20 = 400$

$80,000 \div 200 = 400$

Children should be able to answer the questions in any order, including with the calculations written either side of the equals sign and missing number questions,

e.g. $300 \times \square = 1200$

$40 = \square \div 11$

$7000 = \square \div 12$

$\square 6 = \square \times 12$

Useful Questions

What is 120 **multiplied by** 6?

What are 700 **lots of** 11?

What is 0.7 **times** 60?

What is 8400 **divided by** 12?

What is the **product** of 0.5 and 0.7?

Top Tips:

The secret to success is to practise little and often - could you practise on the way to school or during a car journey? This relies heavily upon a sound knowledge of all the times table fact, so if there are particular facts your child finds difficult focus on those and adjust the place value.

Use what you already know: Look for the times table facts you know, work that part out and then adjust the place value,

e.g. 0.6×900 If I know that $6 \times 9 = 54$, then I know that $0.6 \times 9 = 5.4$ (10 times smaller) and $0.6 \times 900 = 540$ (100 times bigger)

Use fact families: For example, to find $5.6 \div 0.8$

If I know that $8 \times 7 = 56$, then I know that $5.6 = 0.8 \times 7$ (10 times smaller) so I know that $5.6 \div 0.8 = 7$.

Make it fun!

- Play number ping pong! Start by saying 'ping', child replies with 'pong'. Repeat with times tables facts i.e. say '6' and they reply '7.2' (for multiplying by 1.2)
- Test the Parent - Your child can make up their own tricky division questions for you, e.g. What is 13.2 divided by 12? They need to be able to multiply to create these questions.
- Timed Games: How well are you doing? How many questions can you answer in 2 minutes? Can you beat your own record?
- Use any of the games for the times tables and make it 10 or 100 times bigger or smaller.

Deepen and apply

- $12,000 \times 0.9 = 10,800$. How many different number stories can you write to fit this equation?
- If I know that $7 \times 9 = 63$, how many other facts can I work out by adjusting the place value?
- $\square \times 70 = \square \times 0.7$ How many ways can you make this true?
- Captain Conjecture says that multiplying a number by 1.2 is the same as multiplying it by 12 and then dividing it by 10. Do you agree? Can you explain why?