

Abbots Farm Junior School

Resilient

Ambitious



Reflective

Healthy body
and mind

***Learners for Life,
Famers Forever***



Year 4 Multiplication Tables Check 2024

**Presentation for Parents, Carers &
Guardians**

What is the purpose of the multiplication check?





- The purpose of the MTC is to determine whether year 4 pupils can **fluently** recall their multiplication tables and are meeting the expected standard for their year group before moving to Upper Key Stage 2 (Year 5 and Year 6)

‘By the end of year 4, pupils should have memorised their multiplication tables up to and including the 12 multiplication table and show precision and fluency in their work’.

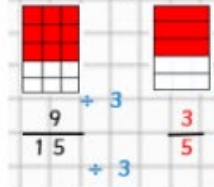
- They are designed to help schools identify which children require more support to learn their times tables so they can access the demands of the Y5 and Y6 maths curriculum with success.

Adding, subtracting, multiplying and dividing fractions

$$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$$

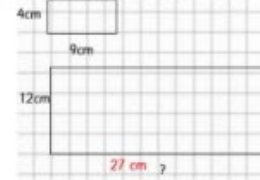
$\frac{1}{3} + \frac{1}{6}$ 
 $\frac{1}{3} - \frac{1}{6}$ 
 $\frac{2}{6} + \frac{1}{6}$ 
 $\frac{2}{6} - \frac{1}{6}$ 

Simplifying fractions



 $\frac{9}{15} \div 3 = \frac{3}{5}$

Using scale factors

2 people	1 person	5 people
6 eggs	6 ÷ 2 = 3 eggs	3 × 5 = 15 eggs
100g flour	100 ÷ 2 = 50g	50 × 5 = 250g



Finding a fraction or a percentage of a number

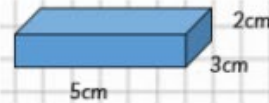
$\frac{3}{4}$ of 48 
 $48 \div 4 = 12$
 dividing by 4 finds one quarter.
 $12 \times 3 = 36$
 multiplying by 3 finds 3 quarters

Finding the area of rectangles, triangles and parallelograms.

Rectangle: $9 \times 4 = 36 \text{ cm}^2$
 Parallelogram: $10 \times 7 = 70 \text{ cm}^2$
 Triangle: $\frac{1}{2} \times 10 \times 7 = 35 \text{ cm}^2$
 Formula: $(b \times h) \div 2$

Why are times tables useful?

Calculating volume



A prize is shared in a ratio of 3 : 4 between Jamie and Dan. If Jamie gets £ 2.1, how much will Dan get?

Jamie : Dan = 3 : 4
 $2.1 \times 7 = 14.7$
 $14.7 \div 4 = 3.675$

Using known facts

If $3 \times 2 = 6$, then
 $3 \times 20 = 60$
 $30 \times 2 = 60$
 $30 \times 20 = 600$

Using algebraic rules

- 1st term: $5 \times 1 - 4 = 1$
- 2nd term: $5 \times 2 - 4 = 6$
- 3rd term: $5 \times 3 - 4 = 11$
- 4th term: $5 \times 4 - 4 = 16$
- 5th term: $5 \times 5 - 4 = 21$

Converting between mixed and improper fractions

$1 \frac{3}{4} = \frac{7}{4}$
 (1 × 4 + 3 = 7)

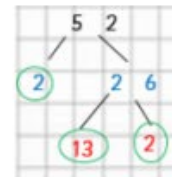
Convert between miles and kilometres

To convert km to miles:
 5 miles = 8km
 30 miles = 48km
 1) Divide by 8 ($48 \div 8 = 6$)
 2) Multiply by 5 ($6 \times 5 = 30$)

Short and long division

$5 \overline{) 125}$
 25

Finding prime factors



Square and cube numbers

$2^2 = 2 \times 2 = 4$
 $4^2 = 4 \times 4 = 16$
 $3^3 = 3 \times 3 \times 3 = 27$

Factors and common factors

1 × 4	8	1 × 3	6
2 × 2	4	2 × 1	8
3 × 1	6	3 × 1	2
4 × 1	2	4 × 1	9
6 × 1	8	6 × 1	6

Finding equivalent fractions

$\frac{2}{3} \times \frac{4}{4} = \frac{8}{12}$
 $\frac{3}{4} \times \frac{3}{3} = \frac{9}{12}$

Identifying prime and composite numbers

A prime number is a whole number greater than 1 with no divisors except 1 and itself.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

Multiples and common multiples

Multiples of 3: 3, 6, 9, 12, 18, 21, 24
 Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32

Short and long multiplication

$853 \times 6 = 5118$
 $32 \times 45 = 1440$

What's the point?

Important information about multiplication tables check (MTC)

- There is no 'pass' rate or threshold which means that, unlike the Phonics Screening Check, children will not be expected to re-sit the check.
- The Department for Education (DfE) will create a report about the overall results across all schools in England, not individual schools.

When the check will take place?

- In 2024, schools must administer the MTC to all eligible year 4 pupils between **Monday 3 June and Friday 14 June**.
- Schools can use the following week, **Monday 17 June to Friday 21 June**, to administer the check to any pupils who were absent during the first 2 weeks or in case of any delays to the administration of the check due to technical difficulties.
- There is **no set day** to administer the check and children are not expected to take the check at the same time.
- All eligible Year 4 children in England will be required to take the check.

How is the check carried out?

- The check will be **fully digital**.
- Answers will be entered using a keyboard, by pressing digits using a mouse or using an on-screen number pad.
- Usually, the check will take less than **5 minutes** for each child.
- The children will have **6 seconds** from the time the question appears to input their answer.
- There will be a total of **25 questions** with a **3 second pause** in-between questions.
- There will be **3 practice questions** before the check begins.

The check questions

- Each child will be **randomly assigned** a set of questions
- There will only be **multiplication** questions in the check, not division facts.
- The 6, 7, 8, 9 and 12 times tables are **more likely** to be asked.
- Reversal of questions (e.g. 8×6 and 6×8) will not be asked in the same check.
- Children will not see their individual results when they complete the check.

Multiplication tables check

00:02

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$$2 \times 8 =$$

1

2

3

4

5

6

7

8

9


<-

0

Enter

<https://www.timestables.co.uk/multiplication-tables-check/>

$10 \times 10 =$

1	2	3
4	5	6
7	8	9
	0	Enter

How best to prepare your child for the check

- Remind them that the check should last no more than 5 minutes.
- If you want to go over times tables, make them fun.
- If you have any concerns, talk to your child's teacher.
- If your child has any concerns, encourage them to talk to a trusted adult (for example, yourself, their teacher).

Useful links

OXFORDOWL



Oxford **OWL**

How to practise
times tables



Play (k)



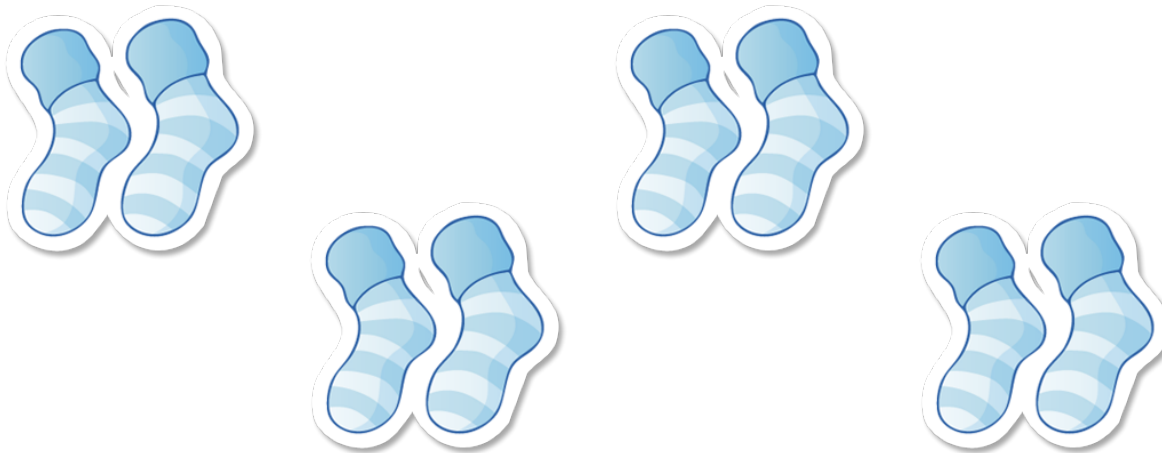
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Counting and looking for patterns.

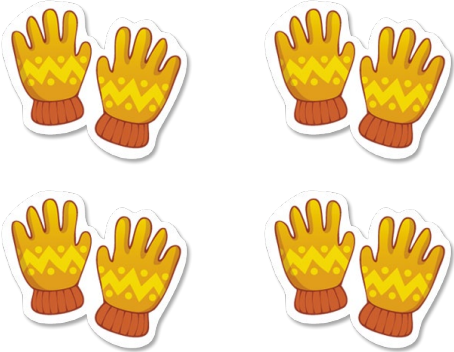
Example: Counting in 2s
2, 4, 6, 8, 10...

- Ensure children have a strong understanding of counting in groups first.
- When children are secure with counting, they can then look for patterns.

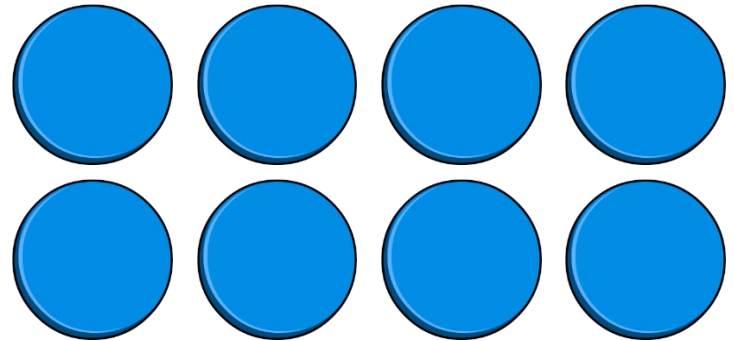


Repeated addition

Knowing that 2×4 is the same as $2 + 2 + 2 + 2$



$$2 + 2 + 2 + 2 = ?$$

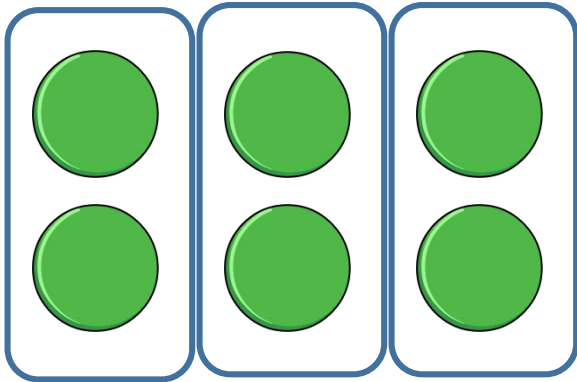


$$2 \times 4 = ?$$

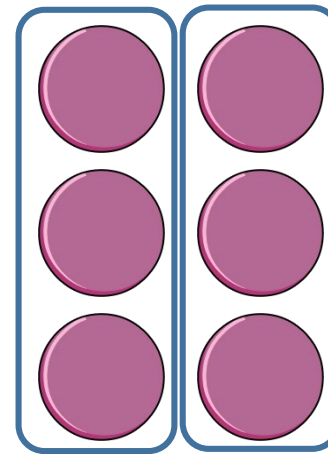
Multiplication is commutative

3×2 is the same as 2×3

Children need to understand that multiplication can be completed in any order to produce the same answer. Sometimes this link needs to be made explicit.



3 lots of 2 = 6

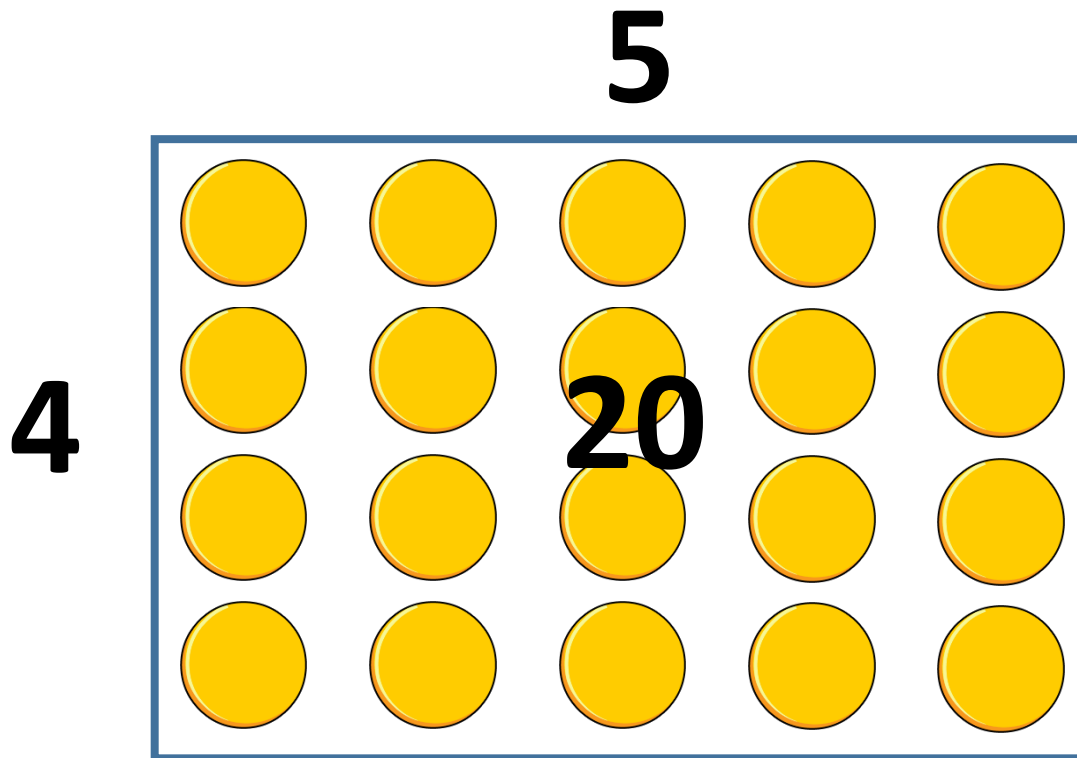


2 lots of 3 = 6

Multiplication is the inverse of division

$20 \div 5 = 4$ can be worked out because $5 \times 4 = 20$

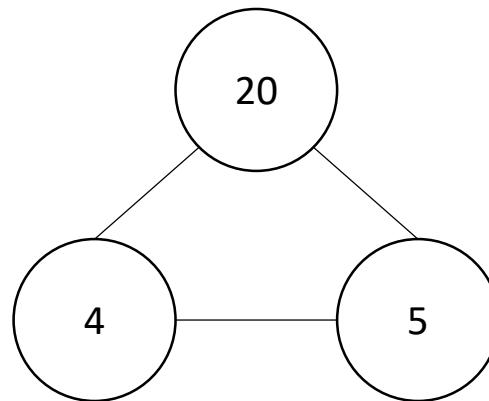
Using pictorial representations (such as arrays) is useful here for children to see the link between multiplication and division.



Number families

$$4 \times 5 = 20, 5 \times 4 = 20, 20 \div 5 = 4, 20 \div 4 = 5$$

Due to their commutative understanding, children should also be able to see whole number families. For many children this will need to be pointed out and discussed.



Using known facts

$4 \times 6 = ?$
I know $4 \times 5 = 20$
Therefore, $20 + 4 = 24$

By using known facts from 'easier' times tables, children should be able to find answers with increasing speed.

