



Moorlands Primary School

High Expectations, High Achievements, Challenge and Enjoyment for All

WELCOME

Multiplication Information Evening
The Year 4 Team

Agenda:

- Importance of Times Tables.
- How they are used across the maths curriculum.
- How we teach multiplication at Moorlands.
- Demonstration of Times Table Rockstars.
- Government 2022 Multiplication Check.

WHY ARE TIMES TABLES IMPORTANT?

- ▶ Used across the maths curriculum.
- ▶ Evidence shows that children who struggle with times tables at Primary School fall behind with maths at Secondary School.
- ▶ Even very complex multiplication and division questions need simple times table knowledge when you break down the calculation.
- ▶ Through knowing times tables, children can begin to spot patterns and apply this to more advanced work. E.g. $2 \times 3 = 6$ helps to know that $20 \times 30 = 600$ and $200 \times 300 = 60,000$.
- ▶ Being able to recognise these connections will in turn speed up their thinking processes and mental arithmetic, meaning cognitive space is freed up to learn new concepts and apply the mathematics to solve problems.

HOW ARE TIMES TABLES USED ACROSS THE MATHS CURRICULUM?

- ▶ Multiplication and division
- ▶ Place value-multiples and factors
- ▶ Shape- area and perimeter
- ▶ Fractions, decimals and percentages
- ▶ Ratio and proportion
- ▶ Algebra (Yr 6)

$$3 \times 12 = 36$$

$$12 \times 3 = 36$$

$$36 \div 3 = 12$$

$$36 \div 12 = 3$$

$$274 \times 7$$

$$673 \div 7$$

$$23 \times 10 \times 3$$

- ▶ What is one twelfth of 36?
- ▶ Equivalent fractions

$$3624 \times 76$$

$$3624 \div 65$$

What is nine tenths of 70?

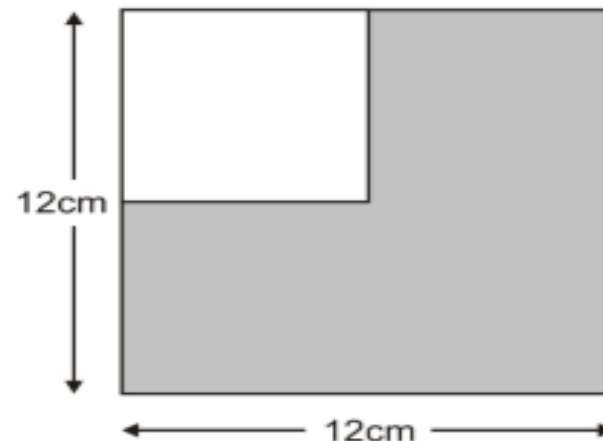
What is 60% of 300?

What is 71% of 1800?

Ratio

A white square is painted in one corner of a grey square.

Each side of the white square is **half** the length of a side of the grey square.



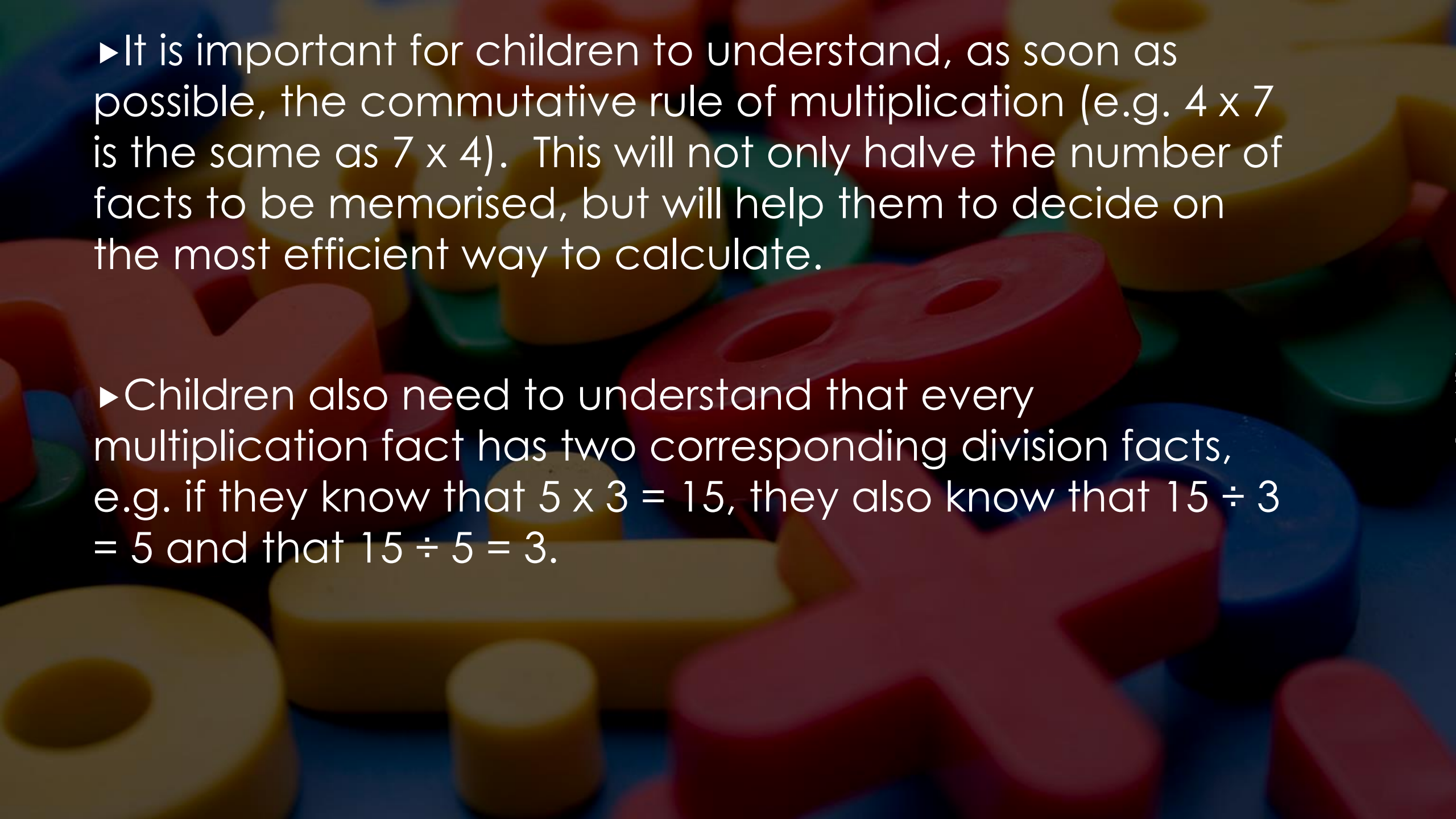
This is a question from a
Year 6 SATs paper.

Not actual size

What is the area of the
white square?

HOW WE TEACH MULTIPLICATION AT MOORLANDS.

- ▶ Ongoing practise during arithmetic lessons / quick starters to a lesson etc.
- ▶ Weekly Times Table Challenge working on Bronze, Silver Gold awards.
- ▶ Times Table Rockstars at least once a week.
- ▶ Children are taught to make connections. E.g. For learning 4 x table we can double the number then double again. 9 x table use the x 10 then subtract 1 multiple. For x 12 we can x 10 then add a double on etc. Unless children are taught these connections they tend to see tables as adding up in steps of 3, 4, 5 etc.



► It is important for children to understand, as soon as possible, the commutative rule of multiplication (e.g. 4×7 is the same as 7×4). This will not only halve the number of facts to be memorised, but will help them to decide on the most efficient way to calculate.

► Children also need to understand that every multiplication fact has two corresponding division facts, e.g. if they know that $5 \times 3 = 15$, they also know that $15 \div 3 = 5$ and that $15 \div 5 = 3$.

National Curriculum States that

Year 1 = counting in steps of 2, 5 and 10

Year 2 = x2, x5, x10 tables

Year 3 = x3, x4, x8 tables

Year 4 = x6, x7, x9, x11, x12

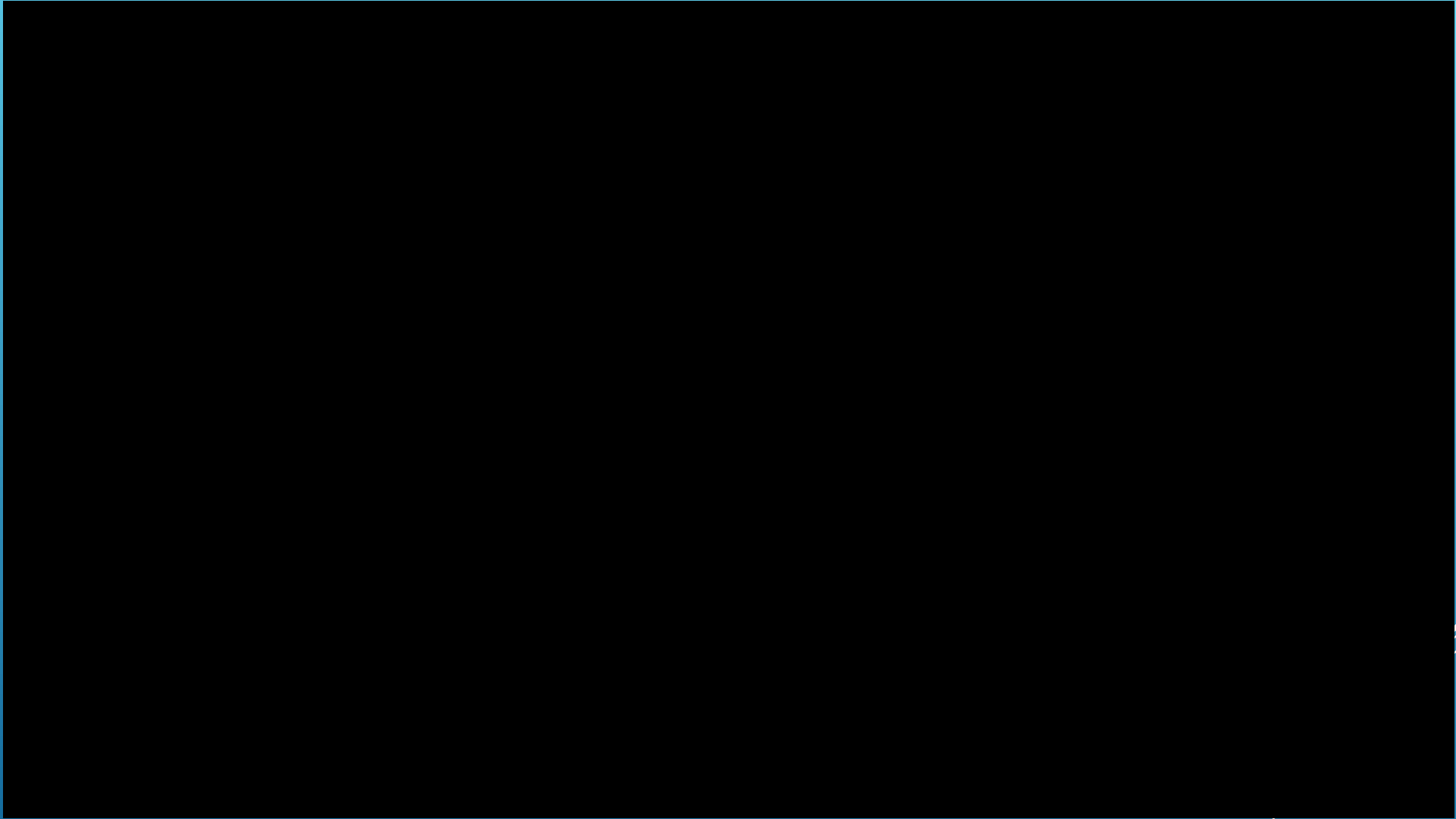
Year 5 = consolidation

Year 6 = consolidation

- ▶ Mirrors the 2022 test- Soundcheck.
- ▶ Teachers may set the tables depending on what your child needs to learn,
- ▶ for example in year 3, the teacher could set x3,x4 and x8 to mirror the
- ▶ curriculum.
- ▶ Great way to practise times tables. Can be played on i-pads, tablets.
- ▶ Children can play against each other and see how well their friends are doing
- ▶ compared to them.
- ▶ Speed check averaged when using Studio.
- ▶ Teacher can use to highlight gaps or areas in which a child is slower to answer.
- ▶ Introducing Rockstar of the month per class, winners to display a trophy to
- ▶ have at their desk.

TIMES TABLE ROCKSTARS.





GOVERNMENT 2022 MULTIPLICATION TABLE CHECK.

The MTC is focused on the fluent recall of multiplication facts.

This will be delivered as an online, on screen digital assessment.

The current domain for the MTC is based on the national curriculum which states 'by the end of year 4, pupils should have memorised their multiplication tables up to and including the 12 times table.'

*To take place in June 2022-
(We took part in a trial with
the current Year 5 children in
June 2021).*

25 questions, 6 seconds
per question to test fluent
recall.

There is emphasis on the 6, 7, 8, 9
and 12 multiplication
tables because these have been
determined to be the most
difficult multiplication tables.

Remaining time: 5

$11 \times 2 =$

1

2

3

4

5

6

7

8

9



0

Enter

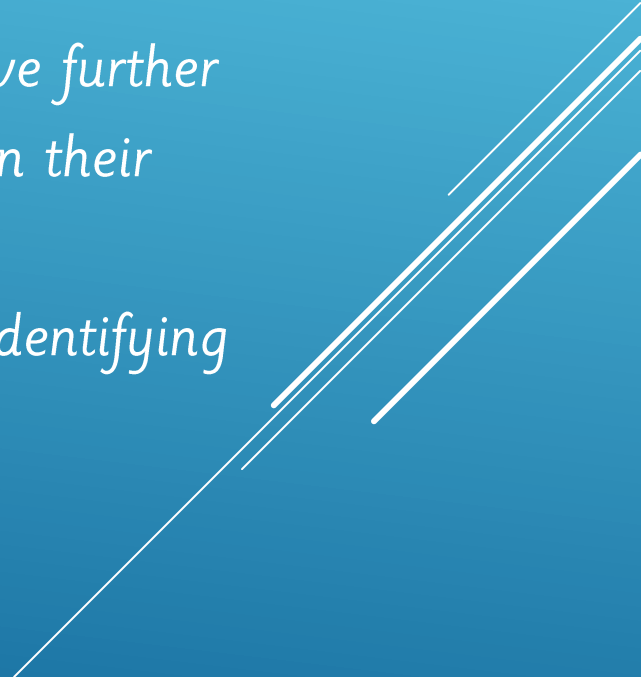
Access arrangements can be made for children who:

- *have an Education, Health and Care (EHC) plan*
- *have a My Support Plan (MSP)*
- *have English as an additional language and have limited fluency in English*

If you have any questions, please ask at the end.

Several white lines of varying lengths and orientations are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.

There is no 'threshold' in the MTC. However:

- The MTC will serve as a measure of how well children understand and can recall their times table knowledge.*
 - Times tables are vital to the Year 5 and Year 6 curriculum and gaps in their knowledge will hold them back when completing work in Years 5 and 6.*
 - Any child who does not achieve full marks in the MTC, will receive further additional support in the form of interventions to plug any gaps in their times table knowledge in Years 5 and 6.*
 - The MTC will serve as a helpful tool for teachers and schools in identifying children with gaps in their mathematical knowledge.*
- 
- A series of three parallel white diagonal lines extending from the bottom right towards the center of the slide.

How can you support at home?

- ▶ Encourage your child to actively use Times Table Rockstars!
- ▶ They can access this from a desktop computer or an Ipad
- ▶ Quiz your children regularly and at random on their times tables. This could be done whilst cooking tea together, during car journeys or on the walk to school
- ▶ Show your children some fun 'tricks' for remembering the trickier times tables, like nines or the sevens
- ▶ Use times table wall charts at home Create flashcards with your child for each times table and play games like snap or matching them up in specific time. This works well as a competition between siblings, parents or even other family members!
- ▶ Challenge your children to 'beat Alexa or Siri' in their times tables!



Thank you for your time

We welcome any questions.

I'm getting quicker at my times tables.

I like it that you can buy things for your avatar!

I love playing against my friends.

I knocked 23 seconds of my fastest time!

I like to keep checking the leaderboard.

Several white lines of varying lengths and orientations are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.

