



Parents



DoodleMaths



DoodleTables



DoodleEnglish



DoodleSpell

Innovative, personalised learning technology

DoodleMaths and DoodleEnglish create programmes which teach the fundamentals of maths and English.



DoodleMaths



DoodleTables



DoodleEnglish



DoodleSpell



DoodleConnect

Fostering a growth mindset

Our programmes reward effort, not ability: children discover that when they try, they succeed. The result isn't just raised standards: it's happier, more confident children.

It really helps our
lower achieving children
gain confidence

Kate Weatherby, Coteford School

How does it work?

- Children don't choose the work (they don't always choose what they need to practise) and teachers don't set the work (too time-consuming to set work for every child).



How does it work?

- The intelligent algorithms determine what each child will learn when they open the app. It's really important that children work independently. The app is learning your child's areas of strength and weakness so it can calibrate to the right level for every individual.



How does it work?

- By assessing their ability across the areas of the curriculum, individuals work at exactly the right level of challenge to guarantee progression. This means that children will get some questions wrong. Your child should be able to answer around 80% of the questions they are given: around 20% should be too hard.

How do the children practise?



- On tablets, mobiles, laptops or desktops where the DoodleMaths or DoodleEnglish apps have been downloaded.
- Children simply open the app and start answering questions.

Frequency of use: little and often



Practise for 10 minutes, 4-5 times a week.

Your child's teacher will help them to set a target and you can encourage them to meet this through praise and reward.

For parents



There is a dashboard which you can access by adding your email through the app.

There is also our parent app, DoodleConnect, which provides the top level details: usage, stars earned, strengths and weaknesses. Download the app to see how your child is doing.

Building in 10 minutes a day



Help your child create a '10 minutes a day' routine: before breakfast, after tea or before other screen-time.

If you'd like to learn more:

- Download the parent handbook on the website.
- Visit the Parent FAQs
- Read our blogs
- Follow us on social media

Call us on 01225 220122 - we love to help you with our resources.

Happy Doodling!



The Multiplication Tables Check



From the 2019/20 academic year onwards, all state-funded maintained schools and academies (including free schools) in England will be required to administer an online multiplication tables check (MTC) to year 4 pupils.

The national curriculum specifies that pupils should be taught to recall the multiplication tables up to and including 12×12 by the end of year 4. The purpose of the MTC is to determine whether pupils can recall their times tables fluently, which is essential for future success in mathematics.



What is the purpose of the check?

The government is saying that the new multiplication check is to determine whether year 4s can fluently recall their times tables or not.

When will the multiplication tables check happen?

- Towards the end of year 4.
- The first multiplication check will be in June 2020 over a three week period starting from Monday 8th June.
- Schools can choose when in the three period they decide to administer the test.



What will the multiplication tables check test?

- By the end of year 4 the children should be able to fluently recall their multiplication and division facts up to 12×12 .
- The MTC only assesses the instant recall of multiplication facts.
- However, there is an emphasis on the 6, 7, 8, 9 and 12 multiplication tables because these have been determined to be the most difficult multiplication tables.

How will the multiplication tables check be administered?

- The MTC will be delivered on-screen (using a computer or tablet) and online (using an internet connection).
- Schools will need to provide appropriate IT equipment to take the check.



What will the multiplication tables check look like?

- It will take five minutes to complete.
- There will be twenty five questions worth one mark each.
- Pupils will have 6 seconds to enter a response to the question and the 6 seconds start as soon as the question appears.
- Once the pupil has input their answer, they can press enter to proceed, or wait until the time expires.
- Once the question is answered, there will be a 3 second pause before the next question appears.
- Pupils and schools will be able to access a practice area prior to the check window opening, in order to become familiar with the MTC format.

How will the results from the multiplication tables check be reported?

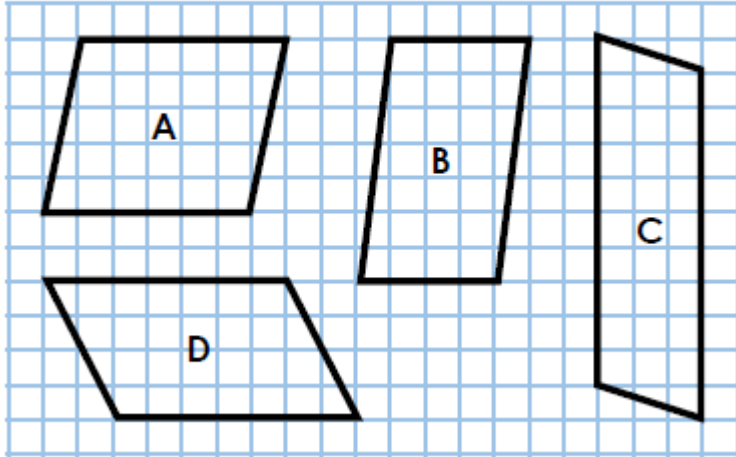
- At the end of the assessment window, a total score out of 25 will be reported to each school for all of their pupils who took the check.
- There will be no expected standard threshold for the MTC. (No pass mark)

Maths at Salford

- The children are expected to **think deeply** about the mathematical concepts they are learning about, explaining and justifying their reasoning using **precise and accurate** mathematical language.
- Developing the children's depth of understanding allows them to **apply their knowledge** and skills to a variety of problem solving tasks, making clear connections between mathematical concepts.
- **Repetition and rote learning** consolidates vital mathematical facts which they are able to confidently rely on, and recall at speed.
- **Fluency** ... allows pupils to develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- We use a scheme called "White Rose Maths" which focuses on children having practice at a skill, then showing understanding through problem

White Rose Maths:

5a. Which parallelograms have an area of 30cm^2 ? $\square = 1\text{cm}^2$

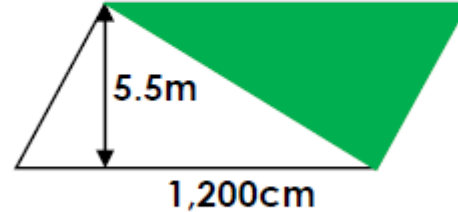


VC

4a. Daniel says:



The area of the triangle is 30m^2 .



Is Daniel correct? Explain your answer fully and show your working.



Salford School Calculation Policy.

Multiplication

Children need to understand the concept of multiplication, that it is:

- **Repeated addition**
- **Can be represented as an array**

They also need to understand and work with certain principles:

- **Inverse of division**
- **Is commutative i.e. $3 \times 5 = 5 \times 3$**
- **Is associative i.e. $2 \times (3 \times 5) = (2 \times 3) \times 5$**

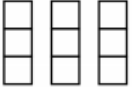
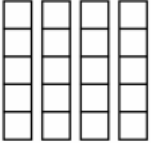
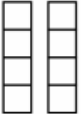

Multiplication starts with counting equal groups or 'lots of'

Equal groups



Multiplication by Repeated Addition

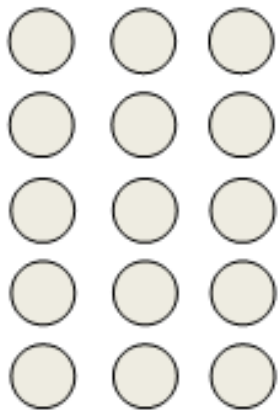
www.worksheetfun.com

| Add and Multiply | | |
|--|------------|---------------|
|  | $3+3+3=$ | $3 \times 3=$ |
|  | $5+5+5+5=$ | $5 \times 4=$ |
|  | $4+4=$ | $4 \times 2=$ |
|  | $2+2+2+2=$ | $2 \times 4=$ |

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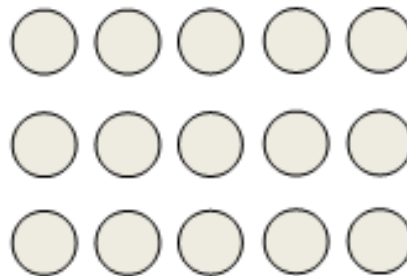
Use of Arrays

Children need to understand how arrays link to multiplication through repeated addition and be able to create their own arrays.



$$3 + 3 + 3 + 3 + 3 = 15$$

5 lots of 3 or $5 \times 3 = 15$



$$5 + 5 + 5 = 15$$

3 lots of 5 or $3 \times 5 = 15$

Continuation of Arrays

Creating arrays on squared paper (this also links to understanding area)

$$4 \times 7 =$$

| | | | | | | | |
|---|---|---|---|---|---|---|--|
| x | x | x | x | x | x | x | |
| x | x | x | x | x | x | x | |
| x | x | x | x | x | x | x | |
| x | x | x | x | x | x | x | |
| | | | | | | | |

$$4 \times 7 = \quad 7 + 7 + 7 + 7 = \quad 28$$

You can use a grid like this to develop subtraction as well, so $40 - 28 = 12$

Which is then consolidated as:

Short multiplication

24 × 6 becomes

$$\begin{array}{r} 24 \\ \times 6 \\ \hline 144 \\ \hline 2 \end{array}$$

Answer: 144

342 × 7 becomes

$$\begin{array}{r} 342 \\ \times 7 \\ \hline 2394 \\ \hline 21 \end{array}$$

Answer: 2394

2741 × 6 becomes

$$\begin{array}{r} 2741 \\ \times 6 \\ \hline 16446 \\ \hline 42 \end{array}$$

Answer: 16 446

Once knowledge of all times tables facts have been fully secured a more efficient method is:

$$\begin{array}{r} 53 \\ \times 24 \\ \hline 212 \\ 1060 \\ \hline \underline{1272} \end{array}$$

How to help your child with maths at home:

- Use of Doodle Maths regularly.
- Always be encouraging.
- Never associate maths with speed. It is not important to work quickly, and we now know that forcing kids to work quickly on maths is the best way to start maths anxiety for children, especially girls.
- Never share with your children the idea that you were bad at maths at school or you dislike it.
- Encourage number sense. What separates high and low achievers is number sense – having an idea of the size of numbers and being able to separate and combine numbers flexibly.
- Let students know that they have unlimited maths potential and that being good at maths is all about working hard.