

## Swanton Morley V.C. Primary School

## **MATHS**

# Multiplication Tables Termly Planner

(This Planner has been adapted from that available as part of the free resources provided by Third Space Learning.)

#### What should children know and when?

By the end of Year 4, the National Curriculum expectation is that pupils are capable of recalling all multiplication tables up to 12 x 12. This is formally assessed through the annual online Multiplication Tables Check (MTC) set by the Government every June which provides a time limit of 6 seconds per answer.

#### What is the aim of this planner?

At Swanton Morley VC Primary, we recognise that being able to recall the multiplication tables (times tables) is a key mathematical piece of knowledge that underpins and supports a lot of other knowledge and skills. Being able to recall these facts readily and quickly is of major benefit to them.

Through a variety of approaches, and using different resources that include the concrete, visual, abstract and using online platforms and games, we aim to ensure that all our children achieve the National Curriculum expectations.

This planner shows how we introduce and build on the multiplication facts from Year 1 and ensure children make the connections with other mathematical learning that they need.

#### How else do we support and promote multiplication tables?

We introduce times tables as set out in the planner with new learning each term/half-term together with increasing amounts of more formal practising of times tables. (e.g. weekly to daily as the children start Key Stage 2)

Alongside this, we subscribe to Times Tables Rock Stars (TTRS) which is an online platform available to all the children in school and can be accessed at home too. Each child has a login which is sent home at the start of each year/during the year for the younger children. We also make time available, as the children get older, for them to practise in school time. This includes a lunchtime club run by Ms Madeley and open to Years 3 and 4.

We hold an annual TTRS Day each Autumn Term to kick-start the year's learning where children can come into school dressed as Rock Stars and take part in the whole school 'Battles' set. We regularly invite parents in to share learning with us, including Maths and keep our parents fully informed before and during the MTC period each year.

Another string to our TTRS bow is the Go Green Challenge.

This runs across the school and is achieved by the children turning their Heatmap green on TTRS – green being a standard of less than 4 seconds per question. This is something particularly pitched at Year 4s and upwards. When achieved, the child receives a 'Go Green' Certificate in our Celebration Assembly and will see a green star appear on our Go Green Boulevard!

#### How can you help at home?

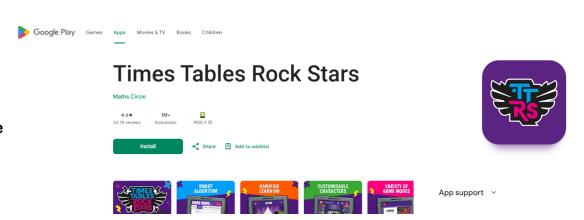
Regular mathematical learning, appropriate to your child's age and stage, is always beneficial. Each year group has a part to play in learning times tables which starts with counting.

As children reach Year 3, more formalised and daily practice is helpful for short bursts of time.

This can be achieved through flashcards or songs, games, using wallcharts etc. TTRS is a brilliant platform mentioned above. There are lots of different 'modes' in it so that children can play without a time pressure too. The programme will set children the questions according to how they are progressing – playing a 'Gig' each month is vital for them to continue through the different times tables.

For more detailed information on Times Tables Rock Stars, see the attached Parent Guide they produce and take a look at this introductory video: https://www.youtube.com/watch?v=-ZxZbRVvbYM

It can be played on a browser or you can download the App from Google Play or Apple App Store.



There are a huge number of online games that can be played as well. Here are just a few of the best:

Hit the Button (best on a touch screen) https://www.topmarks.co.uk/maths-games/hit-the-button

or scan the QR code...



White Rose Maths Minute Maths App available on Google Play and Apple Store Does include other maths skills too.

#### 1-Minute Maths





https://www.timestables.co.uk/
Straight forward site with choice of the times tables.
Ability to try out the MTC in a similar format.
You can print a certificate!



Autumn 1 & 2	Count in ones up to 10 both forwards and backwards.  Understanding fact families when adding and subtracting within 10.
Spring 1 & 2	Count in ones and tens up to 50 both forwards and backwards including counting by making tens.  Understanding doubles and near doubles.
Summer 1	Count in multiples of 2, 5 and 10 to 50 in order with growing fluency.
Summer 2	Counting between 50 and 100. Counting in tens to 100.

The different objectives are introduced in the given terms during the year. The introduction will take more than one lesson.

Weekly practice of the skill/s to continue thereafter.

### Teaching methodologies:

- Count pairs of objects
- Count straws bundled in tens
- Sing counting songs
- Hundred square
- Number lines
- Pictorial representations on display
- Rolling numbers

Methodologies = different ways we teach the tables

Autumn 1	Consolidate counting in steps of 2, 5 and 10 in order from 0 up to 10x.
Autumn 2	Count in steps of 2 and 5 from 0 up to 10x fluently. Recall multiples of 10 up to $10 \times 10$ in any order, including missing numbers.
Spring 1	Recall multiples of 2, 5 and 10 up to 12 x in any order, including missing numbers and related division facts.
Spring 2	Recall how to double numbers by multiplying by 2. Understand how to half numbers by dividing by 2. Understanding the relationship between the 5 and 10 times tables.
Summer 1	Recall multiples of 2, 5 and 10 up to 12 x in any order, including missing numbers and related division facts fluently.
Summer 2	Recall multiples of 2, 5 and 10 up to 12 x in any order, including missing numbers and related division facts fluently.

The different objectives are introduced in the given terms during the year. The introduction will take more than one lesson.

Weekly practice of the skill/s to continue thereafter.

Pupils to be introduced to using Times Tables Rock Stars online from Spring Term. Use of the relevant booklets each week.

★ In the Summer Term, introduce 3x table through counting in steps of 3 from 0 up to 12 x.

#### **Teaching methodologies:**

- Counting objects in groups of 2, 5 and 10
- Sing counting songs
- Hundred square
- Number lines
- Array with concrete resources
- Pictorial representations on display
- Rolling numbers

Consolidate = recap until facts are secure.

Concrete resources = actual stuff like cubes, counters etc

Autumn 1	Recall multiplication and division facts for the 2, 5 and 10 times tables.  And 3 times tables.
Autumn 2	Count in multiples of 3 up to 12 x 3, in order from 0 with growing fluency. This will include in any order.  Count in multiples of 4 up to 12 x 4 in order from 0 with growing fluency.  Introduce (relating to x 4) and begin to count in multiples of 8 from 0 to 12 x 8.
Spring 1	Recall multiples of 3 up to 12 x 3 in any order, including missing numbers and related division facts fluently.  Count in multiples of 4 to 12 x 4 in order from 0 with fluently.  Count in multiples of 8 to 12 x 8 in order from 0 with growing fluency
Spring 2	Recall multiples of 4 up to 12 x 4 in any order, including missing numbers and related division facts with growing fluency.  Count in multiples of 8 to 12 x 8 in order from 0 fluently.
Summer 1	Recall multiples of 4 up to 12 x 4 in any order, including missing numbers and related division facts fluently.  Recall multiples of 8 up to 12 x 8 in any order, including missing numbers and related division facts with growing fluency.
Summer 2	Recall multiples of 8 up to $12 \times 8$ in any order, including missing numbers and related division facts fluently.

The different objectives are introduced in the given half-terms during the year. The introduction will take more than one lesson.

Weekly practice of the skill/s to continue thereafter.

Pupils to continue and increase use of Times Tables Rock Stars online.

Use of the relevant booklets each week to ensure daily practice of the facts.

- ★ 3x tables began in Year 2 so expectation is that it will be recalling the multiplication and division facts in Autumn 1 and then multiples in any order in Autumn 2.
- 6 x tables introduction to begin in Summer Term relating it to x 3.
   Counting in 6s from 0 to 12 x with growing fluency.

#### Teaching methodologies:

- Counting objects in groups of 3, 4 and 8
- Hundred square
- Number lines
- Array with concrete resources
- Pictorial representations on display
- Rolling numbers

Autumn 1	Recall multiples of 3, 4 and 8 up to 12 x in any order, including missing numbers and related division facts fluently. Fluently count in 6's in order up to 12 x 6, using multiples of 3 to support.
Autumn 2	Recall multiples of 6 in any order, including missing numbers and related division facts with growing fluency. Fluently count in 9's in order up to $12 \times 9$ , using multiples of 3 to support.
Spring 1	Recall multiples of 6 in any order, including missing numbers and related division facts fluently.  Recall multiples of 9 in any order, including missing numbers and related division facts with growing fluency.  Explore the relationship between the 3, 6 and 9 times tables.
Spring 2	Recall multiples of 9 in any order, including missing numbers and related division facts fluently (using 10 x and adjusting by 1 group to find 9 x as a strategy).  Fluently count in 7's in order up to 12 x 7.  Fluently count in 11's in order up to 12 x 11.
MTC IS in June Summer 1	Recall multiples of 7 in any order, including missing numbers and related division facts with growing fluency.  Recall multiples of 11 in any order, including missing numbers and related division facts fluently.  Fluently count in 12's in order up to 12 x 12.  Understand what happens when multiplying and dividing by 1.  Understand what happens when multiplying by 0.
Summer 2	Recall all times tables facts fluently.

#### **Teaching methodologies:**

- Hundred square
- Number lines
- Pictorial representations on display
- Rolling numbers

Officially Unofficial Multiplication Tables Check (OUMTC) completed each term when open on Times Tables Rock Stars. The different objectives are introduced in the given half-terms during the year. The introduction will take more than one lesson.

Weekly practice of the skill/s to continue thereafter.

Pupils to continue and increase use of Times Tables Rock Stars online.

Each term they take part in the Officially Unofficial Multiplication Tables Check run by Times Tables Rock Stars.

Use of the relevant booklets each week to ensure daily practice of the facts.

6 x tables began in Year 3 so the expectation is that it will be recalling the multiplication and division facts in Autumn 1 then multiples in any order in Autumn 2. This will run alongside introduction of 9s.

7 x tables to be introduced in Spring 1 with counting in order before moving on to any order in Spring 2.

12 x will be introduced in Spring 2.

BY SPRING 2 all times tables need to be in place with increasing degree of fluency.

The National Curriculum expectation is that by the end of Year 4, children are able to recall all 12 tables up to  $12 \times 12$ .

To secure this, we recommended that the first term of Year 5 be used to consolidate by continuing your practice.

We will track back in this planner to support children who are working below the expectations.

Autumn Term Recall multiples of 12 in any order, including missing numbers and related division facts fluently.

Recall multiples of all times tables up to  $12 \times 12$  in any order, including missing numbers and related division facts with growing fluency.

#### **Teaching methodologies:**

- Pictorial representations on display
- Rolling Numbers

**From Year 5 onwards**, for most pupils, the focus will be on using their times tables knowledge in other areas of maths.

The children will still continue to practise their times tables to improve fluency and speed aiming to 'Go Green' if possible.

For any pupils working below the National Curriculum expectation, we will provide support learning times tables through the methods outlined in this planner and in other ways to suit the particular children.

We recognise the difference between the National Curriculum expectation and the time/speed set in the Year 4 MTC.

At Swanton Morley VC Primary, **fluency** is our aim and, though speed is helpful, having strategies to work out multiplication facts is more important, even if this takes more time.

We aim to enable all children to leave us having the best times tables knowledge they, as individuals, can have so they can carry on enjoying and flourishing in maths.