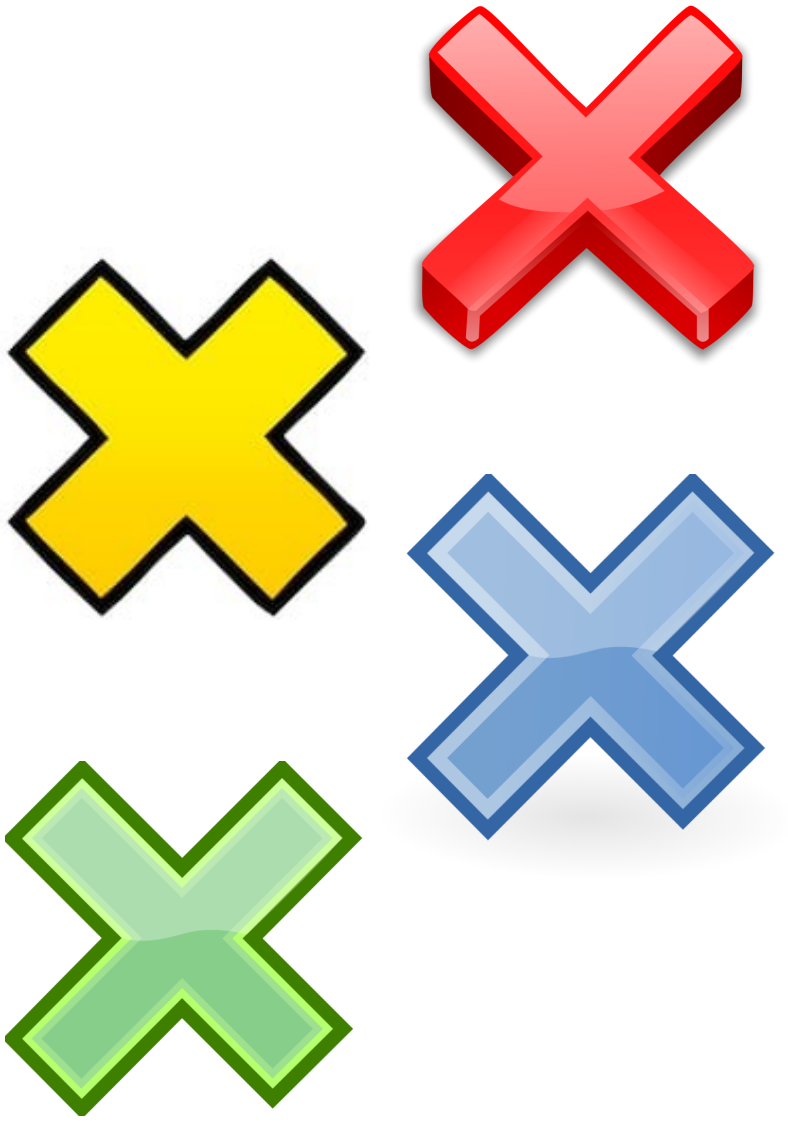


A resource pack to support the teaching and learning of multiplication facts in school and at home

Order of Teaching Multiplication Facts

Year 2	
Autumn 1	x2 (and associated division facts)
Autumn 2	x10 (and associated division facts)
Spring 1	x5 (and associated division facts)
Spring 2	Revision of x2, x10 and x5 multiplication and division facts
Summer 1	Revision of x2, x10 and x5 multiplication and division facts
Summer 2	Revision of x2, x10 and x5 multiplication and division facts

Year 3	
Autumn 1	x3 (and associated division facts)
Autumn 2	x4 (and associated division facts)
Spring 1	x8 (and associated division facts)
Spring 2	x6 (and associated division facts)
Summer 1	Revision of x2, x10, x5, x3, x4, x6 and x8 multiplication and division facts
Summer 2	Revision of x2, x10, x5, x3, x4, x6 and x8 multiplication and division facts

Year 4	
Autumn 1	x11 (and associated division facts)
Autumn 2	x7 (and associated division facts)
Spring 1	x9 (and associated division facts)
Spring 2	x12 (and associated division facts)
Summer 1	Revision of all multiplication and division facts up to 12x12
Summer 2	Revision of all multiplication and division facts up to 12x12

Year 5	
Autumn 1	Revision of all multiplication and division facts up to 12x12
Autumn 2	Using and applying knowledge of multiplication and division facts
Spring 1	
Spring 2	
Summer 1	
Summer 2	

Year 6	
Autumn 1	Revision of all multiplication and division facts up to 12x12
Autumn 2	Using and applying knowledge of multiplication and division facts
Spring 1	
Spring 2	
Summer 1	
Summer 2	

How to Recite Multiplication Facts

Times tables must not be recited as a list of numbers e.g. 3, 6, 9, 12 etc… as children are unable to link the number sentence to the answer.

Times tables at Eversley Primary School are taught in the following way:

* When times tables are recited they should always include the number sentence e.g. 1 x 3 is 3, 2 x 3 is 6, 3 x 3 is 9 etc…
* The first number in the number sentence always increases by 1, whereas the second number always stays the same (is the number of the times table) i.e. for the 3x table:

  1 x 3 is 3

  2 x 3 is 6

  3 x 3 is 9

  4 x 3 is 12
* All times tables should be recalled up to 12 x …
* Children must also be made aware that in the times table they are learning, 0 x the number is always 0.

Learning times tables

All times tables should be learnt in the following way:

Times table facts in order (gradually getting faster):

1 x 4 = … 2 x 4 = … 3 x 4 = … 4 x 4 = …

Times table facts out of order:

5 x 4 = … 7 x 4 = … 2 x 4 = … 11 x 4 = …

Division facts in order (gradually getting faster):

48 ÷ 4 = … 44 ÷ 4 = … 40 ÷ 4 = … 36 ÷ 4 = …

Out of order, mixture of corresponding division facts alongside multiplication facts:

3 x 4 = … 24 ÷ 4= … 16 ÷ 4 = … 9 x 4 = ...

Out of order, mixed up with range of times table facts already learnt:

3 x 4 = … 30 ÷ 5 = … 9 x 2 = … 28 ÷ 4 = …

Here are a range of ideas for teaching and practising times table facts:

TEACHING: CHANTING

Chanting times tables out loud as a class:

- changing speed - chanting slowly or quickly
- changing volume - chanting quietly or loudly
- changing pitch—saying them with a low pitch or a high pitch
- changing accent - Scottish/American/Australian/like a monster/like a cow?!!

TEACHING: DANCING

Whilst chanting times tables out loud, add actions and create your own class routine. This will really help your kinaesthetic learners.

TEACHING: TIMES TABLE SONGS

A great range of resources online, including:

- BBC Supermovers (using UK Football Team mascots)

  https://www.bbc.co.uk/sport/av/supermovers/42675177

- You Tube

  Search "times table songs" and choose laughandlearnalong

TEACHING: COUNTING STICK

Using a metre stick, marked in tenths, recite times table facts out loud together as a class.

Facts can be recited in order up the counting stick, or backwards down the counting sticks.

Post-its can be used as labels, and then removed each time the sequence is repeated to help children commit these facts to long-term memory.

TEACHING: COMPLETING MULTIPLICATION GRIDS

Children to complete blank multiplication grids. This can be used for more than one times table fact so children can revise and recall previously learnt facts.

x	1	2	3	4	5	6	7	8	9	10	11	12
3												

TEACHING: DRAW TIMES TABLE FACTS

Get your children creative and arty to help learn and recall times table facts.

Visual learners will find this useful as they will be able to picture their work:

TEACHING: MAKE ARRAYS

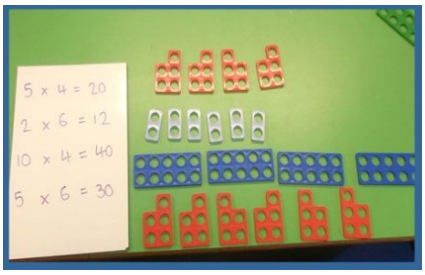
Children to draw and create arrays to help them visualise and see relationships between times table facts:

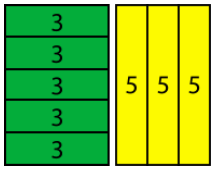
4 x 6 = 24

6 x 4 = 24

TEACHING: NUMICON, COINS AND CUISENAIRE

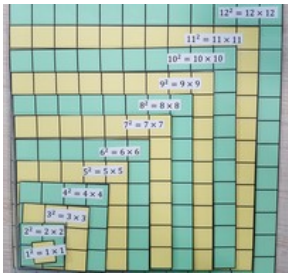
Use a range of resources to help children discover patterns and learn for themselves answers to times table facts:

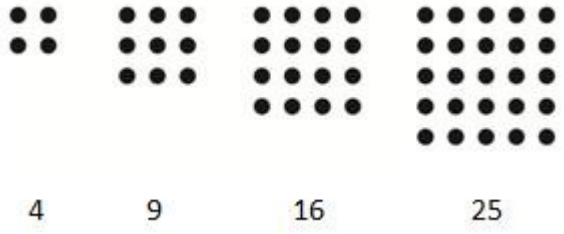




TEACHING: EXPLORE SQUARE NUMBERS

Get children to understand and draw square numbers, and they'll learn some key multiplication facts along the way:





PRACTISING: TT ROCKSTARS

www.ttrockstars.com (can be accessed through Useful Links on the school website or as an app on the Ipads)

Use TT Rockstars to help children practise recalling their times table facts and to increase the speed of their recall.

Different settings can be used to support their learning:

- GARAGE - solo game where class teachers can set specific times tables for children to practise
- STUDIO - solo game where children will be able to practise any x and ÷ fact up to 12x12
- SOUNDCHECK - solo game that is a mock-up of the Multiplication Tables Check: 25 questions, 6 seconds for each
- FESTIVAL - game against any players in the world, where children will be able to practise any x and ÷ fact up to 12x12
- ARENA - game against other players in their class or year group, where children will be able to practise any x and ÷ fact up to 12x12
- ROCKSLAM - children can challenge a friend, where children will be able to practise any x and ÷ fact up to 12x12

PRACTISING: APPS

A range of websites and apps can be accessed online through the school computers and Ipads that can help children to practise recalling their times table facts in a fun and engaging way:

Online activity	Accessed through:
Times Tables	App on Ipads
MentalCalc	App on Ipads
Maths Facts	App on Ipads
Top Marks	Useful Link on school website
Math Playground	Useful Link on school website
timestables.co.uk	Useful Link on school website
Education City	Individual pupil logins

PRACTISING: MULTIPLICATION FACT CARDS

In school there are a couple of sets of multiplication facts cards.

These can be used by individuals, pairs or small groups to recall times table facts.

PRACTISING: MATCHING PAIRS GAMES

Create cards with times table questions and answers on separate cards.

Children have to turn the cards over and find the matching pairs.

PRACTISING: DICE GAMES

Create your own games using dice, where children generate their own numbers by rolling dice (standard 6-faced dice or 12-sided dice) then find the product of the two numbers.

Games can be played individually, in pairs or as a group.

PRACTISING: DOMINO GAMES

Have dominoes turned face-down on the table. Children take it in turns to pick a domino and multiply the two numbers together. Fastest wins the domino!

PRACTISING: PLAYING CARDS

Various games can be played using the number cards and aces from a pack of playing cards, whereby cards drawn can be multiplied by each other.

Get creative—make your own games or get children to make their own games!

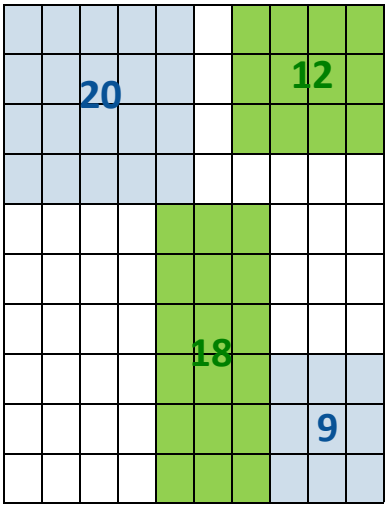
PRACTISING: BATTLE-GRIDS

On squared paper, draw a 20x20 grid.

Children generate two pairs of numbers (dice/domino/playing cards) and then have to draw a rectangle on the grid representing that times table fact e.g. 4x5, and then shade in their colour and label with the answer.

The children keep going, taking it in turns, shading in rectangles they can make on the grid in their own colour until no more rectangles can be made or time is up!

The winner is the player with the most squares shaded.



PRACTISING: MULTIPLICATION SQUARES

All you need for this game is two dice, the game board (easily made or downloaded) and two pens of different colours.

One player rolls both dice and multiplies the two numbers together, then looks for the product on the board, and draws a line to connect any two dots that form part of the square around that product. Shade in the square with your colour when you are the last person to complete the square around the number.

The game continues until the board is filled with squares

PRACTISING: BINGO

Create bingo cards or get children to draw a simple 3x3 grid on their boards with 9 numbers that are all answers of the same times tables e.g. for 3x tables 0, 3, 6, 9, 12 etc.

Call out questions from that times table and children cross them off until all numbers are crossed off—BINGO!

PRACTISING: FOLLOW-ME CARDS

Each child has a card.

One child says their question, the child with the answer on their card gives the answer and then asks their question - how long does it take to get around the class? Can they beat their time next lesson?

I have 36	I have 28	I have 20	I have 9
Follow me if you have 7 x 4	Follow me if you have 4 x 5	Follow me if you have 3 x 3	Follow me if you have 8 x 6
I have 48	I have 45	I have 24	I have 14
Follow me if you have 9 x 5	Follow me if you have 3 x 8	Follow me if you have 2 x 7	Follow me if you have 6 x 9

PRACTISING: TIMES TABLE SHAKER

Write the numbers 1-12 in a dozen-size egg box.

Place two marbles in the box.

Close the lid and shake!

Open the box and multiply the two numbers.

PRACTISING: COLOUR BY NUMBERS

Find online or adapt your own colouring sheets with multiplication questions inside different parts of the drawing. Children have to work out the answer and match to a corresponding colour and then colour in that part of the picture.

PRACTISING: BEAT THE CLOCK

Beat the Clock written multiplication tests - can they beat their time each time they play?

PRACTISING: MULTIPLICATION TENNIS

In pairs, first player 'serves' a multiplication question ('4x3') and the second player must 'return' the answer ('12'). Rally keeps going until the player 'misses the ball' (gets an answer wrong). The second player then serves, and the other play gets a chance to answer.

Act out the serving and returning to make it more fun!

PRACTISING: MULTIPLICATION ROCK, PAPER, SCISSOR (SORT OF!)

In pairs, players stand back to back, on the count of three, the two children turn around using their two hands to show a chosen number of fingers.

First person to multiply the two numbers together wins!