Rush Common School

Parents' Guide to helping your child learn their Times Tables

Times Tables progression

By the end of the year groups set out below, children are expected to be fluent in the following times tables:
Year 2 10, 2 and 5
Year 3 3, 4, 8
Year 4 6, 9, 7,11,12
(Children will continue to practise and apply their times table knowledge in Years 5 and 6.)

Some tips for helping your child learn their times tables:

1) Learn a **little at a time**. If you start a new times table, break it down into achievable sections. For example: start with 1 x 3, 2 x 3 one day, then add more in when they are used to the sequence.

2) Try **different strategies**: all children learn in different ways, so what worked for a sibling may not work for another child.

3) **Constant revision of previous tables learned** is important, so they are not forgotten when you move on to a new set.

4) **Demonstrate** using concrete apparatus so that children can see what the times table represents, for example: 3 X 4 as 3 rows of 4 pieces of dried pasta. (Sweets are good for this as well!)

5) Use **real-life situations** to develop understanding of times tables, for example: "If you saved 5p every day this week, how much do you think you would have saved in a week?"

6) There is no 'right' way to learn the times tables, and it helps to know lots of **links** between times tables facts. The next few pages will help you to identify some ways of making the times tables more fun and relevant than just rote learning.

It's just a quick way of adding up groups of the same number:

It is important that the children understand what times tables mean so that they can start to find their own tricks for speeding up:

1 x 5 = 5

This means there is 1 'lot of' 5

2 x 5 = 10

This means that there are 2 'lots of 5' i.e. 5 plus another 5

(5 + 5 = 10)

3 x 5 = 1 5

3 lots of 5

5 + 5 + 5 = 15 etc.

This knowledge is especially helpful for the higher number tables.

If a child, does not know what 7 x 7 is they do not have to start right at the very beginning of the 7 x table but can leap in half way:

5 x 7 = 7 x 5 =35

6 x 7 = 3 5 + 7 (we now have 6 lots of 7) = 4 2

7 x 7 = 42 + 7 (7 lots of 7) = 49

Once they have learnt that they can start from 5 x the number to find higher multiples, they will be able to solve multiplication problems much more quickly.

Multiplication is Commutative

(Commutative means that it doesn't matter which way around the numbers go, so 3 x 4 is the same as 4 x 3).

This can be shown by the chocolate bars below. In the first one you have 4 rows of 7 squares. (4X7) and in the second 7 rows of 4 squares (7X4) both having 28 squares in total.
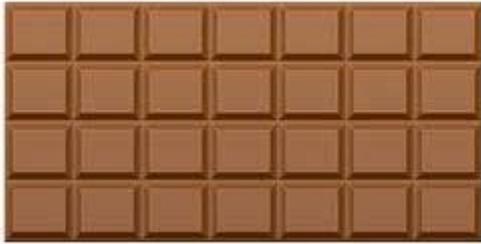
This is another good time to get out the sweets! You could also lay out sweets in different arrays.

Talk the tables:
• Chant the tables in the old fashioned way
• Put one more finger up every time you move onto the next number in the sequence, if this will help the child to remember which number they are up to.
• Working on only one table at a time, try saying them out of order, for example 3 x 5 = ? could be followed by, 3 x 7 = ?
• Give them the answer, for them to work out the question. For example: 35: how many 5s make this?

Sing the Tables:
There are lots of downloadable and online times table songs.

Look for number patterns in the tables
2x: After 2, 4, 6, 8, 10, the pattern is repeated in the last digit ,
For example: 12 14 16 18 20 22 24.
3x: The numbers follow the pattern of: Odd, Even, Odd, Even:
3, 6, 9,12,15.
4x: All of these are double the two times table:
2 4 6 8 10 (2 x table)
4 8 12 16 20 (4x table)
5x: Any odd number times 5, ends in a 5. Any even number times 5 ends in a 0:
1 x 5 = 5 2 x 5 = 10
3 x 5 = 15 4 x 5 = 20
6x: These answers double those in the 3x table:
3 6 9 12 15 18 21 (3x table)

6 12 18 24 30 36 42 (6x table)

8x: These answers are all double the 4x table:

4 8 12 16 20 (4x table)

8 16 24 32 40 (8x table)

9x: Take away the number you are multiplying 9 by from 10 times that number. For example: 10 X 7 = 70 9 X7 = 70 – 7 = 63

10x: All numbers end in a zero! (Please note we are not `adding a zero'. What is actually happening is that the digits which are being multiplied move one column to the left, to make them ten times bigger – they are 'held' in that position by putting a zero into the empty column).

11x: Both digits are the same (for answers up to 100). You can also think of it as 10x tables, plus one more 'lot' of the number that you are multiplying by 11:

9 x 11 is the same as 9 x 10 + 9.

12x: If you've learned all the other tables - there actually should only be one thing to learn by this stage: 12 x 12 = 144

Praise for progress:

As the tables are learned, they can be coloured or highlighted both horizontally and vertically on a multiplication square.

http://www.primaryclassroomresources.co.uk/Free- Downloads/FREE85.pdf

You can use this opportunity again to emphasise that 3 x 6 = 6 x 3, so as well as learning the entire 3 x table, part of the 6 x table has also been learned so this can be coloured in as well! Therefore, by the time all the tables up to and including the 5x have been learned, there is actually only one quarter of this grid left to learn

GAMES!

Playing games is always a really effective way of learning. Here are some examples:

Pelmanism (or Pairs):
Make or download times table questions and answers (e.g. http://www.activityvillage.co.uk/times-tables-flash-cards)
• Shuffle the cards and arrange them in a neat order on the table, face down.
• The players take it in turn to reverse any two cards; the cards must be left on the table face upwards so that everybody gets a good chance to look at them.
• If the two cards are equivalent the player gets to keep the pair and has another go.
• If the two cards are not a pair they are turned over once more and left on the table.
• The game continues until all the cards have been claimed.

Snap
• Half of the cards should be the `question' (2 x 5) and the other half of the cards should contain the answer (10).
• Shuffle the cards and divide them equally between two players.
• The players keep their cards in a pile, face down.
• One person turns over a card and then the other person turns over a card next to it so the two cards are close to each other.
• If the cards are equivalent, the last person to have turned over a card keeps all the cards in the two upturned piles.

Bingo
• Each player selects five `answers' from one of the times tables.
• Roll two dice, add the dots together.
• Multiply that total by whichever table it is you are doing
• e.g. you are learning the 6 x table
• five and two is rolled on the dice
• five and two is 7
• 7 x 6 = 42
• Any player who has 42 on their `Bingo card' can cross it off.
The next player rolls the dice.

Triangle game

Cut out some triangles or download some triangle multiplication cards.
http://www.donnayoung.org/math/tricards.htm
Write the two numbers being multiplied on 2
of the corners and the answer on the other.
Lay the cards face downwards. Pick up a
card and cover one corner with a finger. For
example if you pick up a card with 7, 8 and 56
on it, you could cover the 7 and say: What do
I need to multiply 8 by to get 56?
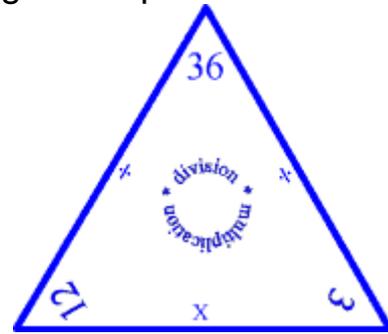
Fishy Fingers

• Two player stand facing each other with their
hands behind their backs.
• They say 'Fishy-fishy fingers' and then present their hands with
numbers shown by raised fingers (like in Rock, Paper, Scissors).
• The players then need to multiply the number on their hands with their
partner's number.
• The first to say the answer wins a point and play continues.

Times Tables Table Tennis

• Each player holds an imaginary table tennis bat and one player starts
with the first number in the times tables that they are learning (e.g. 3)
• Players try to build a rally by 'batting' the next number in that times
table back to their partner (e.g. 6).
• The aim is to say the times tables as quickly as possible in
order.

Online Games

There are lots of excellent on-line times tables games.

Here are some of them:

Hit the Button: http://www.topmarks.co.uk/maths-games/hit-the-button (tablet friendly)

Disappearing tables: http://mathszone.webspace.virginmedia.com/mw/tables_backwards/Disappearing%20tables.swf

Multiplication puzzle: http://tooeleschools.org/schools/elementaryschools/cces/hughes/Math%20Flash%20Games/multiplicationpuzzle.swf

Moon maths: http://www.primaryresources.co.uk/online/moonmaths.swf

Multiple Madness: http://mathszone.webspace.virginmedia.com/mw/multiples/intro.htm

Quickulations: http://www.transum.org/software/SW/Quickulations/ (tablet friendly)