Summer Times Tables Challenge

Are you ready to take on the challenge?

Learning the times tables facts will really help you with maths when you move into Year 5 or 6 in September. For example, good recall of times tables can help you solve calculations requiring short or long multiplication, division and adding/subtracting/multiplying /dividing fractions! There are so many other topics in maths where being able to quickly recall the times tables facts will make it much easier for you to understand them.

Did you know that there are **36 key multiplication facts**? These facts are most definitely worth learning! This is because they are required for the short multiplication or long multiplication written methods. Because of the **commutative** property of multiplication, if you know that 7 x 3 = 21 you also know that 3 x 7 = 21. There are not as may facts to learn as you might think!

The 36 multiplication facts that are required for formal written multiplication methods are as follows:							
2 x 2							
3 x 2	3 x 3						
4 x 2	4 x 3	4 x 4					
5 x 2	5 x 3	5 x 4	5 x 5				
6 x 2	6 x 3	6 x 4	6 x 5	6 x 6			
7 x 2	7 x 3	7 x 4	7 x 5	7 x 6	7 x 7		
8 x 2	8 x 3	8 x 4	8 x 5	8 x 6	8 x 7	8 x 8	
9 x 2	9 x 3	9 x 4	9 x 5	9 x 6	9 x 7	9 x 8	9 x 9

Can you develop your speed of recall of these 36 facts over the summer holidays?

On the next page, you will find different ideas to help you learn these times tables facts. Once you are confident with recalling the 36 key facts, you could challenge yourself further by learning the 11 and 12 times tables facts too!

Practice Plan

The 36 Key Times Tables Facts

2 x 2 = 4							
3 x 2 = 6	3 x 3 = 9						
4 x 2 = 8	4 x 3 = 12	4 x 4 = 16					
5 x 2 = 10	5 x 3 = 15	5 x 4 = 20	5 x 5 = 25				
6 x 2 = 12	6 x 3 = 18	6 x 4 = 24	6 x 5 = 30	6 x 6 = 36			
7 x 2 = 14	7 x 3 = 21	7 x 4 = 28	7 x 5 = 35	7 x 6 = 42	7 x 7 = 49		
8 x 2 = 16	8 x 3 = 24	8 x 4 = 32	8 x 5 = 40	8 x 6 = 48	8 x 7 = 56	8 x 8 = 64	
9 x 2 = 18	9 x 3 = 27	9 x 4 = 36	9 x 5 = 45	9 x 6 = 54	9 x 7 = 63	9 x 8 = 72	9 x 9 = 81

Focus on a column at a time, in the following order:

2 x table (8 key facts to learn)

5 x table facts (5 key facts to learn)

4 x table facts (6 key facts to learn)

8 x table facts (2 key facts to learn)

3 x table facts (7 key facts to learn)

6 x table facts (4 key facts to learn)

9 x table facts (1 key fact to learn)

1) **Read** the times tables facts **out loud**. For example, if you were focusing on the four 6 x table facts, you would say:

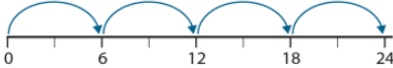"Six sixes are thirty-six"

"Seven sixes are forty-two"

"Eight sixes are forty-eight"

"Nine sixes are fifty-four"

Now do this a second time, but this time, try to say the facts out loud without reading them from the chart above. It is more important that you say them correctly than say them quickly at this stage. As you practise, your speed will develop.

2) Without looking at the chart above, **write out** the times tables facts you are focusing on onto a blank sheet of paper. For example, 7 x 2 = 14. Check the answers on the chart above after you have written them down. Circle any ones you did not get right. These are your priority facts to learn!
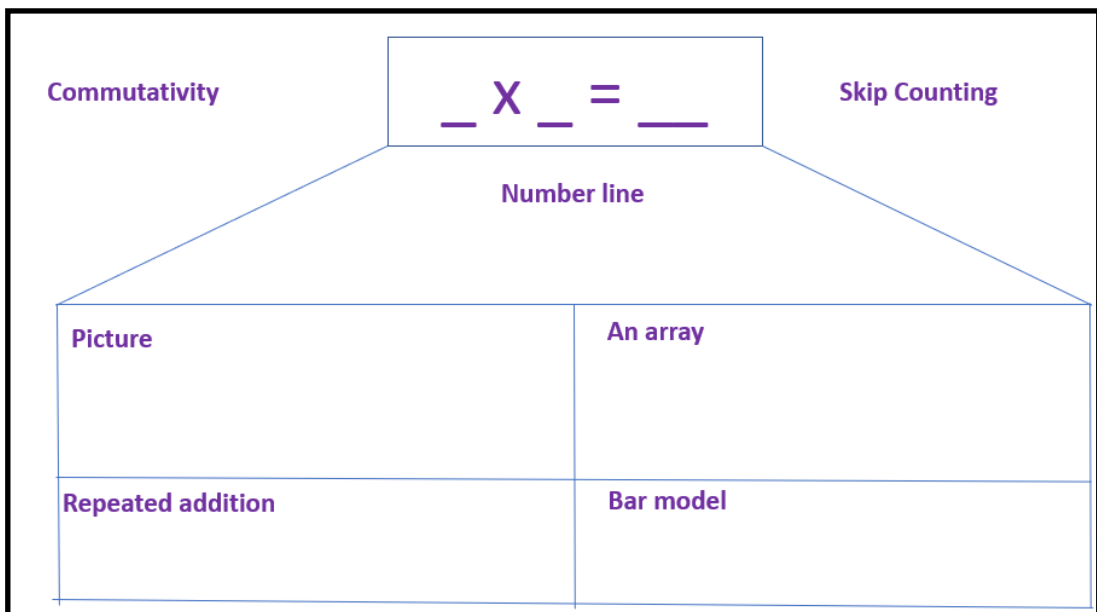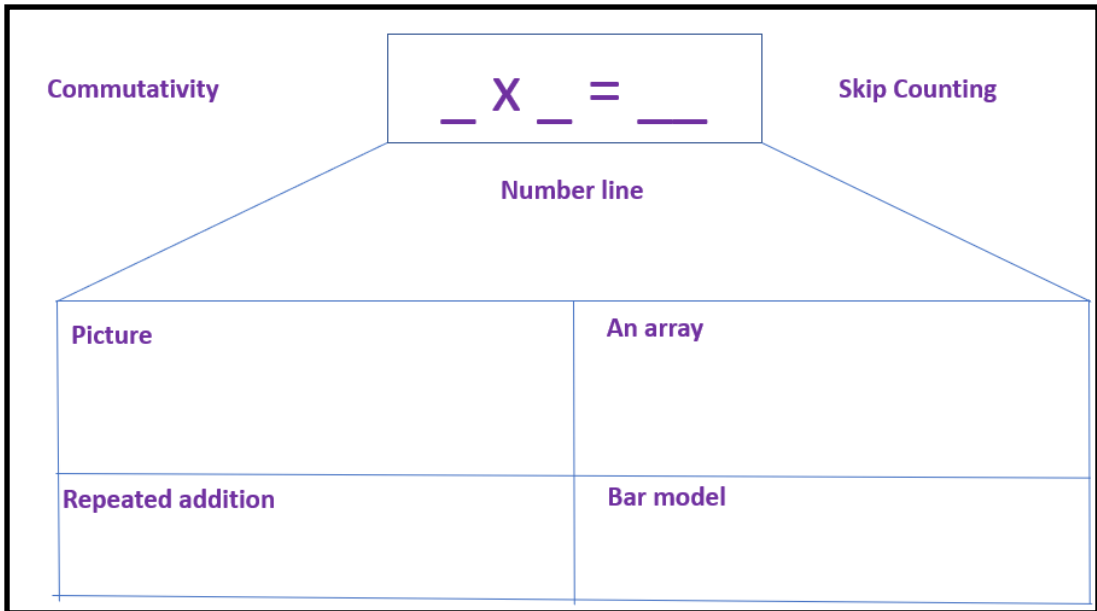
3) Practise the times tables you focused on online. https://www.topmarks.co.uk/maths-games/hit-the-button or http://www.timestables.me.uk/ are great websites and free to use and you can select the times tables you would like practice with. If you have a **TTRockstars** account, logon and practice your times tables. Alternatively, you could have a go at some of the activities on the next few pages such as the "How Close to 100" game. Some of the suggested activities are for 2 players.
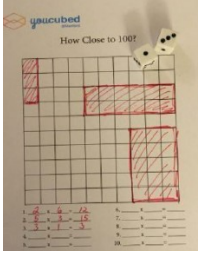
Scatter Tables

This is an activity to try with an adult. The adult calls out a question from the times table you are focusing on and you have to point to the answer on the page. For example, if you are concentrating on the 5 times table, the adult calls out questions like, "8 times 5" (you point to 40), or "6 times 5" (you point to 30)). Your aim should be to get them correct each time and not worry about the speed. Your speed will develop as you practice!

2 Times Table

4   18   8
  10   14
16   12   6

3 Times Table

24   18   9
        27
21   12   15

4 Times Table

20   36   24
  32   16
      28

5 Times Table

45   25
    40   35
        30

6 Times Table

          36
48   42
      54

7, 8 and 9 Times Table

72   63   81
    49   56
        64

Commutativity

4 x 6 = 24
6 x 4 = 24

4 x 6 = ___

Skip Counting

6,12,18,24

Number line

0	6	12	18	24

Picture

An array

Repeated addition

6 + 6 + 6 + 6 = 24
4 + 4 + 4 + 4 + 4 + 4 = 24

Bar model

24			
6	6	6	6

4	4	4	4	4	4

Above is an example of the different ways that we could represent the fact 4 x 6 = 24.

Have a go at completing this for another fact, especially for your priority facts!

Commutativity

_ X _ = ___

Skip Counting

Number line

Picture

An array

Repeated addition

Bar model

Commutativity

_ X _ = ___

Skip Counting

Number line

Picture

An array

Repeated addition

Bar model

Card 1

Commutativity

_ X _ = __

Skip Counting

Number line

Picture	An array
Repeated addition	Bar model

Card 2

Commutativity

_ X _ = __

Skip Counting

Number line

Picture	An array
Repeated addition	Bar model

Card 3

Commutativity

_ X _ = __

Skip Counting

Number line

Picture	An array
Repeated addition	Bar model

This is a game for two or more players. Players take turns to roll **two dice** and multiply the two numbers rolled. The player then draws an array to represent that fact on the grid in one colour and writes the answer to the fact on the lines underneath the grid. A player can put the array anywhere on the grid, but the goal is to fill up the grid to get it as full as possible. Then player 2 rolls two dice, multiplies the two numbers and draws the corresponding array in their own colour. The game ends when both players have rolled the dice and cannot put any more arrays on the grid.

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How Close to 100?

1. _____ x _____ = _____   6. _____ x _____ = _____

2. _____ x _____ = _____   7. _____ x _____ = _____

3. _____ x _____ = _____   8. _____ x _____ = _____

4. _____ x _____ = _____   9. _____ x _____ = _____

5. _____ x _____ = _____   10. _____ x _____ = _____