



**Times table and number  
bond information for  
parents**



## Why are learning times tables and number bonds so important?

If children are able to learn, retain and recall key number facts such as times tables and number bonds, it frees their brains up to solve more challenging calculations and problems.

### Number bonds:

Number bonds are also often referred to as 'number pairs'. They are simply the pairs of numbers that make up a given number and they are VITAL for children's fluency and number understanding.

| Number bonds to<br>5 | Number bonds to<br>10 | Number bonds to<br>20 | Number bonds to<br>100 |
|----------------------|-----------------------|-----------------------|------------------------|
| 0 + 5                | 0 + 10                | 0 + 20                | 0 + 100                |
| 1 + 4                | 1 + 9                 | 1 + 19                | 10 + 90                |
| 2 + 3                | 2 + 8                 | 2 + 18                | 20 + 80                |
| 3 + 2                | 3 + 7                 | 3 + 17                | 30 + 70                |
| 4 + 1                | 4 + 6                 | 4 + 16                | 40 + 60                |
| 5 + 0                | 5 + 5                 | 5 + 15                | 50 + 50                |
|                      | 6 + 4                 | 6 + 14                | 60 + 40                |
|                      | 7 + 3                 | 7 + 13                | 70 + 30                |
|                      | 8 + 2                 | 8 + 12                | 80 + 20                |
|                      | 9 + 1                 | 9 + 11                | 90 + 10                |
|                      | 10 + 0                | 10 + 10               | 100 + 0                |
|                      |                       | <i>And reversed</i>   |                        |

Children identifying number bonds and knowing them thoroughly will help them become more fluent in their calculations throughout their time in school. Number bonds spotting is key for some aspects of the Key Stage 2 SATs and beyond!

Children in any year group need to regularly practise these number bonds to help their calculations.



## Times tables:

Knowing times tables can be a vital tool when calculating more challenging problems and gives children a high level of confidence in their own mathematical ability. Regular rehearsal is crucial in ensuring these times tables are learnt thoroughly.

Children need to be able to recall times tables in a range of ways for example:  $3 \times 4 =$ ,  $4 \times 3 =$ , what is the 3<sup>rd</sup> multiple of 4, divide 12 by 4, 4 x by something is 12.

The National Curriculum outlines clearly which times tables should be learnt in each year group.

| <b>Year 1</b>                        | <b>Year 2</b>  | <b>Year 3</b>   | <b>Year 4</b>   | <b>Year 5</b>   | <b>Year 6</b> |
|--------------------------------------|--|---|---|---|---------------|
| Count in multiples of 2s, 5s and 10s | Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables | Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables | Recall multiplication and division facts for multiplication tables to 12 x 12 | Multiply and divide numbers mentally, drawing upon known facts<br>Recognise and use square numbers and cube numbers |               |



## How to help your child at home:

Firstly don't worry if your child is taking a little longer to learn their times tables and number bonds, it can take a more time for some children. The trick is to find the way that helps them to learn them the best.

Here are some things that you can use to help at home:

- Encourage your children to complete their homework by regularly visiting either [Times Table Rock Stars](#) or [Numbots](#) (as set by your child's class teacher).
- On our school website we have tens frames which can be printed and shown to children to help with their number recognition. They can also see how many more is needed to make 5, 10 or 20 using the gaps in the frame. You can make your own tens frame using egg boxes and cutting off 2 of the egg sections and fill the parts with something eg coins  
<http://www.east-peckham.kent.sch.uk/maths/>
- YouTube has lots of times table and number bond songs and there are plenty of CDs available for purchase
- This video is shared with teachers and one method we use to teach times tables <https://www.youtube.com/watch?v=yXdHGBfoqfw>
- Patterns to help children learn their times tables are as follows:

**X 2**

**X 2**  
Double the number, for example  $2 \times 8$  is the same as double 8.

All numbers in the 2 times table are even numbers.

**X 3**

In the 3 times table the digits add up to 3, 6 or 9.

For example  $3 \times 5 = 15$   
( $1 + 5 = 6$ )

**X 4**

Double the number and then double again.

$4 \times 6 = 24$   
(Double 6 is 12, double 12 is 24)

**X 5**

The last digit always goes 5, 0, 5, 0.

It is half of  $10 \times$  for example  $5 \times 6$  is half of  $10 \times 6$  which is 60.

Half of 60 is 30.  $5 \times 6$  is 30.

## X 6

If you multiply 6 by an even number, they both end in the same digit.

Example:  $6 \times 2 = 12$ ,  $6 \times 4 = 24$ ,  
 $6 \times 6 = 36$ , etc

Double the 3x to find the 6x

## X 8

Double the 4 times table or double and double again to get the 8 times table

## X 9

You can also do the **Hand Trick!**  
Turn your palms so that they face you.

If you are doing  $6 \times 9$ , put down your 6<sup>th</sup> finger. The fingers to the left of your bent finger are the tens and to the right are the units.

## X 9

is  $10 \times$  the number minus the number. Example:  $9 \times 6 = 10 \times 6 - 6 = 60 - 6 = 54$

The last digit always goes 9,8,7,6, .. if you *add* the answer's digits together, you get 9.

Example:  $9 \times 5 = 45$  and  $4 + 5 = 9$ . (But not with  $9 \times 11 = 99$ )

## X 11

Up to  $9 \times 11$ : just repeat the digit (Example:  $4 \times 11 = 44$ ) for  $10 \times 11$  to  $18 \times 11$ : write the sum of the digits between the digits (Example:  $15 \times 11 = 1(1+5)5 = 165$ )

Note: this works for any two-digit number, but if the sum of the digits is more than 9, you will have to "carry the one" (Example:  $75 \times 11 = 7(7+5)5 = 7(12)5 = 825$ ).



## Times table square:

| <b>x</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> | <b>9</b> | <b>10</b> | <b>11</b> | <b>12</b> |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| <b>1</b>  | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10        | 11        | 12        |
| <b>2</b>  | 2        | 4        | 6        | 8        | 10       | 12       | 14       | 16       | 18       | 20        | 22        | 24        |
| <b>3</b>  | 3        | 6        | 9        | 12       | 15       | 18       | 21       | 24       | 27       | 30        | 33        | 36        |
| <b>4</b>  | 4        | 8        | 12       | 16       | 20       | 24       | 28       | 32       | 36       | 40        | 44        | 48        |
| <b>5</b>  | 5        | 10       | 15       | 20       | 25       | 30       | 35       | 40       | 45       | 50        | 55        | 60        |
| <b>6</b>  | 6        | 12       | 18       | 24       | 30       | 36       | 42       | 48       | 54       | 60        | 66        | 72        |
| <b>7</b>  | 7        | 14       | 21       | 28       | 35       | 42       | 49       | 56       | 63       | 70        | 77        | 84        |
| <b>8</b>  | 8        | 16       | 24       | 32       | 40       | 48       | 56       | 64       | 72       | 80        | 88        | 96        |
| <b>9</b>  | 9        | 18       | 27       | 36       | 45       | 54       | 63       | 72       | 81       | 90        | 99        | 108       |
| <b>10</b> | 10       | 20       | 30       | 40       | 50       | 60       | 70       | 80       | 90       | 100       | 110       | 120       |
| <b>11</b> | 11       | 22       | 33       | 44       | 55       | 66       | 77       | 88       | 99       | 110       | 121       | 132       |
| <b>12</b> | 12       | 24       | 36       | 48       | 60       | 72       | 84       | 96       | 108      | 120       | 132       | 144       |

Remember the children only need to learn half of these times table as  $5 \times 4$  is going to give the same answer as  $4 \times 5$ .

Ask children to spot patterns in the square – it may help them to remember them.