



# Key Fluency Facts (K.F.F.s)

## A Parent's Guide

As you are probably aware, the new National Curriculum was introduced to all schools in September 2014. With it came a huge increase in expectations and the breadth and depth of knowledge that are expected of your children in maths. One of the three aims of the new curriculum states that pupils (of all ages, not just primary children) will: *become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.*

In order to assist parents with their own understanding of the expectations, we have developed this document in order to support the invaluable assistance that you are providing to your children at home.

When maths skills are assessed, we are aiming for children to be able to use rapid mental recall (i.e. to be able to answer a mental maths calculation within 3 seconds). This mental recall will hopefully enable pupils to become more efficient when working with larger numbers as well as applying their knowledge to solve problems.

We are encouraging children to practise the recall facts for their year group at home, as well as within school. You can do this as little or often as you deem to be appropriate for your child. However, children are much more likely to remember and recall new facts if they practise in short bursts and often (e.g. 5-10 minutes per day).

This could be through turning over playing cards and multiplying the numbers by a specified times table or a parent giving their child a number less than 100 for them to call back the corresponding number to make 100.

We hope that your child enjoys the challenge of working their way through their recall facts and that this will have a positive impact on progress with mental recall skills.

# Key Fluency Facts for Spring Term

## Reception



### **This term, your child will be learning to:**

- ▶ Estimate how many objects they can see and check by counting them.

*How many toy cars do you think there are on the track?*

*How can you find out if your estimate was correct?*

- ▶ Use numbers 0-20.

- ▶ Place them in order.

*What number is this? Can you put these numbers in order from the smallest to the largest?*

*Which numbers are missing? How can we check?*

- ▶ Say which number is one more or one less than a given number up to 20

*What number comes after 7? What number comes before 9?*

*Can you get me 1 more banana? If you had 1 more hero point, how many would you have?*

*We need to put one toy car away. How many do we have still to play with?*

# Key Fluency Facts

## Reception



### The principles of counting

These are the key concepts in the development of counting for young children and they will progress through these as the year goes on:

- ▶ **The one-one principle** – one object = one count.
- ▶ **The stable-order principle** – 1, 2, 3. Not 2, 1, 3.
- ▶ **The cardinal principle** – counting objects and knowing the last number represents the number of items.
- ▶ **The abstraction principle** – counting things that can't be touched/seen.
- ▶ **The order–irrelevance principle** – the way of counting doesn't matter, as long as each object is only counted once.



# Key Fluency Facts for Spring Term

## Year 1



### **This term, your child will be learning to:**

- ▶ Count up in twos, fives and tens.

*Can you count up in twos from zero?*

*What number have I missed? 0, 2, 4, 8, 10, 12.....*

*How many times will I have to count up in tens to get to 60? Can you help me?*

- ▶ Add and subtract one-digit and two-digit numbers to 20

*What is 4 more than 14? What is 4 less than 14?*

*There are 7 boys and 12 in the Hub. How many children are in there altogether?*

*The pencil costs 12p and the rubber costs 6p. How much will it cost altogether?*

*There are 20 children on the bus and 6 get off at the first stop. How many are left?*

- ▶ Use the language of: equal to, more than less than.

*Which box has the most cubes? How do you know?*

*Can you use language to compare these two numbers? 5 and 15*

*Can you use language to compare these two amounts? 10 and 6+4*

# Key Fluency Facts

## Year 2



### **This term, your child will be learning to:**

- ▶ Count in steps of 3 from 0 from any number, forward and backwards.

*Can you count up to 15 in threes? Can you count backwards from 12 in threes?*

*If I start at 9, how many times will you count in threes to get to 18?*

*Can you count up in threes from 18 to 48? What did you notice? What changes/stays the same?*

- ▶ Recall addition and subtraction facts up to 100.

*What is added to 30 to make 100? If I have 100 and subtract 60, what will I have left?*

*How many more pence do I need to save a pound if I already have 65p?*

*If I have £1 to spend and I buy a can of drink for 35p, how much money do I have left?*

- ▶ Recall and use multiplication and division facts for 2, 5 and 10x tables.

*What is 3 lots of 5? What is 5 lots of 3? IS it the same answer? Why do you think that is?*

*If I have 10 raisins and want to share them with my friend equally, how many will we each get?*

*If you count up in fives six times, what number will you get to?*

*What division fact can you find if you already know  $2 \times 5 = 10$ ?*

# Key Fluency Facts for Spring Term

## Year 3



### **This term, your child will be learning to:**

- ▶ Count from 0 in multiples of 8.

*Count up in eights from 0 until you reach 80.*

*If you start at 24 and count on in eights, how many times will you do this to get to 56?*

*What do you notice about the multiples of eight? Are they odd or even? What happens to the tens and units? Why do you think that is?*

- ▶ Recall and use  $\times$  and  $\square$  facts for  $8x$  tables.

*The pixie is mouse is cm tall. The dog is 8 times taller. How tall is the dog?*

*What is 7 lots of 8? What is 56 shared into 8 equal groups?*

*If you know  $3 \times 8 = 24$ , what other multiplication or division facts can you find using those three numbers?*

- ▶ Count on from 0 in multiples of 50.

*How many lots of 50 in 300? Count on in 50s to check.*

*How many lots of 50ml measurements can I make using 500ml of liquid?*

*What do the multiples of 50 have in common? Is there a pattern?*

*How far can you count up in steps of 50?*

# Key Fluency Facts

## Year 3

|                 |    |
|-----------------|----|
| $0 \times 8 =$  | 0  |
| $1 \times 8 =$  | 8  |
| $2 \times 8 =$  | 16 |
| $3 \times 8 =$  | 24 |
| $4 \times 8 =$  | 32 |
| $5 \times 8 =$  | 40 |
| $6 \times 8 =$  | 48 |
| $7 \times 8 =$  | 56 |
| $8 \times 8 =$  | 64 |
| $9 \times 8 =$  | 72 |
| $10 \times 8 =$ | 80 |
| $11 \times 8 =$ | 88 |
| $12 \times 8 =$ | 96 |

|                  |     |
|------------------|-----|
| $0 \times 50 =$  | 0   |
| $1 \times 50 =$  | 50  |
| $2 \times 50 =$  | 100 |
| $3 \times 50 =$  | 150 |
| $4 \times 50 =$  | 200 |
| $5 \times 50 =$  | 250 |
| $6 \times 50 =$  | 300 |
| $7 \times 50 =$  | 350 |
| $8 \times 50 =$  | 400 |
| $9 \times 50 =$  | 450 |
| $10 \times 50 =$ | 500 |
| $11 \times 50 =$ | 550 |
| $12 \times 50 =$ | 600 |



Remember the Law of Commutativity:  
 $2 \times 8$  will give you the same answer as  $8 \times 2$ !  
Try both ways around to challenge yourself!

Do you notice a pattern in the answers?  
Are they all even or odd or both?

When multiplying, it is called a SUM.  
The answer is called the PRODUCT

# Key Fluency Facts for Spring Term

## Year 4



### **This term, your child will be learning to:**

- ▶ Count in multiples of 6.

*Can you count in 6s from 0 to 72?*

*Start at 24, how many times will you count on in sixes to reach 48?*

*Is 73 a multiple of 6? How do you know? Can you prove your idea?*

- ▶ Count in multiples of 7.

*How many times will you count in sevens to reach 56?*

*What do you notice about the multiples of seven? Is there a pattern you can find?*

*Can you use 2 lots of 7 to help you to find 4 lots of 7? How?*

- ▶ Count backwards through zero to include negative numbers.

*Can you order these numbers? 6, 2, -2, 0, 4, -4, -6*

*Sam is counting down from 13 in fours. Will he say -3 in his sequence? Why/why not?*

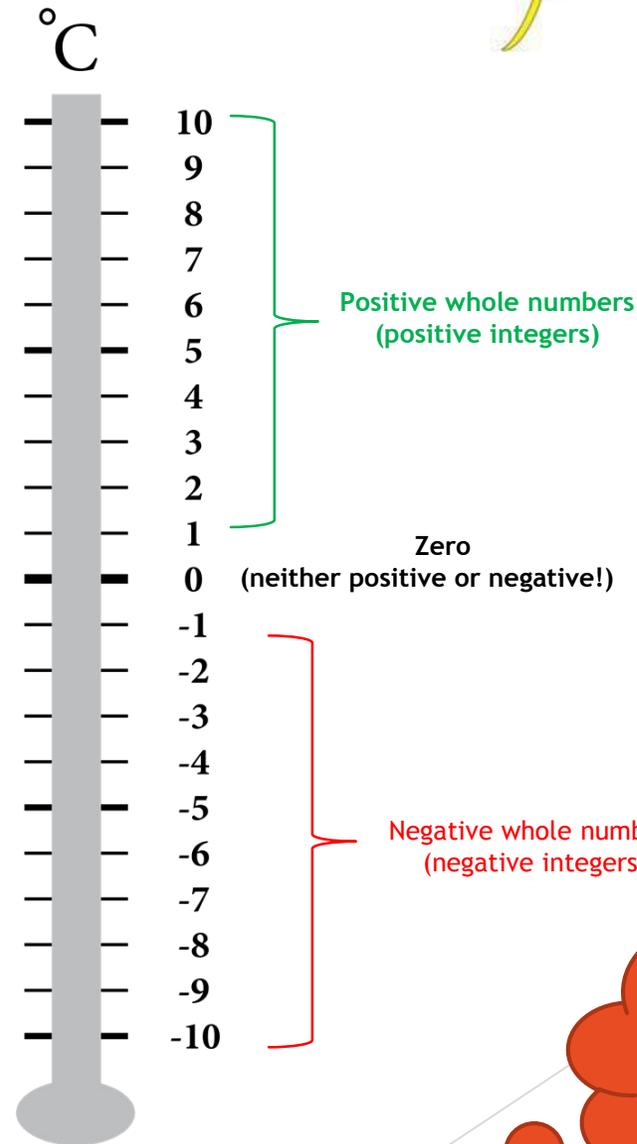
*Count back from 6 to -6 in steps of two. What numbers will you say?*

# Key Fluency Facts

## Year 4

|                 |    |
|-----------------|----|
| $0 \times 7 =$  | 0  |
| $1 \times 7 =$  | 7  |
| $2 \times 7 =$  | 14 |
| $3 \times 7 =$  | 21 |
| $4 \times 7 =$  | 28 |
| $5 \times 7 =$  | 35 |
| $6 \times 7 =$  | 42 |
| $7 \times 7 =$  | 49 |
| $8 \times 7 =$  | 56 |
| $9 \times 7 =$  | 63 |
| $10 \times 7 =$ | 70 |
| $11 \times 7 =$ | 77 |
| $12 \times 7 =$ | 84 |

|                 |    |
|-----------------|----|
| $0 \times 8 =$  | 0  |
| $1 \times 8 =$  | 8  |
| $2 \times 8 =$  | 16 |
| $3 \times 8 =$  | 24 |
| $4 \times 8 =$  | 32 |
| $5 \times 8 =$  | 40 |
| $6 \times 8 =$  | 48 |
| $7 \times 8 =$  | 56 |
| $8 \times 8 =$  | 64 |
| $9 \times 8 =$  | 72 |
| $10 \times 8 =$ | 80 |
| $11 \times 8 =$ | 88 |
| $12 \times 8 =$ | 96 |



If you learn your 4x tables, just double the answer to find the 8x tables!  
E.g.  $2 \times 4 = 8$   
 $2 \times 8 = 16$

When counting up in 8s, why not try adding 10 and then subtracting 2 each time?

When multiplying, it is called a SUM.  
The answer is called the PRODUCT