

# Games to Play

You can use **anything** as counters to play games eg lego/ buttons/pasta etc. Use dice, playing cards or spinners to make random numbers or cut out and keep numbers from birthday cards/magazines to play card/matching number games. Ask your child to explain how they worked their answer out, and in turn explain how you did.

- Bingo - ask your child to write down 5 multiples from the table they are learning, eg for 5s: 5, 10, 20, 35, 45. Randomly call out questions from that table. Children cross them off. Swap it around - the children write the question and you call out the answer. They cross off the correct question if they have it.
- Place 10 playing cards face down. Take it in turns to randomly turn over 2. Multiply them. If you answer correctly keep them. The winner has most cards.

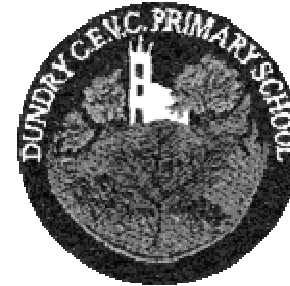
# Websites

- <http://www.mad4maths.com/parents/>
- [http://www.direct.gov.uk/en/Parents/Schoolslearninganddevelopment/HelpingYourChildToLearn/DG\\_4016596](http://www.direct.gov.uk/en/Parents/Schoolslearninganddevelopment/HelpingYourChildToLearn/DG_4016596)
- <http://woodlands-junior.kent.sch.uk/Homework/>
- <http://www.bbc.co.uk/skillswise/numbers/wholenumbers/>
- <http://www.educationcity.com/home/en/>

These methods build and extend of what the children have used in Key stage 1. If your child is finding the methods in this leaflet challenging, remind them of the methods they already know from Year 2. Please contact the class teacher if you have any questions or worries.

Acknowledgements: Leicestershire Primary Team.

# Parent's Guide to



# Mathematics Year 3

This guide is designed to help you understand how your child is taught mathematics in school. There are examples of addition, subtraction, multiplication and division, together with some of the language we use in school. On the back page you will find some ideas for games and helpful websites.

The emphasis of mathematics teaching in Lower Key Stage 2 is on children working mentally, with calculations recorded in horizontal number sentences, with some 'jottings' for more challenging numbers. As they progress through Key Stage 2, children are taught more formal methods of calculating. Use this guide to know which method your child is learning.

# Addition

At the beginning of the year we concentrate on using a numberline or number square to show the position of numbers, counting on in ones, and then counting on by partitioned numbers. We always start with the bigger number.

We learn to add horizontally using partitioning.

- ★  $86 + 43 =$
- ★  $80 + 40 = 120$
- ★  $6 + 3 = 9$
- ★  $120 + 9 = 129$

## Vocabulary:

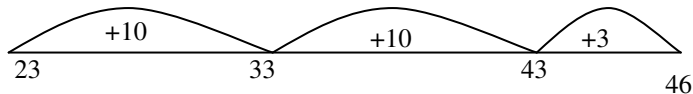
★ **Partitioning/chunking** - splitting a number into tens and units: 23 is  $10 + 10 + 3$  or  $20 + 3$

★ **Add total altogether more than plus and**

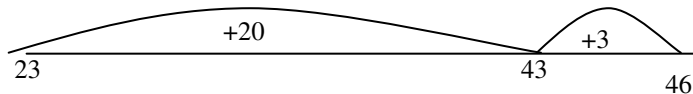
# Subtraction

At the beginning of the year we concentrate on using a numberline and number square to show the position of numbers and count back in ones and tens. Eg  $45 - 32 = 45 - 10 - 10 - 10 - 2 = 13$

★ We also count on to find the difference, eg  $46 - 23 = 23$



★ We then move on to counting on to take away in fewer jumps



## Vocabulary

★ Take away partition jump on count back count on  
 ★ less than difference subtract less than



# Multiplication

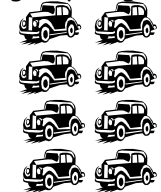
In Year 3 we concentrate on learning the 2, 3, 4, 5, 6 and 10 times tables. All children are expected to know these by heart by the end of the year. We also learn to count on in jumps of 100. To help children's understanding of multiplication we chant our tables and use pictorial images called **arrays** to show groups, eg  $4 \times 2 =$



4 groups of 2

or

2 groups of 4



Or  $4+4= 2+2+2+2=$

We also learn the **inverse** of

each multiplication fact, eg  $2 \times 4 = 8$

$4 \times 2 = 8$

$8 \div 2 = 4$

$8 \div 4 = 2$

## Vocabulary

★ **Inverse** (opposite calculation, eg  $\times$  is opposite of  $\div$ )

★ multiply jump on/back in groups of times

# Division

We divide by using sharing and grouping. We start by teaching it through practical and pictorial images such as **arrays**. They use their knowledge of tables to answer division questions. Which is helped by a sound knowledge of 2, 3, 4, 5, 6 and 10 times tables.

★ What is  $80 \div 4$ ?

★ Here are 83 pieces of Lego. How many groups of 4 can you make?

★ How many are left over?

## Vocabulary

★ share group

divide

groups of