Helping your child with maths in Primary 2

We all use maths every day, often without realising it. We believe that every child can develop the numeracy skills they will need, both at school and home, throughout their lives. Helping your child feel confident about maths now gives them a head start.

This leaflet is to give you some ideas about how you can support your child's learning in maths in small, fun, practical ways at home this year.

The main focus of the booklet is number bonds to 20. Knowing these bonds are the foundation to successful use of number.

By the start of primary 2 many of our pupils will be following the First level curriculum. This curriculum is split into three aspects

- Number, Money and Measure
- Shape, Position and Movement
- Information Handling

We have provided some examples of each aspect in the booklet.

Number games

You need a 1 – 6 dice

- **Take turns. Roll the dice. See how quickly you can say the number to add the number on the dice to make 10.**

? + 6 = 10

If you are right you score a point, first to ten points.

You can extend the activity by making the two numbers to add up to 20.

Sum it up

- Each player needs a dice.
- Say: *Go!* Then each rolls a dice at the same time.
- Add up all the numbers showing on your own dice, at the sides as well as at the top.
- Whoever has the highest total scores 1 point.
- The first to get 10 points wins.

Children's number skills can be supported in all sorts of fun ways at home. Board games such as snakes and ladders are a great way of making them familiar with the number system and simple addition and subtraction.

Car Bingo – something to do on a journey

- Each person chooses a target number, e.g. 15.
- How many car numbers can you spot with 3 digits adding up to your target number, e.g. K456 XWL.
- So 4 + 5 + 6 = 15, bingo!

Number games

I'm thinking of a number. I've subtracted 5 and the answer is 7. What number was I thinking of? Explain how you know.
I'm thinking of a number. I've added 8 and the answer is 19. What number was I thinking of? Explain how you know.
I know that 7 and 3 is 10. How can I find 8 + 3? How could you work it out?

Game – How many different ways to make an number eg 5
10 – 5 , 3+2 , 11 – 6 etc

Speedy pairs to 10

Make a set of 12 cards showing the numbers 0 to 10, but with two 5s.
If you wish, you could use playing cards.
♦ Shuffle the cards and give them to your child.
♦ Time how long it takes to find all the pairs to 10.
Repeat later in the week. See if your child can beat his / her time.

Speedy pairs to 20

Similar game using numbers to 20. Make a set of card including two of a digit.(1 to 10)

Money to 20

Receiving (and spending!) pocket money can make children very keen learners in this area! Use any shopping trips to encourage your child to be able to:
Recognise all the coins
Use money to count up to 20, use the coins, 1p, 2p, and 5p
Show children a price list with items costing up to 20p.
I have 20p to spend. If I spend 20p exactly, which two items could I buy?

If I bought one of the items how much change would I have?

Time

Make sure that there are both traditional and digital clocks around the house for your child to practise reading the time to the whole and half hour. Quarter past and especially quarter to the hour are difficult for pupils.

Let them know that there are 60 seconds in a minute. Play some games to get a sense of 60 seconds. How many sums can you complete in 60 seconds? How far can you run in 60 seconds? How many times can you write out a particular word in 60 seconds?

The months and their chronology is very important. How many days in January, February March and so on. Use the calendar and diary dates to support their understanding of time.

Counting (Forwards and Backwards)

Count forwards and backwards by 2s from 2 "2, 4, 6…" "12, 10, 8.."

Count forwards and backwards by 5s from 5 "5, 10, 15…" "15, 10, 5.."

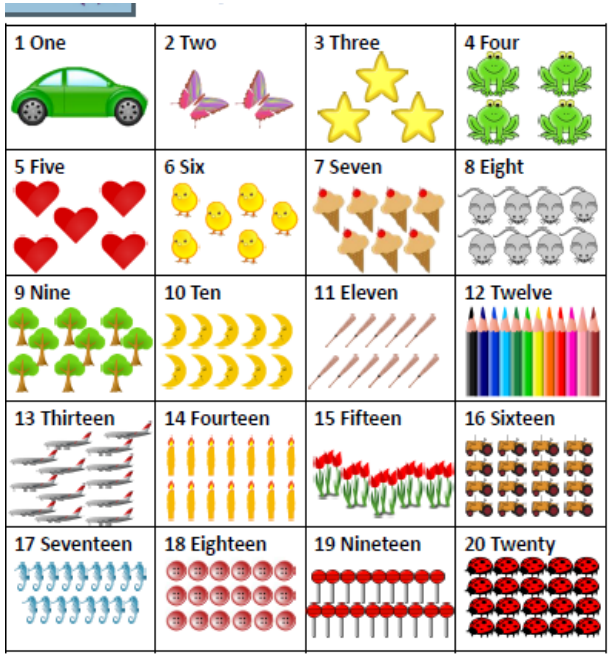
Count forwards and backwards by 10s from 10 "10, 20, 30…" "30, 20, 10.."

Useful websites

www.ictgames.com – there are lot of games that you can use.

The children also use the website www.topmarks.co.uk in class as well.

Number bonds to 20

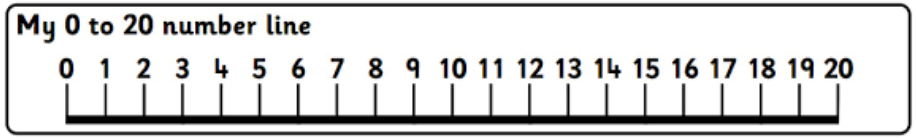


Knowledge of number bonds is essential when it comes to harder calculations involving addition and subtraction (for example, children learn to use the **bridging through 10 method** to help them add numbers mentally), so it is vital children get a firm grounding in this from Primaries 1 to 3.
Use biscuits, lego pieces, sweets, cards

Count together to ten and twenty, matching the count to fingers, using fingers are a good way of learning. .
I am going to place some biscuits in the tin. Count with me so we know how many I have put in the tin. As the children count with you, place eight biscuits in the tin. One, two, three, four . . .
How many biscuits? Eight. Show me eight fingers.
Hold up other biscuits. How many biscuits will I have in the tin if I put another number in?
We will tip them out to check. Tip them out and count them, grouping in twos/threes or fours.

You will need: large number cards 1 to 20.

- Give out the cards to 20 of the children. Say the numbers zero to twenty in order very slowly. As you say each number, place the cards starting at the left side and form a number line to 20.
- Choose a number to find, say number nine. Point to number nine.
- Choose another number, e.g. 14.Which numbers are less than 14 but more than 9. What is the difference between the two numbers?



How to use a number line

0 to 1 is one jump, 1 to 2 is the second jump. So start at 7 – place a counter or finger at 7. We want to add 6. Start at 7 and jump 6 spaces and you land on 13. 7 + 6 = 13

Subtract 14 – 9. Start at 14 and jump back 9 spaces = 5

Teachers teach number bonds in a variety of ways. When learning number bonds to 5, 10 or 20 it is always good to use pictorial representation, so a teacher might show rows of blocks shaded like this to make the concept clear:

Give your child ten counters (Lego bricks, past shapes, buttons, sweets) and ask them questions such as: What do you add to 3 to make 10? What do you add to 2 to make 10? Encourage them to use the counters to work it out.

Print out number cards and ask your child to match them up into number pairs or number bonds (this can be done as a game of Snap).

Write a list of ten numbers then time your child to see how long it takes them to write down the other number that makes up each pair (2 and 18; 5 and 15; 4 and 16).

Shape work

Straight lines

Choose 2/3 or 4 different lengths between 2 and 20 centimetres. Use a ruler marked in centimetres. Draw lines of each length. Add them up. What is the total length?

You could take your child on a 'shape walk' around the supermarket to see what shapes they can spot. The shapes they may recognise in Primary 2 and 3 as well as the old familiar ones are:

2D: square , rectangle *pentagon (5 sides) hexagon (6 sides) octagon (8 sides)*

3D: *sphere, cube, cuboid, pyramid, cylinder, cone*

Guess my shape

♦ Think of a 2-D shape (triangle, circle, rectangle, square, pentagon or hexagon). Ask your child to ask questions to try and guess what it is.
♦ You can only answer *Yes* or *No*. For example, your child could ask: *Does it have 3 sides?* or: *Are its sides straight?*
♦ See if he can guess your shape using fewer than five questions.
♦ Now ask them to choose a shape so you can ask questions.

Information Handling

Discuss advertisements/leaflets/products claiming survey said, e.g. 18 out of 20 people preferred Top Mark Cream.

Find examples together of information displays, e.g. tables, graphs, surveys, questionnaires and ask questions

Curriculum for excellence – first level outcomes (Primary 2)

By the end of primary 2 we are expecting our pupils to be able to do many of the following:

- identify the number before and after a given number beyond 100
- make 3 digit numbers, recognise hundreds, tens and units.
- Recall basic facts for addition and subtraction to 20
- Use numbers upto 100 for addition and subtraction
- use doubles, halves and similar strategies to add and subtract numbers
- divide an object into halves, quarters and eighths
- use vocabulary of fractions
- read and write monetary values, including using the appropriate symbols
- calculate change
- know how many minutes in an hour
- use a variety of timers to measure events using minutes and seconds
- How many days in each month.
- draw simple a bar chart with labels, frequency and a title
- describe the results of my data collection

Great expectations – but not too great! Good maths is built on solid foundations, and these take time to settle. It is very important to develop mental arithmetic skills. Be patient. Be aware that there is a huge gap between the very important early stages of informal, mental arithmetic and the formal, written methods that adults expect to see. Don't try to jump too quickly.