

Peak School



Number Knowledge – Year 1 & 2

Helping your child recall basic number facts quickly and accurately

October 2016

Introduction

At Peak School we are looking to develop three key areas that all strong mathematicians should have. The first key area, and the area this booklet focuses, is number knowledge (mental maths). The second key area is developing a range of strategies to complete a number challenge and the third key area is problem solving. This booklet focuses on number knowledge as it is the foundation that the other two key areas work from. Without a solid base the children will struggle in the other areas.

Developing a love of Maths

Before we go into more detail regarding some of the activities and/or games you can play with your child it is important to think about what message you give your children regarding maths.

If you say to your child that you don't like maths or that you find it hard, it is likely your child will feel the same way. Get excited about maths, by all means talk about how much of a challenge it can be but by showing enthusiasm for learning new things is developing a growth mindset.

If you show stress and frustration when working with numbers then your children will sense this and likely develop the same attitudes. Research has shown that the way we model our interaction with maths has a massive bearing on how confident our children are in this area.

Number Knowledge

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Practical Examples

The following two pages talk about activities or games you can play with your child to develop their number knowledge.

At Year 1 and 2 the most important thing about learning maths is developing strong number sense.

Counting forwards and counting backwards – Children by the end of year 2 should be comfortable counting forwards and backwards from numbers 0-1000. A simple activity is to write down a number (suitable for their ability) and then get them to read out that number and then the number that comes after it. If you have an ipad you can easily draw the numbers on the screen or simply write them down on a piece of paper/card (1 number showing at a time). Do the same activity but this time get them to tell you what the number is and then the number that comes before it. Use a hundreds board to help the children become familiar with numbers from 0-100 (this is crucial). By the end of Year 1 most children know the pattern of numbers up to 100 but get stuck on what comes after 59 (is it 60, 70, 80 etc) so use the hundreds board to show them.

Using maths terms with your child. The children need to know that words such as ‘add, plus, what is ? and ?’ all mean the same thing. They also need to know that ‘minus, subtract and takeaway’ also mean the same thing. By the end of Year 1 children should be able to quickly and accurately know their basic facts for numbers adding to 10 (making 10). Our Year 2 children by the end of the year should be able to quickly add doubles up to 20 as well. What is double 3, 4, 6 etc. If you are working with your child get them to show you what $2 + 3$ looks like with lego or such like. Ask them all the different ways they can show you to make 8.

You cannot beat the classics!

Board games like snakes and ladders and card games like Uno are excellent to help the children reinforce numbers. The children are playing games and learning maths without even knowing it.

Games that involve dice and counting all add to the ‘maths mileage’ but remember to encourage your child to count on rather than always starting from 1.

Dominoes is also another classic game that help the children subitize (identify a collection of dots without counting them)



Counting on

Our Year 1 children, by the end of the year, are expected to be able to count on from any number up to 100. That means, that by the end of the year, your Year 1 child should be able to count on from any given number from 0-100 e.g. what numbers come after 72.

Year 1 activity – give your child a number e.g 23 and ask them to count on until you say stop. Usually you get them to count through the next 10 so for the example of 23 tell your child to stop when they get to about 32.

Our Year 2, by the end of the year, are expected to count on from any number up to 1000. This means that, by the end of the year, your Year 2 child should be able to count on from any given number from 0-1000 e.g. what numbers come after 374.

Year 2 activity – give your child a number e.g 72 and ask them to count on until you say stop. Usually you get them to count through the next 10 so for the example of 72 tell them to stop once they get to 82. Once your child can comfortably count on and backwards from 0-100 try 101-999.



Ordering Numbers – Year 1 should be able to order numbers up to 100 by the end of the year and children in Year 2 should be able to order numbers up to 1000 by the end of the year. Depending on the age and ability of your child you can get them to order numbers from smallest to biggest.

This might include 3-4 numbers from either 1-10, 20-30, 30-80 or 120-180 or higher numbers depending on the ability of your child. The main point of the exercise is so that the children can recognize that numbers are part of a range and that they can identify the order of numbers within that range. Let them have access to the 100's chart as support if your child needs it.

Hundreds Chart – The children need to know the order of number and should be able to count to 100 as soon as possible. They also are required to be able to identify numbers as well.

Using the Hundreds Chart, simply pick out a number on the 100's square and ask the child to name it. Ask them what number comes after it, before it. If in year 2 ask them to add 11 by moving across one number and down a row. Tell them you have a number and they have to try and guess it asking questions. You may need to model this first by having them pick a number and then you asking questions e.g. is the number between 20 and 30? Does it have a 5 in it? Is the 5 the first digit of that number?