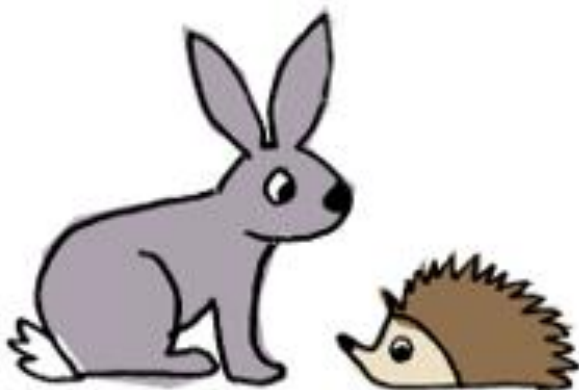




Prior Park Schools
**THE PARAGON
SCHOOL**

How can I help
my child with
mathematics in
Year 1?



At The Paragon, we make Maths come alive by showing how important it is in everyday life - a vital tool in working out how long it's going to take to save up for that new computer game or measuring the ingredients for a chocolate cake.

We strive to develop a positive attitude to Mathematics as an interesting and purposeful subject in which all children can gain a degree of success and pleasure.

“We need to help learners shift from thinking ‘I can’t do this’ to ‘I can’t do this yet’; to encourage, in all learners, a ‘can do’ attitude. Developing an ‘I can’t do this yet’ disposition means being comfortable with getting stuck on some mathematics.” - Mike Askew

An important role of any parent is to support this positive attitude towards Maths. In this way, pupils at The Paragon can develop a secure understanding of Mathematical concepts and processes, combined with a genuine procedural fluency and joy in the subject.

Always begin by asking your child what they already know. It is important that children are learning with consistency whether at home or in school. If you are unsure of how to best support your child’s understanding of a mathematical concept, class teachers are more than willing to answer any questions.

Addition

Subtraction

Counting on

Count on in 1s
e.g. $8 + 3$ as 8, 9, 10, 11

Add, putting the larger number first
Count on in 10s
e.g. $45 + 20$ as 45, 55, 65



Taking away

Count back in 1s
e.g. $11 - 3$ as 11, 10, 9, 8

Count back in 10s
e.g. $53 - 20$ as 53, 43, 33



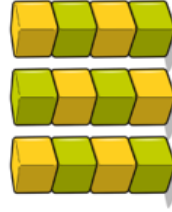
Record addition as a number sentence:

$$23 + 10 = 33$$

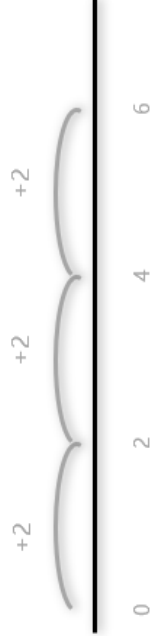
Multiplication

Grouping

Begin to use visual and concrete arrays and sets of objects to find the answers to 'three lots of four' or 'two lots of five'
e.g. *three lots of four*



Record multiplication as repeated addition: $3 \times 2 = 6$



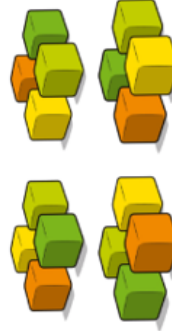
Record subtraction as a number sentence:

$$37 - 10 = 27$$

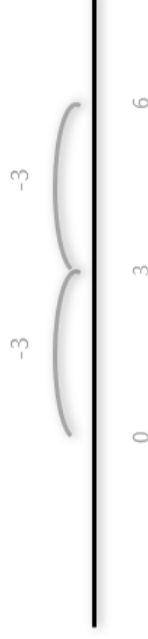
Division

Grouping

Begin to use visual and concrete arrays and 'sets of' objects to find the answers to questions such as 'How many piles of four can I make with sixteen cubes?'



Record division as repeated subtraction: $6 \div 3 = 2$



Fun Activities to do at Home

Adding Circles

For this game, you need: a dice, a pencil and some paper.

Each person should draw four circles on their piece of paper and then write a different number between 2 and 12 in each circle.

Take it in turns to roll the dice twice and add the numbers together. If the total is one of the numbers in your circle, then cross it out.

The first person to cross out all four circles wins.

Housey, Housey

When walking down a street look at the house numbers. Can you notice a pattern? Can your child predict what number might come next? Discuss the patterns that you find.

How Old?

Start with your child's age. Ask your child:

How old will you be when you are a year older?

How old were you last year?

How old will you be in 10 years time?

etc.

Takings

For this game you will need: a small collection of 'things' such as Lego, pasta pits, marbles, a pencil, some paper.

Take turns to roll the dice and take that number of objects. Write down the number on your paper.

Keeping rolling the dice and taking that number BUT you must write down your new total before taking them.

The first person to collect 20 objects wins.

This can also be played with subtraction: start with 20 objects and roll the dice to take away. The winner is the first with no objects left.

Dicey Coins

For this game you will need: a dice and 10p coins.

Take turns to roll the dice and take that number of 10p coins. Guess how much money this is, then count in 10s to check. If you 'guessed' correctly you keep one of the 10p pieces. The first person to £1 wins.

Secret Numbers

For this game you will need: a pencil, some paper.

Write the numbers 0-20 on a piece of paper. Ask you child to secretly choose a number on the paper. Ask questions to find out what the secret number is:

Is the number less than 10?

Is it between 10 and 20?

Is it even?

Does it have a 5 digit in it?

...

They must only answer yes or no.

This game can be made harder by using larger numbers or only asking a given number of questions (e.g. 5).

By the end of Year 1 most children will be able to:

- Count in 1s to 20
- Count on and back and order numbers to 10
- Estimate a quantity (<50) and count to check
- Recognise dice and domino numbers without counting
- Count to 30 and back
- Read, write, count and order numbers to 20 in figures and words
- Understand and use zero to represent the empty set
- Recognise teen numbers as 10 and some 1s
- Identify the larger and smaller of two numbers
- Put three numbers in order
- Find the number between two numbers (e.g. 3,5)
- Understand and use ordinal numbers up to tenth.
- Count in 1s to 100 and back
- Partition 2-digit numbers into 1s and tens
- Identify patterns in the 100 square
- Identify 10s and 1s in a 2-digit number
- Compare and order 2-digit numbers
- Say a number between any 2-digit numbers

- Say the number one more than (1-20)
- Find pairs that make 5, match pairs that make 5 to number sentences
- Find pairs that make 6, match pairs that make 6 to number sentences
- Find pairs that make 10, match pairs that make 10 to number sentences
- Find pairs to make 7, match pairs that make 7 to number sentences
- Find pairs to make 8, match pairs that make 8 to number sentences
- Begin to understand that + is commutative
- Find 2 more than any number (1-18)
- Find 1 less than any number up to 20
- Say the number 1 more or 1 less for numbers up to 50
- Use number facts for 5,6,10 to solve subtractions
- Use number facts for 5,6,10 to solve simple word problems
- Add 1,2,3 by counting on
- Subtract 1,2,3 by counting back

- Add three small numbers by recognising bonds or doubles
 - Find $+1/-1$ or $+2/-2$ up to 100 using 100 square or a number line.
 - Locate 2-digit numbers on a 100 square and bead string
 - Read, write and say 2-digit numbers
 - Understand 2-digit numbers as some tens and some 1s
 - Understand a symbol being used for an unknown
 - Use number facts to understand and solve number stories
 - $+ 1$ -digit number to 2-digit number by counting on (not across 10)
 - Count on and back in 10s from any number
 - Identify unit patterns in addition
 - Find pairs to make 9, match pairs that make 9 to number sentences
 - Use knowledge of pairs to 10 to make pairs to 20
 - Add single digit numbers by counting on
 - Subtract single digit from numbers up to 30 by counting back (not across 10)
 - Say and write number 10 more or 10 less for numbers up to 100
 - Use number facts to $+$ single digits to 2-digit numbers
 - Use number facts to $-$ single digits to 2-digit numbers
 - Solve repeated addition using coins
 - Find the change from 10p
 - Find the change from 20p
-
- Know the double of numbers 1-5
 - Count in 5s recognising that multiples of 5 end in 5 or 0
 - Count in 2s identifying the pattern of even numbers
 - Recognise odd and even numbers
 - Know the doubles of numbers 1-10
 - Find half of even numbers up to 20
 - Halve odd numbers up to 10
 - Recognise patterns on a 9x9 grid
-
- Recognise, name and describe: circles, squares, rectangles and triangles
 - Recognise basic line symmetry
 - Recognise the properties of 2D shapes
 - Recognise and name: cube, cuboid, cone, cylinder, sphere, pyramid

- Sort 3D shapes according to their properties
- Sort objects using a Venn diagram
- Sort objects using a Carroll diagram
- Compile tables to record measurements
- Draw block graphs of results
- Read and interpret a simple pictogram
- Create a simple pictogram
- Read and interpret a simple block graph
- Describe position and direction using appropriate vocabulary/language
- Describe movement using half turns
- Recognise and continue repeating patterns
- Directly compare lengths and heights
- Measure length using nonstandard units
- Understand that a cm is a measure of length
- Recognise and name a ruler
- Measure length using standard units
- Recognise coins and know values up to £2
- Make amounts of money up to 20p using coins
- Order and name the days of the week
- Order and name the seasons of the year
- Order and name the months of the year
- Relate times of the day to activities
- Tell the time using o'clock on analogue and digital clocks
- Tell the time using half past on analogue and digital clocks
- Have a sense of how long a minute is
- Directly compare weights using appropriate language (lighter, heavier)
- Use a capacity measure (plastic bottle) to measure and compare capacities
- Measure weight using nonstandard uniform units
- Measure capacity using non-standard uniform units
- Understand the relative value of £5 and £10 notes
- Tell the time to $\frac{1}{4}$ hours on analogue and digital clocks
- Find $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$ of shapes
- Fold symmetrical shapes into halves and quarters
- Know that two halves and four quarters make a whole
- Know that two quarters make a half

Abacus

In the Pre-Prep, pupils have access to an online learning platform. Abacus is a Maths toolkit that has been written for the primary Maths curriculum. It has been carefully crafted on a robust approach to creating inspired and confident young mathematicians. To help children make sense of and practice their Maths, Abacus provides a combination of Maths games and interactive activities focused around an interactive pupil world where your child can earn rewards and personalise their learning.

Logging into the pupil world

The Abacus pupil world is powered by a website called ActiveLearn. To log into the pupil world, your child will need to:

1. Go to www.activelearnprimary.co.uk
2. Enter their login details and click "Log in".

You can record your child's log in details here:



Username: _____

Password:

School Code: thpa