

Helping your child with maths



Year 1

At the heart of the teaching of maths at Drayton Community Infant School are the 3 aims of the National Curriculum:

- **Fluency** – varied and frequent practise of the fundamentals of maths, developing conceptual understanding and being able to recall and apply knowledge rapidly and accurately.
- **Reasoning** – following lines of enquiry, recognising relationships and generalising, developing arguments, explaining workings out and justifying and proving using mathematical language.
- **Problem solving** – applying maths to a variety of problems, including word problems and those in the context of real life, using systems and finding all possibilities.

Calculation policy

Please see the school's calculation policies on addition, subtraction, multiplication and division for further information on how these concepts are taught:

<http://www.draytoninfantschool.co.uk/key-information/policies>

Year 1 programme of study

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- given a number, identify one more and one less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
- read and write numbers from 1 to 20 in numerals and words.
- read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including zero
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems
- solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
- recognise, find and name a half as one of two equal parts of an object, shape or quantity and a quarter as one of four equal parts of an object, shape or quantity
- compare, describe and solve practical problems for lengths and heights, mass/weight, capacity, volume and time. Measure and begin to record the lengths and heights, mass/weight, capacity, volume and time.
- recognise and know the value of different denominations of coins and notes
- sequence events in chronological order using language
- recognise and use language relating to dates, including days of the week, weeks, months and years
- tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
- recognise and name common 2-D and 3-D shapes, including rectangles (including squares), circles, triangles, cuboids (including cubes), pyramids and spheres.
- describe position, direction and movement, including whole, half, quarter and three quarter turns.

Useful maths websites

<http://mathszone.co.uk>

<http://www.topmarks.co.uk/maths-games>

<http://www.bbc.co.uk/bitesize/ks1/maths>

<http://www.snappymaths.com>

<http://www.ictgames.com>

<http://www.educationcity.com/uk/families/free-trial>

<http://www.coolmath-games.com>

<http://nrich.maths.org/primary-lower>

<http://www.activityvillage.co.uk/dice-games>

<http://www.mathschamps.co.uk/games5-7>

- Please ensure you have appropriate security settings on your device as websites may have pop-ups.

The CPA approach

Concrete – give your child objects to help them count and calculate. Use real-life objects in context to make the learning more meaningful. Using concrete objects helps children to visualise.

Pictorial – your child may wish to draw pictures to help them. This could simply be drawing dots in groups to aid multiplication or division, for example.

Abstract – Children move to being able to calculate in their heads. They may choose to write their working out, or use empty number lines. Ask your child to talk about their mental working out: “Tell me how you reached your answer”, “convince me your answer is correct”, “show me how I could work that out like you”.

Take turns to count in 2s, 5s or 10s, as far as you can go. The person who says the final number is the winner.

Practise bouncing or throwing a ball to each other. Counting in 2s, 5s or 10s, say a number each time you catch the ball. What is the highest number you can get to?

Use 2 sets of number cards numbered 0-10. Play games such as pairs or snap. Win the pair if they are doubles, or if they total 10, or if they are both even, for example.

In the house or when you are out play shape hunts. How many different shapes can you find? Are they 2D or 3D? Describe a shape you can see for your child to guess.

In real and play situations use objects and toys to practise counting, adding, subtracting, multiplying, doubling and halving.

When cooking together, help your child to measure liquid in millilitres and weigh dry ingredients in grams.

Talk about the days of the week and months of the year. Ask questions such as what day was yesterday?, what day will it be in 2 more days?, what month will it be after this one?

Encourage your child to look at the clock (analogue and digital) during specific times of the day eg lunchtime or bedtime, when the time is on the hour or half hour.

Make obstacle or orienteering courses or treasure hunts and direct each other through them, for example go over, make a half turn.

Make maths fun!