

Eastfield Primary School



Parent information booklet:

Numeracy

Year	Autumn term	Spring term	Summer term
<u>Year 1 Cycle A</u> <u>Cycle B</u>	Count at least 20 everyday objects; Put 0 – 20 in order; Count forwards/backwards in 1s starting from a small number; Name/describe simple flat and solid shapes.	Count forwards/backwards in 10s, read/write numbers to at least 20; Know by heart all pairs of numbers that make 10; Compare 2 objects or containers.	Add/subtract 2 numbers under 10; Given a number from 10 to 20 say what is 1 more/less, 10 more/less; Use words add, sum, total, take away, subtract.
<u>Year 2 Cycle A</u> <u>Cycle B</u>	Use mathematical names for common 2D/3D shapes; Understand multiplication is repeated addition; Know by heart all + and - facts for each number to at least 10.	Count, read, write order whole numbers to at least 100; Use maths vocabulary to describe position, direction and movement;	Know/use halving as inverse of doubling; Know by heart 2 and 10 X tables; estimate, measure, compare lengths/masses/capacities.
<u>Year 3</u>	Read, write, order whole numbers to 1000; Know by heart multiplication facts for 2, 5 and 10 tables; recognise halves, quarters, fifths.	Units of time; Right angles; Solve given problems by interpreting data; + and – mentally a near multiple of 10 to/from TU	Identify lines of symmetry; choose/use appropriate operations to solve word problems.
<u>Year 4</u>	Know by heart 2, 3, 4, 5 and 10 multiplication facts; Recognise simple fractions; Problem solving; Use place value to subtract.	Use symbols <, > and =; Round numbers less than 1000 to nearest 10 or 100; Column + and -;	Find remainders after dividing; Derive facts relating to 2, 3, 4, 5, and 10 tables; Know/use relationships between familiar units of length/mass/capacity.
<u>Year 5</u>	Use decimal notation for tenths/hundredths; HTU x U; Parallel/perpendicular lines; Column = and – of whole numbers up to 1000.	Order sets of +/– numbers; Use all 4 operations to solve word problems; Understand area is measured in sq.cms.	Know by heart all tables 10 x 10; Long X of TU x TU; relate fractions to division and decimal equivalents.
<u>Year 6</u>	Understand %; Reduce fractions to simplest form; Read/plot co-ords. in 4 quadrants; Area/perimeters of compound shapes	Short X½ of numbers inc. decimals; order mixed set of numbers up to 3dps; know all x and ÷ facts; Find fractions of quantities.	Ratio/proportion; long x of HTU by TU; problem solving by choosing correct info; column + and – inc. decimals.

Areas covered in Numeracy

The order in which topics are covered may vary.

What Is Numeracy

Numeracy is a skill, which involves confidence and competence with numbers and measures. It requires an understanding of the number system, a bank of computational skills and an ability to solve a variety of problems by using an assortment of ways. By the end of primary school, pupils should have mastered a diversity of skills and concepts.

The should:-

- have a sense of the size of a number and where it fits into the number system.
- know by heart number facts such as bonds, tables, doubles and halves.
- use what they know by heart to figure out answers mentally
- calculate accurately/efficiently, both mentally and with a pencil and paper, using a range of strategies.
- recognise when it is appropriate to use a calculator and how to use it.
- make sense of number problems and know what operations are needed to solve them.
- explain methods and reasoning using correct mathematical vocabulary.
- judge whether their answers are reasonable and have checking strategies.
- suggest suitable measuring units and make sensible estimates of measures.
- explain and make predictions from the numbers in graphs, diagrams charts and tables.

What are 'Numeracy' lessons like?

To ensure that there is adequate time for developing numeracy skills, each class teacher is expected to provide a daily lesson for mathematics, which should last about 45 minutes in Key Stage 1 and 50 to 60 minutes in Key Stage 2.

A typical lesson will be structured like this:

- **Oral work and mental calculation:** (5-10 minutes) whole class work to rehearse, sharpen and develop mental and oral skills.
- **The main teaching activity:** (about 30-40 minutes) teaching input and pupil activities. Work as a whole class, in groups, in pairs or as individuals.
- **A Plenary:** to round off the lesson (about 10-15 minutes) work with the whole class to sort out misconceptions and identify progress, to summarise key facts and ideas and what to remember, to make links to other work and discuss the next steps, and to set work to do at home.

What do we aim for in Numeracy?

At Eastfield we aim to share with the children, the joy and fun of learning; the understanding of mathematics and consequently increase their mathematical confidence and proficiency by using it as a powerful tool. In doing so your child will be: -

- able to recall basic facts and have the ability to use them in a variety of contexts.
- able to think clearly and logically and to develop reasoning and communication skills.
- fostering positive attitudes towards mathematics by developing pupil confidence, independence, perseverance and co-operational skills.
- confident and proficient with numbers and measures, and have an ability to solve problems in a variety of contexts.

Opportunities will be used to draw mathematical experiences out of a range of activities in other subjects and to provide opportunities to apply and use maths in real life, problem-solving situations. Maths will also contribute to other subjects in practical ways e.g. science – graphing/recording results from investigations; art – technical drawings and tessellating shapes; history – sequencing timelines; DT – calculating materials for projects; PE – timing events/measuring distances.

The list is endless.

By the end of Key Stage 1 children should have reached Level 2b
and by the end of Key Stage 2 Level 4b.

How can parents help to develop 'Numeracy' skills?

An easy way to boost your child's skills and motivation is by showing them how useful number skills are in almost everything we do. Children can have fun: -

- measuring height and working out how much they've grown
- on car journeys – playing number plate games; adding/subtracting with road signs; thinking about speed by dividing distance by time.
- at the shops – weighing fruit/vegetables; budgeting with pocket money; working out the relative of products by comparing prices/weights.
- in the kitchen – with weighing and measuring; temperature and timings.
- making models and origami shapes.

Make a game out of putting little problems to your child and letting them reason things through, prompting as little as you can. Praise your child for trying, even if they get stuck or get things wrong.

You can take advantage of the overlap between learning and enjoyment in almost any setting. New experiences and discoveries are always stimulating, and they don't have to be expensive or elaborate.

http://www.bbc.co.uk/schools/parents/work/primary/numeracy_and_science/index.shtml

This is a good website to visit and gives links to other valuable pages and sites.