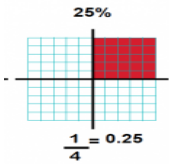
Fractions, percentages and decimals

Children will be building on language that they have been exposed to previously e.g. half, quarters, whole etc. Fractions are parts of a whole unit, the whole unit = 1

We write fractions with denominators (at the bottom showing showing the total number of parts) and numerators (at the top shows the number of parts in the fraction). Children should be able to work out fractions of amounts e.g. 1/3 of 27 is 27 ÷ 3 = 9. They develop to understand equivalence fractions e.g. three sixths is the same as one half, and how to compare fractions. From year 5 children will relate fractions to decimals and percentages. A percentage is a number or ratio expressed as a fraction of 100. Imagine the whole has been divided into 100 parts. Children will work out finding percentages of certain amounts.



A fraction wall, conversion table, number lines, empty hundred square, are all useful tools to visualise fractions, decimals and percentages.

Topmarks—Build a fractions, fraction matcher, compare decimals, equivalent fractions, decimals

Maths-games.org - percent shopping, matching cards

Ipad—Pizza fractions, Fractions with trains

Questions to ask…..

When shopping ask the children to find 25% off the total cost?

In a half price sale, how much will I save on a given amount?

A pizza is count into 8 slices, 4 are left, what percentage is left?

In a class 35 out of 50 children are boys, write as a decimal how many boys there are in the school.

Working with your child at home will reinforce the learning, teaching, fun, play and exposure to number that your child is experiencing at Euston Street PS.

Maths World Passport

Our school number scheme is the Maths World Passport. This engages your child to progress within number and achieve a continent every school year. Each continent shows progression within the numeracy curriculum and by Year 7 each child should be a Globe Trotter! Pupils have their passport pictures displayed on the World Map in the assembly hall.

⇒ Y4 should be working on Australasia.
⇒ Y5 should be working on North America
⇒ Y6 should be working on South America
⇒ Y7 should be working on Antarctica.

The school website has a breakdown of all the stages within the Passport

eustonstreetps.co.uk

Helpful Websites

Using a game or an exciting activity will make learning concepts more interesting. The following websites have numerous games and activities

There are useful 'how to' videos and online games and activities for each age group.

https:/www.oxfordowl.co.uk/for-home/maths/

- BBC Bitesize
- Education City
- Maths Zone
- ICT games
- Maths Playground.com
- * Maths Frame
- * Primary Games
- * Topmarks
- * Crickweb.co.uk
- * The School run

Ipad apps

- Doodle Maths (pay)
- Maths Frame
- King of Maths
- *KS2 Maths
- * KS2 Pocket posters
- * Squeebles Times tables

If you have any questions or concerns about your child's learning within numeracy please speak the numeracy co-ordinators Mrs L Rainey and Mrs K Templeton.

Euston Street PS & Nursery Unit
Euston Street Belfast BT5 9AG
02890457089
www.eustonstreetps.co.uk

Euston Street E St PS Primary School and Nursery Unit

Year 4—Year 7 Number

Working together for excellence in our learning, our school, our community and our future

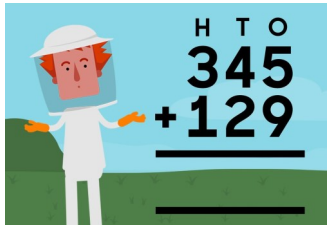
Information for parents/guardians

This information is aimed to support you and your child in the area of number.
Children make progress when they regularly repeat skills and practice them until they are embedded. These are areas of learning that you could support your child with at home.

Counting

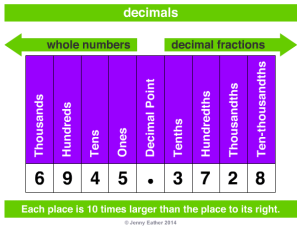
Children should be confident working with numbers larger than 100. They will be skip counting—counting forwards and backwards in 2's, 5's, 10's, progressing to counting in multiples of 3, 4, 6, 7, 8, 9, 11 and 12. This will assist with multiplication and division.

Addition and Subtraction



Children will be building on addition and subtraction skills from Year 3. They should be familiar with terminology for addition and subtraction and various methods to complete mental maths problems such as counting, number families, bonds, bridging, rounding and adjusting and partitioning.
E.g. bridging across the ten 136+8= ? the children will use knowledge of number bonds that 4+4 are components of 8. 136 + 4 = 140 + 4 = 144.
In Key Stage 2 children are using decimal and negative numbers.
Using a number line, drawing a picture or using a hundred square may help to find the answer.
Children will be familiar with how to record written calculations (see written calculation helpsheet) for exchanging and working with larger numbers.
There are numerous addition and subtraction games and online games. Board and dice ideas.
Topmarks - Hit the button, a subtraction game, dartboard (doubles and half)
Maths frame—super maths bowling, tommy's trek
Maths playground– missing digits addition
Questions to ask…..
When shopping ask the children to total the price of a few items and work out the change from £10.
What is 1.6 take away 0.8?
I have £6390 in the bank. I spend £3980 on a new car. How much money do I have left?

Place Value

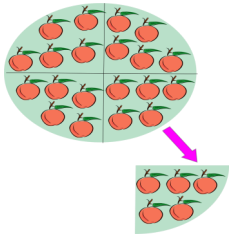


Place value is the value of each digit in a number. Children will be aware of hundred, tens and units and will be building on this knowledge to understand thousands to millions. Pupils can partition numbers, explain how many tens and how many units. Pupils are exploring what happens to a number when it is multiplied by 10, 100 or 1000. It is important they understand the number moves to the left e.g. 6 x 10 = 60. When dividing by 10, 100 and 1000 the numbers move to the right e.g. 5370 ÷ 100 = 5.37
Children will learn how to round numbers to the nearest 10, 100 and 1000.
Place value arrow cards, dienes, place value grid, ordering numeral cards, number lines
Topmarks—Place value basketball, millionaire, mystery numbers
Maths frame—Maths road hopper (rounding), partitioning
Questions to ask…..
How many hundreds are there in the number 3458?
If I make the number 54 ten times bigger, what number will I have?
Divide 34 by 10.

Multiplication

As children progress with counting they will start to skip count i.e. leave out numbers and count in 2's or 5's etc. They also learn with repeated addition 3+ 3+ 3+ 3 = 12 Children will begin to contextualize that this is the same as 3 x 4 or 4 x 3 . (Like addition and subtraction multiplication is commutative). We show the children arrays (like the stars above) to visualise the pattern. Developing from this, children will start to look at multiplication tables and look for patterns e.g. every multiple of 5 end in 0 or 5 and then memorize the multiplication table .
To multiply larger numbers children are taught long multiplication (see written calculation helpsheet)
Calculator constants , roll 2 dice and multiply, times table buzz (e.g. 4 times tables counting in ones but say buzz all multiples of 4—1, 2,3, buzz, 5, 6, 7, buzz, 9, 10 etc.
Top marks - hit the button, multiples and factors
Timestables.co.uk and Maths Frame—multiplication
Questions to ask…..
What is 7 squared?
There are 6 eggs in a carton and I buy 8 cartons, How mnay eggs do I have altogether?
How many days are there in 6 weeks?

Division



Division is introduced within Foundation stage when children have a number of objects and they need to share them equally. Lots of practical opportunities are provided to divide items into smaller or equal groups. Children should recognise that division is the opposite of multiplication. The division symbol and sum is introduced. Division with remainders occurs when you can't divide equally e.g. share 10 cookies between 3 people, each person gets 3 cookies and 1 remains.
For written long multiplication see written calculations.
Activities for home include sharing grapes equally between family members
Topmarks—hit the button, division millionaire, Snork
Crickweb—division facts
Questions to ask…..
If we have 35 jelly beans and 7 children, how many jellybeans would each child receive?
A taxi has space for 7 passengers, there are 20 passengers in total. How many taxis do we need to order? How many empty spaces will there be?

Number patterns and sequences

Number sequences are a list of numbers that follow a certain pattern e.g. 1, 4, 7, 10 starts at 1 and jumps 3. Other patterns include doubling, halving , using factors or multiples.
There a special sequences including triangular, square, cube, Fibonacci, prime etc.
Sudoku, number games,
Maths Frame– sequences, Top marks - number patterns
Questions to ask….. Can you find a rule?