	3rd and 4th	5th and 6th	How to do this at home	ICT
Number	**Place Value** Explore and identify place value in whole numbers, 0- 999, 9999 Read, write and order 3 digit numbers, 4 digit numbers Round whole numbers to the nearest ten or hundred, thousand Explore and identify place value in decimal numbers to one place, two places of decimals **Operations** Addition and Subtraction Add and subtract, without and with renaming, within 999,9999 Know and recall addition and subtraction facts Solve word problems involving addition and subtraction Multiplication Develop an understanding of multiplication as repeated addition and vice versa	**Place Value** Read, write and order whole numbers and decimals Identify place value in whole numbers and decimals Round whole numbers and round decimals to nearest whole number to one, two or three decimal places **Operations** Estimate sums, differences, products and quotients of whole numbers, decimals Add and subtract whole numbers and decimals (to three decimal places) without and with a calculator Multiply a decimal (up to 3 places) by a whole number decimal without and with a calculator Division Divide a three/four-digit number by a two-digit number, without and with a calculator	Write out any random numbers- order them from the lowest to the biggest. Play higher or lower with your child using a deck of cards of homemade cards of random big numbers. Look at car registrations in your area. Can you add two registrations together/ can you subtract them? Have fun with numbers; write a number down and ask you child to guess the hidden number. Initially, they may guess by calling out numbers but model some more effective questions such as It is more than…Is it less than…Is it an even number…Is it an odd number… Is it a multiple of 10? i.e. does 10 go into it	https://ie.ixl.com/ www.folensonline.ie www.scoilnet.ie www.seomraranga.com www.edcolearning.ie/ www.maths-resources.com www.ict.mic.ul.ie/maths.html www.mathisFun.com **www.fun4thebrain.com** http://www.cyberkids.com www.multiplication.com

	Explore, understand and apply the zero, commutative, distributive and associative properties of multiplication Develop and/or recall multiplication facts within 100 Multiply a one-digit or two-digit number by 0-10 multiply a two-digit or three-digit number by a one or two digit number Solve and complete practical tasks and problems involving multiplication of whole numbers Division Develop an understanding of division as sharing and as repeated subtraction, without and with remainders Develop and/or recall division facts within 100 Divide a one or two , three-digit number by a one-digit number without and with remainders Use calculators to check estimates	Divide a decimal number by a whole number, decimal without and with a calculator Write down some random numbers. Ask your child to order them starting with the lowest/highest. Write down any number and ask your child what number comes before it/after it. Can they add 10 more to the number/ can they subtract 10 from the number. Can they add 100 more to the number/ can they subtract 100 from the number. With number you could begin to classify numbers; are numbers odd/even/can they name multiples/can they name factors/ is it a prime number/composite number/ square number etc.	evenly with no remainder e.g. 110, 70, 30 etc. <u>Tables are really important.</u> Ideally children should be able to say tables as quickly as they can say their name! Try to work with your child by counting up in the number. If you have a ball you could bounce it or throw it back and forth thus creating a movement along with the thought process. Taking turns, counting together and then letting your child count independently. If these numbers are written out also they will allow the child to visualise the patterns that occur. Even climbing the stairs can be a useful way of counting up in the number.	http://interactivesites.weebly.com/math.html http://www.crickweb.co.uk/ **www.ttrockstars.com** www.ictgames.com www.mathplayground.com www.irishprimaryteacher.ie

	Solve and complete practical tasks and problems involving division of whole numbers		When it comes to counting in 2s, tell the child to double the number and then when counting 4s they double it again. The following order begins with 'friendly numbers'. Start with 10s, 5s, 11s, 2s, 4s And then 9s, 6s, 3s, 12s, 8s,7s Place value of the number is really important. Ask the children to note down the registration on their car. What number represents hundreds/tens/thousands? The mileage in the car is always a good way to show bigger numbers in maths also.	

	Fractions Identify factions and equivalent forms of fractions with denominators 2, 3, 4, 5, 6, 8, 9 and 10 and 12 Compare and order f actions with appropriate denominators and position on the number line Calculate a fraction of a set using concrete materials develop an understanding of the relationship between fractions and division Calculate a unit fraction of a number and calculate a number given a unit fraction of the number Calculate a number, given a multiple fraction of the number Express one number as a fraction of another number Solve and complete practical tasks and problems involving fractions **Decimals**	**Fractions** Compare and order fractions and identify equivalent forms of fractions with denominators 2-12 Express improper fractions as mixed numbers and vice versa and position them on the number line Add and subtract simple fractions and simple mixed numbers Multiply a fraction by a whole number/by a fraction Express tenths, hundredths and thousandths in both fraction and decimal form Divide a whole number by a unit fraction Understand and use simple ratios **Decimals and Percentages**	If cutting or segmenting an orange. Count the pieces. If making buns count how many buns e.g. 12. How many are eaten? 3 out of 12 = $\frac{1}{4}$ etc If cutting pizza or opening a packet of biscuits. Count the slices/biscuits. How many is half? How many would be $\frac{1}{4}$? Discuss where decimals/percentages are	

	Identify tenths and hundredths and express in decimal form Order decimals on the number line Add and subtract whole numbers and decimals up to two places Multiply and divide a decimal number up to two places by a single-digit whole number Solve problems involving decimals	Develop an understanding of simple percentages and relate them to fractions and decimals Compare and order fractions and decimals/percentages of numbers Solve problems involving operations with whole numbers, fractions, decimals and simple percentages/problems relating to profit and loss, discount, VAT, interest, increases, decreases **Number Theory** Identify simple prime and composite numbers Identify and explore square and rectangular numbers Explore and identify simple square roots Identify factors and multiples Write whole numbers in exponential form	used around the world, in money, petrol prices, sport/ timing races. Look at receipts and see if you can add up the items.	
Algebra	**Number Patterns and Sequences** Explore, recognise and record patterns in number, 0-999 – 9999 Explore, extend and describe (explain rule for) sequences Use patterns as an aid in the memorisation of number facts	**Directed Numbers** Identify positive and negative numbers in context/on the number line Add simple positive and negative numbers on the number line	Research temperatures around the world in varying countries. Create a table using this information.	

	Number Sentences Translate an addition or subtraction, multiplication and division number sentence with a frame into a word problem (frame not in initial position) Translate a one-step word problem into a number sentence	**Rules and Properties of Numbers** Explore/know and discuss simple properties and rules about brackets and priority of operation Identify relationships and record verbal and simple symbolic rules for number patterns **Variables** Explore the concept of a variable in the context of simple patterns, tables and simple formulae and substitute values for variables **Equations** Translate number sentences with a frame/variable into word problems and vice versa Solve one-step number sentences and equations		
Shape and Space	**2D Shapes** Identify, describe and classify 2-D shapes: square, rectangle, triangle, hexagon, circle, semicircle, oval and irregular shapes/equilateral, isosceles and scalene triangle,	**2D Shapes** Make informal deductions about 2-D shapes and their properties	Look for shapes in the environment. Complete a maths trail in the back garden/	

	parallelogram, rhombus, pentagon, octagon Explore, describe and compare the properties (sides, angles, parallel and non-parallel lines) of 2-D shapes Construct and draw 2-D shapes Combine, tessellate and make patterns with 2-D shapes Identify the use of 2-D shapes in the environment Solve and complete practical tasks and problems involving 2-D shapes **<u>3D Shapes</u>** Identify, describe and classify 3-D shapes, including, cube, cuboid, cylinder, cone, sphere, triangular prism, pyramid Establish and appreciate that when prisms are sliced through (in the same direction) each face is equal in shape and size	Use angle and line properties to classify and describe triangles and quadrilaterals Identify the properties of the circle Construct a circle of given radius or diameter Tessellate combinations of 2-D shapes Classify 2-D shapes according to their lines of symmetry Plot simple co-ordinates and apply where appropriate Use 2-D shapes and properties to solve problems **<u>3D Shapes</u>** Identify and examine 3-D shapes and explore relationships, including tetrahedron/octahedron (faces, edges and vertices) Draw the nets of simple 3-D shapes and construct the shapes	neighbourhood. What shapes can you spot? Can you identify edges and corners? Keep old boxes for cereal and open them out. This will allow you to identify nets of shapes. Can you cut the faces and put the 3D shape back together using some tape? Playing with Jenga, Lego and construction will allow you to understand which shapes tessellate and which do not. Look at any walls in your area, can you see the bricks tessellating? What 3D shapes can you see?	

	Explore, describe and compare the properties of 3-D shapes Explore and describe the relationship of 3-D shapes with constituent 2-D shapes Construct 3-D shapes Solve and complete practical tasks and problems involving 2-D and 3-D shapes **<u>Symmetry</u>** Identify line symmetry in the environment Identify and draw lines of symmetry in two dimensional shapes Identify lines of symmetry as horizontal, vertical or diagonal Use understanding of line symmetry to complete missing half of a shape, picture or pattern **<u>Lines and Angles</u>**	**<u>Lines and Angles</u>**	Use items around the house. Containers, oranges, cereal boxes and identify as many 3D shapes as you can. When helping out by folding clothes, see if you can find the lines of symmetry in a T-shirt, pair of leggings etc. Look at logos, can you draw them? Are they symmetrical? Look at patterns on T-shirts etc. can you find the line of symmetry in the? Look for lines in the environment on fences,	

	Lines and Angles Identify, describe and classify vertical, horizontal and parallel lines/oblique and perpendicular lines Draw, discuss and describe intersecting lines and their angles Recognise an angle in terms of a rotation Classify angles as greater than, less than or equal to a right angle Solve problems involving lines and angles	Lines and Angles Recognise, classify and describe angles and relate angles to shape and the environment Recognise angles in terms of a rotation Estimate, measure and construct angles in degrees Explore the sum of the angles in a triangle/quadrilateral	goal posts, coffee table, kitchen table, ironing board. Can you name the various lines/ angles? Make your own angle measure using 2 sticks. (Lollipop sticks if you have them or straws). Can you make approximately 90 degrees or a right angle? Can you estimate other angles around your house using your angle? E.g. the corner of the TV, microwave etc.	
Measures	**Length** Estimate, compare, measure and record lengths of a wide variety of objects using appropriate metric units (m, cm) Rename units of length in m and cm - 125 cm = 1 m 25 cm	**Length** Select and use appropriate instruments of measurement Estimate and measure length using appropriate metric units Estimate and measure the perimeter of regular and irregular shapes	Measure your back and front garden using your feet. Draw a mock up plan of your garden where every foot is 1 cm.	

	Rename units of length using decimal or fraction form Solve and complete practical tasks and problems involving the addition and subtraction of units of length (m, cm) Solve and complete practical tasks and problems involving the addition, subtraction, multiplication and simple division of units of length (m, cm, km) Estimate, compare, measure and record lengths of a wide variety of objects, using appropriate metric units, and selecting suitable instruments of measurement Understand, estimate and measure the perimeter of regular 2-D shapes **Weight** Estimate, compare, measure and record the weight of a wide variety of objects using appropriate metric units (kg, g) Solve and complete practical tasks and problems involving the addition	Rename measures of length Use and interpret scales on maps and plans **Weight** Select and use appropriate instruments of measurement Estimate and measure weight using appropriate metric unit Rename measures of weight	Have a root around in your kitchen presses to see which items are the heaviest. Order these items from lightest to heaviest. What	

	and subtraction of units of weight (kg and g) and selecting suitable instruments of measurement Rename units of weight in kg and g Rename units of weight using decimal or fraction form Solve and complete practical tasks and problems involving the addition, subtraction, multiplication and simple division of units of weight (kg and g) **<u>Capacity</u>** Estimate, compare, measure and record the capacity of a wide variety of objects using appropriate metric units (l, ml) and selecting suitable instruments of measurement Solve and complete practical tasks and problems involving the addition and subtraction of units of capacity (l, ml) Rename units of capacity in l and ml 1500 ml = 1 l 500 ml	**<u>Capacity</u>** Select and use appropriate instruments of measurement Estimate and measure capacity using appropriate metric units Rename measures of capacity	is the average weight of the items? Do some baking and use the kitchen weighing scales to measure flour and other ingredients. Get out the back with old bottles and containers, estimate their capacity and then check your answer by measure them with water.	

	Rename units of capacity using decimal and fraction form **<u>Time</u>** Consolidate and develop further a sense of time passing Read time in five-minute/one-minute intervals on analogue and digital clock (12-hour) Record time in analogue and digital forms Express digital time as analogue time and vice versa Rename minutes as hours and hours as minutes Read dates from calendars and express weeks as days and vice versa Solve and complete practical tasks and problems involving times and dates and the addition and subtraction of hours and minutes **<u>Area</u>** Estimate, compare and measure the area of regular and irregular	**<u>Time</u>** Read and interpret timetables and the 24- hour clock (digital and analogue) Interpret and convert between times in 12- hour and 24-hour format Explore international time zones Explore the relationship between time, distance and average speed **<u>Area</u>** Discover that the area of a rectangle is length by breadth	Time your daily exercise. Make a calendar for the month/ year ahead and list all your family's birthdays so you don't forget! Make a clock face using a circle and two clock hands. Play What time is it Mr. Wolf? Using the 24 hour clock.	

	shapes nonstandard units standard square units **<u>Money</u>** Rename amounts of euro or cents and record using symbols and decimal point	Estimate and measure/calculate the area of regular and irregular 2-D shapes Calculate area using square centimetres and square metres Compare visually square metres and square centimetres Recognise that the length of the perimeter of a rectangular shape does not determine the area of the shape Measure the surface area of specified 3-D shapes Calculate area using acres and hectares Identify the relationship between square metres and square centimetres Find the area of a room from a scale plan **<u>Money</u>** Compare/explore 'value for money' using unitary method	Look through recent receipts.	

	Solve and complete one-step and two step problems and tasks involving the addition and subtraction, multiplication and simple division of money	Convert other currencies to euro and vice versa	Can you round the numbers to the nearest euro?	
Data	**Interpreting Data** **Representing Data** Collect, organise and represent data using pictograms, block graphs and bar charts and bar-line graphs incorporating the scales 1:2, 1:5, 1:10, and 1:100 Read and interpret tables, pictograms, block graphs and bar charts and bar-line graphs and simple pie charts Use data sets to solve and complete practical tasks and problems	**Interpreting Data** **Representing Data** Collect, organise and represent data using pictograms, single and multiple bar charts and simple pie charts and trend graphs Collect, organise and represent data using pictograms, single and multiple bar charts and simple pie charts and trend graphs Read and interpret pictograms, single and multiple bar charts, and pie charts and trend graphs Compile and use simple data sets Explore and calculate averages of simple data sets Use data sets to solve problems	Do some surveys on your family. Look at the fruit in the fruit bowl. Count ten pieces. Then make a pie-chart to show the fruit in your house. Convert your answers to percentages.	

	Chance Use vocabulary of uncertainty and chance: possible, impossible, might, certain, not sure, chance, likely, unlikely, never, definitely Order events in terms of likelihood of occurrence Identify and record outcomes of simple random processes	**Chance** Identify and list all possible outcomes of simple random processes Estimate the likelihood of occurrence of events, order on a scale from 0 to 100%, 0 to 1 Construct and use frequency charts and tables		