

Maths

Resources to support progression through EYFS		Developing Communication and language		Possible learning experiences/ invitations to play	
<u>To Start With</u> Jigsaws, Multilink, Sorting equipment, Washing line, Plastic/magnetic numbers, Number rhymes and songs (CD/tape), Peg boards, Abacus, Clocks, Calculators, Sand timers, Beads, cotton reels, threading, Measuring containers, Transportable maths box, Notepads and pens, Clip boards, Range of natural resources to encourage classifying, sorting, counting	<u>Stages of mathematical Development.</u> Inborn abilities – recognising shapes of faces Number names – usually around 2 and a half Number sequences- Counting at group time, anticipation counting, correcting you or a puppet. Children need to know number names before the sequence comes. One to one correspondence- links to provision having opportunities available and don't be afraid to correct Cardinal – place value Subitising and visualisation – ability to visualise amount without counting Forwards, backwards, fewer and more	<u>Asking open questions?</u> “How did you...” “Why does this?” “What happens next?” “What do you think?” “What would happen if: “How would you feel...”, “I wonder how we could find out?” <u>Using Positive Questioning</u> “I don't know”, “ what do you think”, “I hadn't thought of that” “That's an interesting idea” “Have you seen what Ben has done”, good thinking maybe you should try it out. I wonder what would happen if... I wonder how we would make that. Can you help me sort, count, find? How much more do you have? How many bears are there? Which one is the heaviest? Who is taller? Can you make a pattern? Which number is missing? Which shape has more sides? What 3D shape is this? How many do we have altogether? <u>Words to build vocabulary</u> Adults to introduce vocabulary (use of words, symbols, and signs) e.g.- More, less, bigger, smaller, Longer, taller, shorter, Higher, lower, full, empty, heavy, light, too much, little, same, different, balance, measure, weigh, add, take away, all together, names of numbers, shapes, days, months of year, coins, round, flat, straight, curvy.	Develop self-esteem, confidence and the ability to self-organise. Share and use equipment, work co-operatively and with respect. Make choices, listen, respond and communicate ideas. Have opportunities to classify and sort objects Have opportunities to develop ability to count. Opportunities to recognise and order numbers 1 to 10 Play mathematical games, developing their ability to form good relationships with peers and develop mathematical skills through games. Begin to recognise 2D shapes and 3D solids and use their names in familiar contexts. Positive and enjoyable mathematical experiences. Exploring addition, subtraction and writing numbers. Children using number names correctly Children counting correctly Children recognising and creating patterns. Children adding and taking away Children identifying more/less Use of mathematical language Children playing games well together, sharing and agreeing rules REMEMBER Maths can be observed in every area of provision. Think about mealtimes, role play, routine-based activities, story and rhyme times		
	<u>Enhancements to support Skill Development</u> Clip boards, Calculators Games – track, dice, matching, sorting, colour, shape, size, dominoes, card games, Calendars, diaries, telephone directories. Real coins Scales, Number and information books Number lines, tracks and squares,	<u>Shape, space and measure.</u> Link to opportunities in provision – construction and role play area e.g., shapes of tins and boxes as well as blocks. Outdoors and big maths, e.g., how many will fit in a den? Does it need to be bigger? <u>EAL</u> Ask parents to show you what numbers and shapes look like in their home language. Ask them to use the talking tins to share numbers and shapes.			
Look, listen, and note.....					
Can the children give you the right number when you ask for one or two objects? Can they say some number names in order? Do they draw lines that go across, up, down, and round and round to show numbers and amounts? Can they show you which group of toys has more? Do they use the words more and lots to describe amounts of objects? Do they show they understand if they add something they have more and if they take something away, they don't have as much? Do they notice shapes and patterns in pictures and clothes? Can I sort a collection of objects that are the same shape or size? Can they use words such as big and little to describe toys, pictures, and clothes? Do they understand the order of the day?		Do the children use number names and words such as more than and fewer than? Do they say numbers in order 1-10? Do they use their fingers, marks, or pictures to show how many things there are? Do they sometimes match a numeral to the right number of things? E.g., number 3 to three balls Do they talk about numbers and ask questions? Are they aware that there are the same number of things, 2 cakes, 1 for you and 1 for me? Can they share out a number of objects and begin to understand that the total is the same? Do they know that they can count claps and jumps as well as objects? Are they aware of shapes they see around them? Do they use words like next to and under, on top of to describe where things are? Do they play with various construction sets and talk about what they are making?			Are the children beginning to recognise numbers that are important to them such as age and house number? Can they recognise numbers 1-5? Do they touch one thing and say the number name at the same time to help them count up to 3 or 4 objects? Do they count objects in books or pictures? Are the able to match the right number of things from 1-5, then 1-10? Do the children guess and then check when counting? Are they able to add to sets together to find a total? Are they able to tell you one more than a given number? Do they use words like more, add, less and take away? Do they use counting to help them solve problems, for e.g., sharing food or toys? Are they beginning to use shape names like square, circle, cylinder, and cube? Do the children use words like under, behind, on and in? Do they talk about things being heavy and light, empty and full? Are they starting to use language relating to time and money?