

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy



### **Scheme of work: Short family numeracy adult and joint programme**

(Based on 12 x 3-hour sessions totalling 36 hours)

*Extra time may be needed for outings*

Level of learners:     Adults working at Entry 2 to Level 1  
                              Children in Foundation Stage /Year 1  
                              (Joint session activities to be adjusted according to age and ability of children and current learning in their classes)

Course aims:

- To develop the maths skills of adults and children linked to the Adult Core Curriculum and Early Years Foundation Stage and Primary Framework for Mathematics.
- To increase parents' and carers' confidence and skills to support their children's acquisition of mathematical concepts and skills.
- To support parents and carers to work towards a national numeracy qualification at Entry level or Level 1.

Assessment for learning throughout the course will include:

- outcome of practical activities
- participation in and contributions to group discussions/tasks
- question and answer
- teacher observation
- peer review.

Differentiation will be addressed by:

- providing support to learners to complete the task depending on any needs that become apparent
- providing support and extension activities
- providing open activities (which allow different outcomes), including group discussion
- group and paired work.

Abbreviations:     M4L TTM     Math4Life - Thinking through mathematics – NRDC – order via NCETM ([www.ncetm.org.uk](http://www.ncetm.org.uk))  
                             CAFOT     Count and figure it out together – BSA publication order via NIACE ([www.niace.org.uk](http://www.niace.org.uk))

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EYFS Early Years Foundation Stage – DfCFS publication 0012-2007BKT-EN (tel: 0845 60 222 60)  
BBCSW BBC Skillswise web site – [www.bbc.co.uk/skillswise](http://www.bbc.co.uk/skillswise)

Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
1. Maths talk (Lesson plan)	Adult session	<ul style="list-style-type: none"> <li>Talk about and recognise their own strengths and areas for development.</li> <li>Identify their own feelings about learning maths.</li> <li>Recognise the value of talk in maths learning.</li> <li>Relate the key elements of EYFS problem-solving, reasoning and numeracy and primary framework Y1 to maths used in everyday activities.</li> <li>Devise/use an activity to develop their child's use of mathematical language.</li> </ul>		<p>Introduction to course: enrolments, negotiation of group rules. Group activity: 'What I'm good at' self-assessment activity, followed by discussion.</p> <p>Group discussion: How did you learn maths at school and which methods were most helpful? What were the barriers to learning?</p> <p>How do children learn now? Video clip of maths lesson and discussion.</p> <p>Practical activity to encourage speaking and listening and demonstrate the value of talk in maths learning.</p> <p>Initial assessment – using recognised assessment tool (feed back next session).</p> <p>Group activity: matching everyday activities to aspects of problem-solving, reasoning and numeracy EYFS and strands of primary framework. See resource sheet: 'Matching everyday activities'</p>	<p>Post-it notes and A3 paper with columns cold to hot. <i>For teacher reference– M4L TTM CPD1 – Principles of effective teaching</i> Video clip –'Parents Partners in Learning' 'DfES0747-2004G or video clip from EYFS: <a href="http://www.standards.dfes.gov.uk/eyfs/site/4/4.htm">www.standards.dfes.gov.uk/eyfs/site/4/4.htm</a></p> <p>M4L TTM Session A Sheet 1 or 3</p> <p>Computer or paper based initial assessment</p> <p>EYFS Principles into practice card – Problem solving. Copy of primary framework Cards for column headings and cards with everyday activities written on – see resource sheet.</p>

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	Joint session	<ul style="list-style-type: none"> <li>Use questioning when sharing an activity with a child to promote discussion (Adult).</li> <li>Say and use the number names in order in familiar contexts (Early Learning goal).</li> <li>Read and write numerals from 0 to 20 and beyond. Position them on a number track (Y1 key objective).</li> </ul>		<p>Sing 'Once I caught a fish alive'</p> <p>Fishing activity for children with different coloured, numbered, fish to catch. Read numbers on fish, order, hang on washing line. Make own fish to number and order. Could make fish with different numbers of spots. Adults to observe children's learning and interact.</p> <p>Share other number songs children know.</p> <p>(Activities to be adjusted for age and ability of children.)</p>	<p>Water tray, fishing nets and/or rods with magnets and paperclips for fish, laminated coloured fish, washing line, pens, coloured paper, glue, scissors</p> <p>Camera</p>
	Home activity			<p>Share an everyday activity with your child and use to promote counting skills and maths talk e.g. sorting the washing, laying the table. Share rhymes and songs.</p>	<p>Copy of 'Rhymes and songs' CAFOT</p> <p>See 'Family Health' embedded learning Module 4.17</p> <p><a href="http://rwp.qia.oxi.net/embeddedlearning/searchresults.cfm?setting=family_health&amp;set_title=Family%20Health">rwp.qia.oxi.net/embeddedlearning/searchresults.cfm?setting=family_health&amp;set_title=Family%20Health</a></p>
	Independent learning			<p><b>BBCSW</b></p> <p>L1/2 Addition and subtraction games – <a href="http://www.bbc.co.uk/skillswise/numbers/wholenumbers/addsubtract/problemsolving/">www.bbc.co.uk/skillswise/numbers/wholenumbers/addsubtract/problemsolving/</a></p> <p>E3 Comparing numbers games – <a href="http://www.bbc.co.uk/skillswise/e3/numbers/wholenumbers/placevalue/game.shtml">www.bbc.co.uk/skillswise/e3/numbers/wholenumbers/placevalue/game.shtml</a></p>	

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2. What's it worth <i>(Lesson plan)</i>	Adult session	<ul style="list-style-type: none"> <li>Negotiate targets for ILP.</li> <li>Partition and recombine numbers up to 1000.</li> <li>Order and compare numbers.</li> <li>Identify the value of each digit in a number.</li> <li>Add using 2- or 3-digit numbers.</li> <li>Recognise importance of learning number bonds to aid calculation.</li> <li>Use a 100 square to aid calculation.</li> </ul>	N1/E2.2 N1/E3.1 N1/L1.1  N1/E2.3 N1/E3.2  N1/E2.4 N1/E3.3	<p>Starter activity: making largest/smallest number from given digits on mini whiteboards. (Differentiate by number of digits)</p> <p>Learners to make sets of arrow cards and use to make target numbers. (Teacher to give individual feedback to learners on IA during the above activity.)</p> <p>Whole group activity: use arrow cards to identify value of digits e.g. make a number that is 100 more. (Use interactive version: <a href="http://www.ictgames.com/arrowCards_revised_v4.html">www.ictgames.com/arrowCards_revised_v4.html</a>.)</p> <p>See resource sheet 'Ideas for using arrow cards'.</p> <p>Pairs: partitioning and recombining 2- and 3-digit numbers using arrow cards to add.</p> <p>Group discussion: How learning number bonds helps calculation. Practical activities to support children.</p> <p>Using a 100 square – interactive game: <a href="http://www.bbc.co.uk/schools/numbertime/games/mend.shtml">www.bbc.co.uk/schools/numbertime/games/mend.shtml</a></p> <p>Negotiating ILP targets/ discussing qualifications – agreeing group targets and individual learner targets. (Use cards with sample targets to support. See resource sheet 'Negotiating targets for ILPs'.)</p>	<p>M4L TTM Session 5</p> <p>Mini whiteboards and pens</p> <p>Arrow card templates on coloured card – see: <a href="http://tre.ngfl.gov.uk/server.php?request=cmVzb3VyY2UuZnVsbHZpZXc%3D&amp;resourceId=693">tre.ngfl.gov.uk/server.php?request=cmVzb3VyY2UuZnVsbHZpZXc%3D&amp;resourceId=693</a></p> <p>Scissors and envelopes</p> <p>Laminated 100 squares</p> <p>Set of cards with sample targets</p> <p>IA Feedback</p>

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	Joint session	<ul style="list-style-type: none"> <li>Share activities with a child which support learning and using number facts (Adult).</li> <li>Begin to relate addition to combining two groups of objects (Early Learning goal).</li> <li>Select two groups of objects to make a given total of object (Foundation Stage objective).</li> <li>Derive and recall all pairs of numbers with a total of 10 and addition facts for totals to at least 5 (Year 1 key objective).</li> </ul>		<p>Song: 10 green bottles – children to act as bottles – how many fallen over, how many still standing? Use school resources e.g. Numicon, Multi-link cubes, bead strings, number flip-flaps and games for number bonds to 5 and 10. Children and teacher to show adults how they use these. Include interactive whiteboard activities if possible. Could include 'Models and Images' interactive resources.</p> <p>Making collections – find objects around the class or (scavenger hunt outside) to count and combine, to makes groups of numbers to 5, 10 or 20+ .Drawing pictures to record.</p> <p>Make own number flip-flap to practise number bonds.</p> <p>Additional activity: using 10 clothes pegs on a coat hanger to break up in different ways and find how many on each side while still making 10 – stick pictures of animals, cars etc. on pegs. Could have a peg with an addition sign.</p> <p>ICT addition games to play with adult – e.g. ladybird spot game:  <a href="http://www.bbc.co.uk/schools/laac/numbers/ch1.shtml">www.bbc.co.uk/schools/laac/numbers/ch1.shtml</a></p> <p>(Activities to be adjusted for age and ability of children)</p>	<p>Classroom resources</p> <p>Found objects, baskets for collecting            Paper, crayons</p> <p>Models and Images resources.</p> <p>Camera</p> <p>Clear sticky plastic or laminator            Template and instructions for flip-flap can be found at:  <a href="http://www.primaryresources.co.uk/maths/mathsA3.htm">www.primaryresources.co.uk/maths/mathsA3.htm</a>.</p> <p>Pegs, coat hangers and pictures to stick on.</p>

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	Home activity			Make collections of objects at home to count and use to compare numbers: more/less and number bonds to 10	Copy of 'What to look for' CAFOT
	Independent learning			Comparing numbers at BBCSW: L1/L2 <a href="http://www.bbc.co.uk/skillswise/numbers/wholenumbers/whatarenumbers/comparing/">www.bbc.co.uk/skillswise/numbers/wholenumbers/whatarenumbers/comparing/</a> E3 <a href="http://www.bbc.co.uk/skillswise/e3/numbers/wholenumbers/placevalue/">www.bbc.co.uk/skillswise/e3/numbers/wholenumbers/placevalue/</a>	

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3. Informal ways with addition and subtraction	Adult session	<ul style="list-style-type: none"> <li>Use a variety of mental strategies for addition and subtraction.</li> <li>Use an empty number line to count on or find the difference.</li> <li>Calculate the costs of more than one item in pence and whole pounds.</li> <li>Use decimal notation in the context of money.</li> <li>Add and subtract to two decimal places in the context of money.</li> <li>Discuss and use strategies to solve everyday problems.</li> </ul>	<p>N1/E2.4 N1/E3.2</p> <p>MSS1/E2.2</p> <p>N2/E3.3</p> <p>N2/L1.5</p> <p>N1/E3.9</p>	<p>Starter activity: follow me cards for simple addition and subtraction.</p> <p>Pairs: Look at calculations on cards and think about what strategies they used to find the answer.</p> <p>Model: using number lines for addition and subtraction – bridging – empty number lines. Link to children's learning and have classroom resources available such as multi-link, bead strings, number lines and 100 squares, Models and Images resources.</p> <p>Pairs: using near doubles, compensating, re-ordering, known facts, partitioning, number lines, carry out calculations.</p> <p>Use Card Match activity, to choose most appropriate strategy for calculation given and explain to partner. Differentiate by cards used.</p> <p>Review of place value applied to money: see <a href="http://www.skillsworkshop.org/e3num/e3pvmoney.pdf">www.skillsworkshop.org/e3num/e3pvmoney.pdf</a> for money place value chart. (M4L TTM Session 8 for information)</p> <p>Applying to everyday situations – learners to devise shopping problems for each other.</p> <p>Explore Move on website and opportunities to check skills using Move up test and practice tests for Level 1 or 2 learners and E3 learner routes and Hot topics. Also Embedded Learning Portal – interactive learning. <a href="http://rwp.qia.oxi.net/embeddedlearning/searchinteractive.cfm">rwp.qia.oxi.net/embeddedlearning/searchinteractive.cfm</a></p>	<p>Sets of follow me cards</p> <p>Mini whiteboard and pens</p> <p>Practical classroom resources to support addition and subtraction</p> <p>Card match</p> <p>Wave 3 resources sheets 15/16/17: <a href="http://www.standards.dfes.gov.uk/primary/publications/inclusion/wave3pack/pns_wave3_116605_resources.pdf">www.standards.dfes.gov.uk/primary/publications/inclusion/wave3pack/pns_wave3_116605_resources.pdf</a></p> <p>Supermarket adverts/web sites</p> <p>Access to Internet</p>

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	Joint session	<ul style="list-style-type: none"> <li>Use a number line with a child for counting on, counting back, and in ones, twos and fives (Adult).</li> <li>Find one more or one less than a number from 1 to 10 (Early Learning goal).</li> <li>Count aloud in ones, twos and fives or tens (Foundation Stage objective).</li> <li>Say the number that is one more or less than any number and 10 more or less for multiples of 10 (Year 1 objective).</li> </ul>		<p>Number lines – make number snake lines – children to order numbers up to 10, 20 or beyond. Use with children to practise counting in twos and fives, one more, one less.</p> <p>Use a hundred square to extend activity to 10 more, 10 less etc. Use bundles of ten straws to practise counting in tens.</p> <p>Back to back activity – make towers with multi-link: child makes one more/ one less than number given and passes to adult to check.</p> <p>Counting around us in twos (legs, arms, hands) and in fives (fingers, toes).</p> <p>Catch the cheetah game – find cheetahs round the room with 10 spots on and count how many spots in total.</p> <p>Playing games, which involve counting on and counting back using one or two dice. Could adjust score by one more/one less before moving, using number snake for support.</p> <p>Number songs but adjust to adding 1 back on – e.g. 5 little speckled frogs – frog jumps back on log</p> <p>Snakes and ladders – interactive version <a href="http://www.bbc.co.uk/schools/numbertime/games/snakes.shtml">www.bbc.co.uk/schools/numbertime/games/snakes.shtml</a>.</p> <p>(Activities to be adjusted for age and ability of children.)</p>	<p>Strips of paper, crayons, numbers to cut out, glue</p> <p>Hundred squares</p> <p>Multi-link</p> <p>Pictures of cheetah with 10 spots on</p> <p>Bundles of straws in 10s</p> <p>Games</p> <p>Camera</p>



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	Home activity			Practise counting in twos: pairs of socks, shoes, knives and forks, etc. What can you count in fives?	Copy of 'Learning about numbers' CAFOT
	Independent learning			BBC SW Mental addition and subtraction practice, including with money: <a href="http://www.bbc.co.uk/skillswise/numbers/wholenumbers/addsubtract/mental/">www.bbc.co.uk/skillswise/numbers/wholenumbers/addsubtract/mental/</a>  E2 Embedded learning – Paying for things <a href="http://rwp.qia.oxi.net/learning_material/portal/paying-for-things_num_e2/m04/t16/index.htm">rwp.qia.oxi.net/learning_material/portal/paying-for-things_num_e2/m04/t16/index.htm</a> .	

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4. Using addition and subtraction <i>(Lesson plan)</i>	Adult session	<ul style="list-style-type: none"> <li>Use a variety of vocabulary for addition and subtraction.</li> <li>Select efficient strategies for addition and subtraction to suit calculation.</li> <li>Use a written method for addition and subtraction.</li> <li>Relate addition to subtraction and use as a checking strategy.</li> <li>Apply knowledge of calculation to solve everyday problems.</li> <li>Be aware of the stages in the teaching of calculation for addition and subtraction from foundation to KS2.</li> </ul>	<p>N1/E2.7 N1/E3.9</p> <p>N1/E2.3 N1/E3.2</p> <p>N1/L1.3</p> <p>N1/E2.7 N1/E3.9</p>	<p>Starter – Use follow me cards, which use a variety of vocabulary (see resource sheet ‘Follow me cards: addition and subtraction vocabulary’). As a group, think of all the vocabulary associated with addition and subtraction. Use this to make a poster for four rules to be added to later.</p> <p>Recap on mental methods for addition and subtraction. How do they decide which method to use?</p> <p>Discuss stages in mental through to formal written calculations for children. Use the school’s calculation and progression policy on teaching of addition and subtraction – possible input from maths coordinator.</p> <p>What formal methods do learners use for addition and subtraction?</p> <p>Pairs: explain method for addition and subtraction to partner and compare.</p> <p>Model addition and subtraction using informal expanded methods through to formal method (decomposition for subtraction). Use money to show ‘exchanging’ ten for 10 units.</p> <p>How do addition/subtraction relate? How can this be used for checking?</p> <p>Use problem cards from pizza activity to provide practical context to apply strategies for addition and subtraction. Differentiate by problem.</p>	<p>Follow me cards</p> <p>Poster paper and pens.</p> <p>Down loadable vocabulary cards to stick on poster: <a href="http://www.standards.dfes.gov.uk/primary/publications/mathematics/vocab_flashcards/">www.standards.dfes.gov.uk/primary/publications/mathematics/vocab_flashcards/</a></p> <p>Calculation and progression policy</p> <p>1p, 10p and £1 coins</p> <p>Money place value chart: <a href="http://www.skillsworkshop.org/e3num/e3pvmoney.pdf">www.skillsworkshop.org/e3num/e3pvmoney.pdf</a></p> <p>M4L TTM Pizza activity</p> <p>Session 8 Problem cards</p>

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	Joint session	<ul style="list-style-type: none"> <li>Use games with children to develop number skills (Adult).</li> <li>In practical activities and discussion, begin to use the vocabulary involved in addition and subtraction (Early Learning goal).</li> <li>Use the vocabulary related to addition and subtraction and symbols to describe and record addition and subtraction number sentences (Year 1 key objective).</li> </ul>		<p>Playing games: children to share some of the games they use in class, including on computers – parents identify learning taking place.</p> <p>Use a number track to count on and back to 10 or 20 using a large numbered dice and +/- labelled dice. (Could label with variety of addition and subtraction vocabulary.) Year 1 children to record movements up and down track as number sentences.</p> <p>Make a race game with child to use at home. Think of ways to extend this activity. (Activities to be adjusted for age and ability of children.)</p>	<p>Selection of games</p> <p>Floor number track</p> <p>Wave 3 resources blank track resource sheet 21 (see above for link)</p> <p>Felt pens, pictures to cut and stick, counters, dice</p>
	Home activity			<p>Play the game at home and find ways to change and extend it. Make a number track with chalk outside for children to play hopscotch.</p>	<p>Copy of 'Board games and other games' CAFOT</p>
	Independent learning			<p>Move On Hot Topic – budgeting E3 using E3 learner route (need to log in): <a href="http://www.move-on.org.uk">www.move-on.org.uk</a></p> <p>L1/2 BBCSW</p> <p>Written addition and subtraction game <a href="http://www.bbc.co.uk/skillswise/numbers/wholenumbers/addsubtract/written/game.shtml">www.bbc.co.uk/skillswise/numbers/wholenumbers/addsubtract/written/game.shtml</a></p>	

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5. Close enough!	Adult session	<ul style="list-style-type: none"> <li>Recall multiplication facts for 2, 3, 5 and 10 times table.</li> <li>Round numbers to the nearest 10, 100 or 1000.</li> <li>Estimate answers to calculations.</li> <li>Key in and interpret money calculations on a calculator.</li> <li>Use a calculator to check answers.</li> <li>Use everyday opportunities to help children develop money skills.</li> </ul>	<p>N1/E2.5 N1/E3.5</p> <p>N1/E2.6 N1/E3.7 N1/L1.8</p> <p>N1/E3.8 N1/L1.9 MSS1/ E3.2</p> <p>N1/E2.8 N2/E3.4 N2/L1.11</p>	<p>Starter activity: Counting on/back in twos, threes, fives and tens from given number. (Display 100 square for visual prompt.)</p> <p>Group – using a counting stick, learners place post-it notes (with numbers written on) on it to round numbers to nearest 10, 100 and 1000.</p> <p>Interactive practice:  <a href="http://www.wmnet.org.uk/wmnet/custom/files_uploaded/uploaded_resources/852/2ring-centrev4.swf">www.wmnet.org.uk/wmnet/custom/files_uploaded/uploaded_resources/852/2ring-centrev4.swf</a>.</p> <p>Pairs: Rounding money to estimate costs. Use a number line to round to the nearest 10p, pound (100p) and £10. (Differentiate by amount.)</p> <p>Group discussion: When do we use rounding?</p> <p>Pairs: Takeaway activity – Select an order for the family. Keep track of the bill by rounding. Check the bill with a calculator – keying and interpreting answers. Discussion on how learners did this. How good was the estimate?</p> <p>Discussion on appropriate use of calculators with children.</p> <p>Interactive activity from Embedded Learning portal: Estimate answers to calculation  <a href="http://rwp.qia.oxi.net/learning_material/portal/estimate-answers-to-calculations_num_e3/m04/t08/">rwp.qia.oxi.net/learning_material/portal/estimate-answers-to-calculations_num_e3/m04/t08/</a>                      Opportunities at home for children to estimate and count and use money in role-play activities.</p>	<p>Number cards and stop cards (see Wave 3 resources for number cards)</p> <p>Large 100 square</p> <p>Counting stick and post-it notes</p> <p>M4L TTM Pizza activity                      Session 8 – menu only/ or other take away menus</p> <p>Calculators</p>

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	Joint session	<ul style="list-style-type: none"> <li>Support children to estimate and count groups of objects and use money in role-play activities (Adult).</li> <li>Use language such as more or less to compare two numbers (Early Learning goal).</li> <li>Estimate how many objects they can see and check by counting (Foundation stage objective).</li> <li>Estimate the number of objects; check by counting (Year 1 objective).</li> <li>Solve problems involving paying and giving change (Year 1 objective).</li> </ul>		<p>The Great Pet Sale by Mick Inkpen – share story as group. Model asking questions: Which pet costs more? Which cost less? Children and adults to make a pet shop and price tags. Use trays and coins to buy and sell pets. Estimate how many left in shop, how many bought. Could put a number of animals in a box for children to estimate after giving them a quick look and then let them check by counting.</p> <p>Sort coins. Estimate number of coins in a sorting tray and count.</p> <p>Play 'Guess how many pennies I have' using bags of pennies. Adult guesses how many child has taken out. Child to estimate how many he/she is holding and then to count.</p> <p>(Activities to be adjusted for age and ability of children.)</p>	<p>The Great Pet Sale</p> <p>Toy animals</p> <p>Labels, money, tills. sorting trays, coins</p> <p>Camera</p>
	Home activity			<p>Estimate number for groups of objects e.g. cakes on a plate.</p> <p>Make a shop with toys or food tins and packet at home.</p> <p>Try BBC Skillswise number rounding quiz.</p>	<p>Copy of 'Maths and Play'</p> <p>CAFOT</p>

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	Independent learning			<p>Move On Hot Topic – estimation E3 using E3 learner route (need to log in): <a href="http://www.move-on.org.uk">www.move-on.org.uk</a></p> <p>L1/2 BBC SW Rounding and estimating: <a href="http://www.bbc.co.uk/skillswise/numbers/wholenumbers/whatarenumbers/rounding/">www.bbc.co.uk/skillswise/numbers/wholenumbers/whatarenumbers/rounding/</a></p> <p>E2 Embedded learning 'Counting out change': <a href="http://rwp.qia.oxi.net/learning_material/portal/paying-for-things_num_e2/m04/t16/">rwp.qia.oxi.net/learning_material/portal/paying-for-things_num_e2/m04/t16/</a></p>	

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6. Multiplication and shape	Adult session	<ul style="list-style-type: none"> <li>Review own progress.</li> <li>Relate multiplication to repeated addition.</li> <li>Use the vocabulary of multiplication.</li> <li>Multiply 2-digit numbers by a single digit.</li> <li>Use an efficient written method for multiplication.</li> <li>Find the area of simple rectangles.</li> <li>Describe the properties of 2D shapes and 3D solids, and name them.</li> </ul>	<p>N1/E2.5 N1/E3.2  N1/E3.4  N1/E3.4 N1/E3.9  N1/L1.3  MSS1/ L1.9  MSS2/ E2.2 MSS2/ E3.1</p>	<p>Move on quizzes to check progress or questions from sample tests on topics covered so far. Review of ILP targets.</p> <p>Starter activity: Find the missing number for multiplication facts (e.g. <math>3 \times ? = 12</math>) using mini whiteboards to show answers. (Could use a number slider for this to cover up different parts of the number sentences.) Multiplication squares for support.</p> <p>Group discussion: What do they remember about multiplication? What strategies have they used already – doubling, repeated addition? How many ways can they make 36 using multiplication – what strategies did they use? Add vocabulary use to 4 rules poster. Small group activity from M4L TTM Session 3 using card sets A and B representations.</p> <p>Recap on partitioning – how could this be used in multiplication for 2 digit numbers.</p> <p>Model grid method. BBC SW game as group. <a href="http://www.bbc.co.uk/skillswise/numbers/wholenumbers/multiplication/written/">www.bbc.co.uk/skillswise/numbers/wholenumbers/multiplication/written/</a></p> <p>Recap on measurement in cm.</p> <p>In pairs, investigate how to work out the area of rectangles. Use Dienes apparatus to find the area of different sized rectangles.(Application of multiplication.)</p> <p>Prepare for joint session: feely bag to describe and identify 2D and 3D shapes. Prepare for shape hunting in the park and questions to use with children. Prepare a tally chart with pictures of appropriate shapes for each child to find.</p>	<p>Move on quizzes Internet access</p> <p>Mini whiteboards/pens Multiplication squares Multi-link to make arrays Dienes apparatus (See NCETM for using Dienes apparatus: <a href="http://www.ncetm.org.uk/mathemapedia/Ways%20of%20working%20with%20Dienes%20Apparatus">www.ncetm.org.uk/mathemapedia/Ways%20of%20working%20with%20Dienes%20Apparatus</a>) 4 rule posters M4L TTM Session 3 Cards A and B Internet access</p> <p>Feely bag with variety of 2D and 3D shapes and solids Pictures of solids and shapes to draw round</p>

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy

Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Joint session	<ul style="list-style-type: none"> <li>• Make use of local environment to support children's learning (Adult).</li> <li>• Use language such as 'circle or 'bigger' to describe shape and size of solids and flat shapes. (Early Learning goal).</li> <li>• Visualise and name common 2D shapes and 3D solids and describe their feature; use them to make patterns, pictures and models (Year 1 key objective).</li> </ul>		<p>Outing to a local park – how many different shapes can children find on the way to and at the park? Complete a shape hunt and make a tally of the number of different shapes and solids seen. Adults to talk with children about properties of shapes, including using vocabulary such as face, edge, corner to describe features of shapes. Making shapes with twigs challenge. What shapes can you make/ not make? Can you make a pattern? Extend to concept of area – e.g. how many leaves fit in the shapes made. Playing games in circles and squares e.g. corners</p> <p>(Activities to be adjusted for age and ability of children.)</p>	<p>Shape tally chart Supply of extra twigs in case these cannot be found at the park. Camera</p>
	Home activity			<p>Finding shapes in the kitchen. Looking at food packaging, utensils, floor tiles, etc. Make a shape picture or pattern. Junk modelling.</p>	<p>Internet access Copies of 'In the street' CAFOT</p>



# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy



Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Independent learning			<p>Practice for timetables: BBCSW <a href="http://www.bbc.co.uk/skillswise/numbers/wholenumbers/multiplication/timestables/game.shtml">www.bbc.co.uk/skillswise/numbers/wholenumbers/multiplication/timestables/game.shtml</a></p> <p>Lots more games at: <a href="http://www.woodlands-junior.kent.sch.uk/maths/timestable/interactive.htm">www.woodlands-junior.kent.sch.uk/maths/timestable/interactive.htm</a></p> <p>L1/L2 learners perimeter and area practice BBCSW: <a href="http://www.bbc.co.uk/skillswise/numbers/measuring/perimeterareaandvolume/arearectangle/">www.bbc.co.uk/skillswise/numbers/measuring/perimeterareaandvolume/arearectangle/</a></p>	

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy



Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
7. Division and time	Adult session	<ul style="list-style-type: none"> <li>Use multiplication facts to work out division.</li> <li>Divide 2-digit numbers by a single digit and interpret remainder.</li> <li>Use division to solve practical problems.</li> <li>Read and understand <math>\frac{1}{2}</math> and <math>(\frac{3}{4})</math>.</li> <li>Read and (record) time in 12- and 24-hour format.</li> <li>Calculate using time.</li> </ul>	<p>N1/E3.5 N1/L1.5</p> <p>N1/E3.6 N1/L1.3</p> <p>N1/E3.9 N1/E2.7</p> <p>N2/E2.2 N2/E3.1</p> <p>MSS1/ E2.4 E3.3</p> <p>MSS1/ L1.3</p>	<p>Starter activity: using multiplication facts to solve division problem – matching pairs of cards or mini whiteboard activity.</p> <p>Language of division – add to posters.</p> <p>Relate to subtraction, halving. How could we divide by 4 using this?</p> <p>Small groups: which numbers can you divide 32 pasta shapes by with none left over/some left over (remainder)? How did you divide – sharing or grouping? Make arrays using multi-link and Dienes apparatus.</p> <p>Model use of chunking for division by a single digit and standard written method.</p> <p>Pairs: dividing time – how many 5 or 10 minutes in an hour, etc. Make up problems for each other relating to length of time and length of a task.</p> <p>Introduce halves and quarters in relation to clocks. How many minutes?</p> <p>Small groups: converting times – clock triominoes M4L TTM</p> <p>Planning timetable for shopping trip as a group.</p> <p>Use plan to ask questions on measuring/calculating time as assessment.</p> <p>Prepare for outing – what to look out for/ talk about with child while shopping.</p>	<p>Cards</p> <p>Mini whiteboards/pens</p> <p>4-rule posters</p> <p>Coloured pasta shapes</p> <p>Dienes apparatus</p> <p>Multi-link cubes</p> <p>Analogue clock</p> <p>Clock triominoes M4L TTM session 7</p>

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy

Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Joint session	<ul style="list-style-type: none"> <li>Use everyday activities to promote mathematical talk and skills with a child (Adult).</li> <li>Count reliably up to 10 everyday objects (Early Learning goal).</li> <li>Share objects into equal groups and count how many in each group (Foundation Stage objective).</li> <li>Solve practical problems that involve sharing into equal groups (Year 1 objective).</li> </ul>		<p>Shopping trip to local shop on bus or foot – adult to use their timetable plan. Each child to have shopping list to buy number of items e.g. 8 plums, 12 mini packets of raisons, 20 sweets.</p> <p>Adult to talk with children about weighing, shapes, numbers, paying for items etc.</p> <p>On return to school:</p> <ul style="list-style-type: none"> <li>Talk about how all the items bought can be shared between the children to take home.</li> <li>Children to share out what they have bought. (Could have some items left over.)</li> </ul> <p>(Activities to be adjusted for age and ability of children)</p>	<p>Shopping lists</p> <p>Camera</p> <p>Money</p> <p>Bags</p>
	Home activity			<p>Make a sequencing picture of the trip to the shops (showing the time on the hour/half hour Year 1)– use vocabulary first, second, later etc to recount the trip using pictures. Use a clock at home for bedtime, favourite TV programmes, meals.</p>	<p>Copies of 'Shopping'</p> <p>CAFOT</p>

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy



Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Independent learning			<p>Move on Hot Topic – Which operation? E3 using E3 learner route (need to log in):  <a href="http://www.move-on.org.uk">www.move-on.org.uk</a></p> <p>BBCSW division game  <a href="http://www.bbc.co.uk/skillswise/numbers/wholenumbers/division/written/game.shtml">www.bbc.co.uk/skillswise/numbers/wholenumbers/division/written/game.shtml</a></p> <p>Level 1 learners – adding and subtracting time                      BBCSW  <a href="http://www.bbc.co.uk/skillswise/numbers/measuring/time/calculatingtime/">www.bbc.co.uk/skillswise/numbers/measuring/time/calculatingtime/</a></p> <p>E3 Embedded learning – understanding time  <a href="http://rwp.qia.oxi.net/learning_material/portal/understanding-time_num_e2/m04/t31/">rwp.qia.oxi.net/learning_material/portal/understanding-time_num_e2/m04/t31/</a></p>	

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy



Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
8. Measuring up	Adult session	<ul style="list-style-type: none"> <li>• Multiply and divide whole numbers by 10 and 100.</li> <li>• Multiply and divide decimals by 10 and 100.</li> <li>• Use decimals in metric measures for length.</li> <li>• Estimate, measure and compare length using common non-standard and standard units.</li> <li>• Choose and use appropriate units and measuring instruments for length.</li> <li>• Read, estimate and measure length using mm, cm and m.</li> <li>• Work out simple ratio and direct proportion.</li> </ul>	<p>N1/E3.1 N1/L1.4</p> <p>N2/L1.6</p> <p>N2/E3.2</p> <p>MSS1/ E2.5</p> <p>MSS1/ E3.8</p> <p>MSS1/ E3.5</p> <p>MSS1/ L1.4</p> <p>N1/L1.7</p>	<p>Starter activity: Use large number cards, decimal point. Learners arrange themselves to make a number – rearrange themselves to make 10x bigger etc. Discuss what they learnt: Zero? Decimal point?</p> <p>Pairs: Make number slider to multiply and divide by 10, by 100, etc. Record on whiteboards.</p> <p>Make number chains using M4L TTM resource (Session 25).</p> <p>Length – body measurement investigation to compare lengths of various parts of body and their ratio. Select appropriate instrument and unit to measure parts of body (could use non-standard measures first). (See M4L Measurement booklet – page 14 for details of activity.) Can body measurement facts be used to estimate cm, 10 cm, m?</p> <p>How much would 10, 100 etc, hands measure? Relate metric system to units, 10s, 100s.</p> <p>Extension: covert measurement to different units within same system.</p> <p>Pairs: use body measurements to estimate lengths of objects, room etc.</p> <p>Measuring and children – vocabulary, non standard measures, activities at home with measure.</p>	<p>Large number cards</p> <p>Slider: <a href="http://www.skillsworkshop.org/l1num/l1pvslider.pdf">www.skillsworkshop.org/l1num/l1pvslider.pdf</a></p> <p>Mini whiteboards</p> <p>BBC Skillswise x10, 100</p> <p>Multiplication</p> <p>Investigation Sheet 8</p> <p>M4L TTM Session 25</p> <p>Selection of measuring equipment</p> <p>M4L Measurement booklet for reference.</p> <p>BSA Card – metric measures length</p>

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy



Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Joint session	<ul style="list-style-type: none"> <li>Use everyday contexts to support children to develop language for measure and estimation skills (Adult).</li> <li>Order items by length or height (Early Years foundation stage development goal).</li> <li>Use everyday language such as 'bigger, smaller, to describe size of solid and flat shapes.</li> <li>Estimate, measure and compare objects choosing and using suitable uniform non-standard units. (Year 1 key objective).</li> </ul>		<p>Draw round children on large sheet of paper. Compare and order group. Use footstep cut outs to measure parts of body and record. Use to measure objects round the room and compare length. Use outside areas to extend activity. Order objects found in the room by length and talk about them.</p> <p>Measure teddies and toys using multi-link or other unit of measure, estimating first.</p> <p>Story – Guess how much I love you?</p> <p>(Activities to be adjusted for age and ability of children.)</p>	<p>Roll of paper</p> <p>Objects to order in size</p> <p>Camera</p> <p>Multi-link</p> <p>Metre rules</p>
	Home activity			<p>Estimating lengths – talk with children using longer, shorter to compare everyday objects e.g. sorting the washing and comparing length of trousers, using play dough to make snakes.</p> <p>Make a family height chart.</p>	<p>Copy of 'Around the house' CAFOT</p> <p>Parents as partners – learning and growing together height chart</p> <p>DCSF-00672-2007 – free to order</p>

# Family literacy, language and numeracy

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Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Independent learning			<p>Move On Hot Topic – Length weight and capacity E3 using E3 learner route (need to log in): <a href="http://www.move-on.org.uk">www.move-on.org.uk</a></p> <p>L1/2 BBCSW Game to practise converting between units of length <a href="http://www.bbc.co.uk/skillswise/numbers/measuring/lwc/game.shtml">www.bbc.co.uk/skillswise/numbers/measuring/lwc/game.shtml</a></p> <p>E2 Embedded learning – using metric units <a href="http://rwp.qia.oxi.net/learning_material/portal/paying-for-things_num_e2/m04/t16/index.htm">rwp.qia.oxi.net/learning_material/portal/paying-for-things_num_e2/m04/t16/index.htm</a></p>	

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy

Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
9. Fractions (Lesson plan)	Adult session	<ul style="list-style-type: none"> <li>Divide whole objects into common fractions and relate to division.</li> <li>Order common fractions.</li> <li>Find fractions of whole number measurements.</li> <li>Recognise and use equivalent fractions.</li> <li>Find parts of whole number quantities using fractions.</li> <li>Recognise equivalences between common fractions, decimals and percentages.</li> <li>Read, write and compare <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math>.</li> <li>Find <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math> of small numbers.</li> </ul>	<p>N2/E3.1</p> <p>N2/L1.1</p> <p>N2/L1.2</p> <p>N2/E3.3</p> <p>N2/E3.2</p> <p>N2/L1.2</p> <p>N2/E3.3</p> <p>N2/L1.3</p> <p>N2/E2.1</p> <p>N2/E2.2</p>	<p>Starter: finding fractions of objects e.g. biscuits, chocolate, apples (M4L TTM session 6) followed by fraction dominos (Card A) What are we doing when we find a fraction (link to division)?</p> <p>Activity – comparing and ordering fractions (M4L TTM session 23)</p> <p>Individual activity – order fractions on cards. In pairs, use area cards and number lines to check/ compare.</p> <p>Support E2 learners to work with <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math>.</p> <p>Learner to make fraction walls to find equivalent fractions (use to revise measuring length in cm and mm and division). Label and cut out to make fraction towers. Use to find equivalent fractions (differentiate by fractions included). Use multi-link and Dienes apparatus for support.</p> <p>Equivalent fractions: L1 learners use fraction spidergram activity (M4L TTM session 24) and E3 learners make equivalent fractions with fraction towers. E2 learner work with real object to divide into halves and quarters.</p> <p>Make number lines for fractions, decimals and (percentages L1 only) and find common equivalents. Share with rest of group and discuss everyday context for using decimals and percentages.</p> <p>Or</p> <p>E3 Use Embedded Learning portal interactive activity on equivalences:  <a href="http://rwp.qia.oxi.net/learning_material/portal/equivalences_num_1/m04/t12/index.htm">rwp.qia.oxi.net/learning_material/portal/equivalences_num_1/m04/t12/index.htm</a></p> <p>E2 Embedded learning: dividing into halves and quarters</p>	<p>Things to divide e.g. chocolate</p> <p>M4L TTM Session 6 fraction dominos</p> <p>M4L TTM Session 23 fraction cards, area cards and number lines</p> <p>Rulers, scissors, coloured card, plastic wallet.</p> <p>Dienes apparatus</p> <p>Multi-link cubes</p> <p>M4L TTM Session 24 spidergram</p> <p>Squared paper for number lines</p> <p>Access to computers and internet</p>



# Family literacy, language and numeracy

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Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Joint session	<ul style="list-style-type: none"> <li>Use cooking activities to promote mathematical language and concepts (Adults).</li> <li>Use mathematical ideas to solve practical problems (Early Learning goal).</li> <li>Talk about, recognise and recreate simple patterns (Early Learning goal).</li> <li>Use vocabulary of half and quarters in context (Year 1 objective).</li> <li>Visualise and name common 2D shapes and 3D solids, and describe their features; use them to make patterns, pictures and models (Year 1 key objective)</li> </ul>		<p>Share Story – 'Handa's Surprise' using story sack if available</p> <p>Look at a selection of fruit and discuss shapes, colour, size etc.</p> <p>Make repeating patterns with whole fruits.</p> <p>Make a fruit salad – cutting fruit into halves and quarters, segmenting and counting segments, slicing.</p> <p>Measuring juice.</p> <p>Shape pictures – cutting circles etc. in halves and quarters and using to make repeating patterns and shape pictures. Pictures could be laminated to use as place mats at home</p> <p>(Activities to be adjusted for age and ability of children.)</p>	<p>Handa's Surprise and story sack.</p> <p>Variety of fruit and juice. Bowl, chopping boards and knives.</p> <p>Sticky paper shapes and paper</p>
	Home activity			<p>Using play dough to make shapes and cut in half, make patterns with etc.</p> <p>Making sandwiches</p>	<p>Play dough made previously</p>

# Family literacy, language and numeracy

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Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Independent learning			<p>Move On Hot Topic – Fractions E3 using E3 learner route; Move on Hot Topic – Fractions L1 using L1 learner route (need to log in): <a href="http://www.move-on.org.uk">www.move-on.org.uk</a></p> <p>BBCSW fractions, decimals and percentages <a href="http://www.bbc.co.uk/skillswise/numbers/fractiondecimalpercentage/">www.bbc.co.uk/skillswise/numbers/fractiondecimalpercentage/</a></p>	

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy

Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
10. Volume and weights Reading tables	Adult session	<ul style="list-style-type: none"> <li>Use multiplication facts for times tables (differentiate by level).</li> <li>Read, measure and compare weight and volume using non-standard and standard units.</li> <li>Extract information from a table to make comparisons.</li> <li>Organise information in a table.</li> </ul>	N1/E2.5 N1/E3.4 N1/L1.5  MSS1/E2.6 MSS1/E3.6,7 MSS1/L1.4, 6,7 HD1/E2.1 HD1/E3.1 HD1/L1.1 HD1/E2.5 HD1/E3.4 HD1/L1.2	Starter: times table practice. Use follow me cards and multiplication squares for support. . Discuss ideas for helping children learn tables. Whole group – use Card set C (M4L TTM session 13) to promote discussion on which units for volume and weight they are familiar with and the notation. Revision of length. Reading scales on measuring devices – use number lines to practise reading of scales or Embedded learning – measuring weight ( <a href="http://rwp.qia.oxi.net/learning_material/portal/measuring-weight_num_e3/m05/t02/index.htm">rwp.qia.oxi.net/learning_material/portal/measuring-weight_num_e3/m05/t02/index.htm</a> ). Small group carousel of activities: 1. Use scales and measuring jugs to compare metric and non-metric weights/volume (water/rice) and find common equivalents to make a chart e.g. 4 oz = 125 g (extension converting between metric units). 2. Measure ingredients to make play dough. For recipe see Family Health Embedded learning file Module 4.14: <a href="http://rwp.qia.oxi.net/embeddedlearning/searchresults.cfm?setting=family_health&amp;settle_title=Family%20Health">rwp.qia.oxi.net/embeddedlearning/searchresults.cfm?setting=family_health&amp;settle_title=Family%20Health</a> 3. Read amounts of salt, sugar, fat etc. in a variety of breakfast cereal. Make a table to compare. (Extension: working out how many bowls of cereal a child could eat within daily allowance for salt and sugar.) Group discussion on activities at home to help children use language of measure and to compare quantities.	Follow me cards Multiplication squares  M4L TTM session 13 Card set C  Analogue, digital scales, measuring jugs, water, rice, flour, salt, mixing bowl, spoons  Variety packs of breakfast cereals See <a href="http://www.salt.gov.uk">www.salt.gov.uk</a> for information and resources

# Family literacy, language and numeracy

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Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Joint session	<ul style="list-style-type: none"> <li>Use everyday opportunities to develop children's learning around measure (Adult).</li> <li>Use language such as 'greater or 'smaller, 'lighter' or 'heavier' to compare quantities (Early Learning goal).</li> <li>Estimate, measure and weigh and compare objects, choosing and using suitable uniform non-standard and standard units and measuring instruments (Year 1 key objective).</li> </ul>		<p>Cooking – making smoothies, child-friendly cocktails, samosas or pancakes (depending on facilities) to measure weight and volume. Use play dough to make different length snakes, different sized balls. Compare weights of variety of objects on balance scales. Set problems for children to solve: find five things heavier/lighter than a teddy, for example. Record in pictures. Try using play dough as weights to balance with other objects. Water tray for measuring with containers and jugs.</p> <p>(Activities to be adjusted for age and ability of children.)</p>	<p>Ingredients and utensils for chosen cooking activity</p> <p>Camera</p> <p>Play dough</p> <p>Water tray</p>
	Home activity			<p>Playing in the bath with water. Investigating the food cupboard: sorting heaviest to lightest. Weighing toys to compare weights</p>	<p>Copies of 'Around the house' CAFOT</p>

# Family literacy, language and numeracy

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Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Independent learning			<p>Move On Hot Topic – Length, weight and capacity E3 using E3 learner route; Tables and charts E3 using E3 learner route (need to log in)  <a href="http://www.move-on.org.uk">www.move-on.org.uk</a></p> <p>L1/ L2 BBCSW volume:  <a href="http://www.bbc.co.uk/skillswise/numbers/measuring/volume/">www.bbc.co.uk/skillswise/numbers/measuring/volume/</a></p> <p>E2 Embedded learning – metric measures:  <a href="http://rwp.qia.oxi.net/learning_material/portal/metric-units_num_e2/m05/t13/index.htm">rwp.qia.oxi.net/learning_material/portal/metric-units_num_e2/m05/t13/index.htm</a></p>	

# Family literacy, language and numeracy

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Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
11. Charts/ problem-solving	Adult session	<ul style="list-style-type: none"> <li>Identify next step on personal learning journey and reflect on achievements.</li> <li>Solve a problem by selecting appropriate method and operation.</li> <li>Record numerical information using a tally chart and represent in appropriate ways.</li> <li>Extract information from charts.</li> <li>Find the mean of a set of data.</li> <li>Find the range of a set of data.</li> <li>Work out ratio and direct proportion.</li> </ul>	<p>N1/E3.9</p> <p>HD/E2.4 HD/E3.3 HD/E3.4 HD/L1.2 HD/E2.1 HD/E3.1 HD/L1.1 HD/L1.3 HD/L1.4 N1/L1.7</p>	<p>Visit from IAG adviser to provide information on progression opportunities.</p> <p>Starter activity: equivalent fraction/percentage/decimal dominoes – differentiate by answer.</p> <p>Group activity: pose question ‘Do all tubes of Smarties contain the same number and colours of Smarties? Discussion on how to approach this problem and how to display results: estimation, counting, tallying, comparing, representing as a chart (which is most suitable – pictogram, bar chart), extracting information, collecting group results, L1 learners finding range and mean, working out ratios of one colour to another. (L2 extension – mode and median.)</p> <p>Practise test questions using Move On web site or targeted interactive activities from Embedded Learning portal to practise skills according to need: <a href="http://rwp.qia.oxi.net/embeddedlearning/searchinteractive.cfm">rwp.qia.oxi.net/embeddedlearning/searchinteractive.cfm</a></p> <p>Review ‘What I am good at’ chart from session 1.</p> <p>End of course review of ILPs</p>	<p>Equivalent fraction dominoes</p> <p>Copy for teacher only of Smartie activity: <a href="http://www.skillsworkshop.org/hd/hde111smarties.pdf">www.skillsworkshop.org/hd/hde111smarties.pdf</a></p> <p>Squared paper</p> <p>Rulers</p> <p>Internet access</p>

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy

Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Joint session	<ul style="list-style-type: none"> <li>Sort 2D and 3D shapes using their properties (Adult).</li> <li>Use stories to extend children's vocabulary and knowledge of maths (Adult).</li> <li>Sort familiar objects to identify their similarities and differences (Foundation Stage objective).</li> <li>Use diagrams to sort objects into different groups according to given criterion. Suggest a different criterion for grouping the same objects (Year 1 objective).</li> </ul>	HD1/ E2.3 MSS2/ E3.1          HD1/ E2.3	<p>Share 'Very Hungry Caterpillar' and model questioning to extend learning (e.g. days of week, sequencing)</p> <p>Adult and children to make pictogram together of fruit eaten on different days.</p> <p>Interactive whiteboard Carroll diagram to sort shapes.</p> <p><a href="http://www.standards.dfes.gov.uk/primary/publications/mathematics/12874/nns_useict026000carroll.swf">www.standards.dfes.gov.uk/primary/publications/mathematics/12874/nns_useict026000carroll.swf</a></p> <p>Sorting fruits to make Carroll diagram – red/not red, round/not round – using real fruit. Can children suggest own criteria?</p> <p>Make a five-a-day chart to use at home. (Downloadable version as example –children to make their own – <a href="http://www.5aday.nhs.uk/DownloadsResources/ChildrensWallchart.aspx">www.5aday.nhs.uk/DownloadsResources/ChildrensWallchart.aspx</a>)</p> <p>(Activities to be adjusted for age and ability of children.)</p>	<p>Very hungry caterpillar.</p> <p>Fruit to cut out: see <a href="http://www.dltk-teach.com/books/hungrycaterpillar/sequencing.htm">www.dltk-teach.com/books/hungrycaterpillar/sequencing.htm</a></p> <p>Large sheet of paper, fruit Fruit, paint, paper</p> <p>Copies of days of the week and grids. Pictures to decorate.</p>
	Home activity			<p>Use the five-a-day chart – recording what fruit and vegetables adults and children eat each day of the week.</p> <p>Sharing number stories and poems.</p>	<p>Copies of 'Stories'</p> <p>CAFOT</p>

# Family literacy, language and numeracy

## Family learning impact funding – Family Numeracy



Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Independent learning			Final preparation for test next session	
12. Test/ Celebration	Adult session	<ul style="list-style-type: none"> <li>• Use a variety of strategies to approach a written test.</li> <li>• Recognise own and child's achievements.</li> </ul>		Final preparation for test – review of hints from Move-on 'Pointers to success'. Tests. End-of-course evaluations – identifying achievements for adults and children.	Move on 'Pointers to success' for teacher  Paper or computer based tests End of course evaluations



# Family literacy, language and numeracy

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Session		Learning outcomes	Curric. Ref.	Teaching and learning activity	Resources
	Joint session	<ul style="list-style-type: none"> <li>Use a celebration event to promote the use of number language and skills (Adult).</li> <li>Use ordinal numbers in different contexts (Foundation Stage objective).</li> <li>Solve problems involving counting and adding in the context of number (Year 1 objective).</li> </ul>		<p>Reviewing the course using photos as a group. Children to choose five photos to make a poster of what they enjoyed most – make a border with repeating patterns.</p> <p>Making sandwiches – halving and quartering. Set the table for tea – working out number of plates and cups needed.</p> <p>Play games outside in two teams– bean bag race, space hopper race, number skittles etc – record places using ordinal numbers. Year 1 children decide how to score events. Record scores and total at end.</p> <p>Share some songs they have learned.</p> <p>Presentation of certificates by significant person!</p> <p><i>This session could be opened to other parents and children who may then be encouraged to join the next course.</i></p>	<p>Photos of course</p> <p>Paper</p> <p>Printing materials</p> <p>Sandwich ingredients</p> <p>Plates and cups</p> <p>Variety of outdoor sports equipment</p> <p>Certificates</p>
	Home activity			Use the 'Count and figure it out together' pack to continue to share activities with your child.	All remaining sheets from Count and figure it out together.