

Practical Numeracy Ideas

Activities for Counting and Number Patterns:

- Count your stairs going up and down. Try counting backwards when going downstairs.
- Count the stairs starting on a different number - you could place a different number card on the bottom stair, to start on each day!
- Count the number of birds in your garden. Can you count backwards as each one flies away?
- Count the number of times you can jump in one minute; hop in one minute; run up and down your garden in one minute.
- Count the number of: biscuits in a packet; crisps in a packet; forks around the table; plates in the cupboard; items in a shopping basket.
- Recognise numbers around the environment: car number plates; house numbers; road signs; prices; numbers on clocks; shop signs; bus numbers.
- When you have spotted a number, find out what is one more or less?
- Using magnetic numbers on the fridge - put a number line 1 to 10 up then remove a number. What is the missing number? Make it the magic code to crack before opening the fridge.
- Using magnetic numbers and a number line. Mix up two of the numbers. Can you spot which two are swapped round?
- Place three numbers on a fridge. Which numbers come next?
- Learn and sing some simple counting number songs, such as: "One potato, two potato, three potato, four...", or "One, two, three, four, five, Once I caught a fish alive..."
- Count how many times you can catch a ball without dropping it.

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Activities for Ordinal Numbers (first, second, third,...):

- When watching any type of race, guess who will come first, second or third.
- Look at cars on the road, describe each car "The first car is red, the second car is shiny, the third car has its windows open..."
- Explain what you are doing in order. "First I'm going to... Second I'm going to..."
- Before cooking put the ingredients in order of use, what's going in the bowl third? Fourth? Second?
- Put some Smarties in a bowl. Sort them in a row of five, using colours. Follow instructions to put a green Smartie in third place, a blue Smartie in first place etc.
- Play races with toys, make pretend first, second, third medals for the winners. Use up to 10 toys to develop ordinal numbers to tenth.
- With coloured magnetic numbers or letters on a fridge, identify the "third yellow number" or "second green letter".
- Using a bookcase or CD rack, find the third book on the second shelf from the top, or the fifth CD from the left on the bottom shelf etc.

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Activities for Sorting and Grouping Objects:

- Sort your shoes or socks out into matching pairs.
- Sort out toys into soft and cuddly or hard and smooth.
- Set treasure hunts by searching for ten green (or red, or yellow, or soft etc.) objects from the house or garden.
- Sort a packet of Smarties into colours and/or happy /sad colours.
- Sort cutlery into knives, forks, spoons.
- Hunt for different types of leaves on a walk. Sort them on to a collage, sticking smooth/spiky; green/brown; big/little into two different sorts.
- Try sorting some books onto two shelves: big books/little books, hardback/paperback, books I like to read/books I don't read.
- Sort out coloured pegs on a washing line.
- Draw a picture in two sets sorting out - food I like, food I don't like.
- Keep a weather chart - find a way to record each month, eg. Tick off the type of weather, colour in the type of weather on a block graph, complete in a calendar with a picture. Draw a picture of each type of weather as it occurs and stick in rows on a big piece of paper.

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Activities for Counting in Twos:

- Count in ones going up each stair, but shout out every other number. E.g. 1 2 3 4 5 6. Then start by shouting out the "1" then whisper "2". (The odd numbers being dominant).
- Count the house numbers going along a road. Walk up the even side, then back down the odd side. Try to predict which house will come next by adding on two more.
- Count socks, shoes or gloves. How many pairs? How many altogether?
- Find things that come in pairs: eyes, ears, legs, hands, feet, bicycle wheels, twins, taps etc.
- Go for treasure hunts, finding two of different things, eg. Two leaves, two stones, two sticks etc.
- Put pegs in twos on a washing line - find out if it works for odd numbers, if you have 5 pegs there will be 1 left over.
- Decorate a cake with chocolate drops in groups of two around the edge.
- Put magnetic numbers on a fridge just counting in twos.
- Tell the story of Noah's Ark, counting the animals into the ark in twos.
- Find "two more" items on a treasure hunt, or maths trail. Be a "Two Detective".
- Find opportunities to ask for "two more" e.g. "two more crisps on the plate", "two more flowers in the vase", "two more pencils in the pot", "two more sweets".

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Activities for Simple Addition:

- With a given number of objects, e.g. Sausages. Split into two or three groups. E.g. 6 sausages - 1 on one plate, 2 on another, 3 on another. Is there a fair way of doing it?
- Treasure hunt to total 10. In pots there are 4 sticks, 3 leaves, 5 stones. Make each up to 10. Make it a race to finish.
- Make small cakes and put on chocolate drops. Add up the drops on the top of any 2 cakes.
- Play games that require two dice to be thrown. Add up the scores.
- Play dominoes. Add up the total on each domino by counting the spots.
- Play a ball game, throwing balls into hoops or buckets to score points. E.g. red bucket scores 2, blue bucket scores 5, green bucket scores 3. Keep running total of your 3 ball score.
- Make a collage, or paint or draw a large picture with groups of similar objects - e.g. 2 birds in 1 tree, 3 in another, 4 red flowers and 2 more red flowers. Test an adult member of the family - how many flowers/birds can they see? The child testing has to say if they are correct.
- Play school, where the child has to teach adding up. Get some of the questions wrong so that the child can show you how to work it out using equipment or drawings or numberline. Get them to make up some adding questions for you - you answer, but get some wrong, so the child can mark it checking your answers.

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Activities for Doubles and Halves:

- Play games using dice but change the rules to double the score on the dice.
- Play dominoes, point out the doubles and add the total spots.
- Draw or make mirror pictures - on one side put 5 flowers, draw the reflection - how many flowers altogether?
- Play Snap games, looking for doubles visually.
- Use magnetic numbers to build doubles questions on the fridge.
- Double challenge races - with given items in pots. E.g. 2 pencils, 3 leaves, 2 toys. The child has to double the number in the pot as quickly as possible or before a timer runs out.
- Sharing sweets or biscuits or pencils out between two groups to give half to each. Point out how many there are to start with and how many each will get.
- Cut cakes or sandwiches or fruit in half. Point out the same amount in each half to make it fair.
- Look in shops for sales where the price is "Half Price". If you double the sale price it should equal the full price.
- When buying two packets of e.g. buns or crisps, find out how many altogether.
- Split the cost of items such as chocolate bars - half now, half later. How much does each half cost.
- Play children's darts where simple numbers can be doubled for certain parts of the dartboard.
- Make up games where doing certain things - e.g. jumping furthest, you double your score.

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Activities for Measuring and Comparing:

- When looking at two similar objects state which is the biggest/smallest, thinnest/fattest, tallest/shortest, heaviest/lightest.
- Line up chips on a plate in order, with the longest going down to the shortest.
- Organize books on a shelf in size order.
- Make cards for people with leaves or flowers with the largest going down to the smallest.
- Read stories where size is mentioned, e.g. Red Riding Hood, The Very Hungry Caterpillar.
- Organize teddies or toys into size order, either by weight or height.
- With a given length e.g. a pencil, find 5 things in the house or garden which are longer, 5 things which are shorter and 5 things which are the same length.
- Find pairs of objects that are the same length/weight/height. Find objects that are double the height or half the height of a toy.
- Make a garden sculpture or collage with sticks, stones and leaves. Organize them by size.
- Become familiar with measuring resources like scales, tape measures, rulers, odometers.
- Use a finger as a measuring unit. How many fingers long is the table, the chair, the rug? What happens if we measure with our thumb instead?
- Draw a large outline of yourself on the floor (piece of paper or use chalk on the ground). How many pencils long are you/are your arms/is your head?
- Cut out a card version of your foot. Be a detective and find something that is one "foot" long, 2 "feet" long, 3 "feet" long.

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Activities for Simple Subtraction, including finding the difference:

- Count backwards when travelling up or down stairs.
- Have a countdown to doing things, either in ones or even twos, e.g. 10, 8, 6, 4, 2, 0.
- Play the magicians tray. There are some items on a tray. Some are removed under a magic cloth. You have to work out either how many are left or how many have been removed.
- Play dice games using 2 dice where the score is the difference between the two numbers on the dice. E.g. throw a 2 and a 6, score the difference, which is 4.
- When eating food or taking items from a packet, keep track of the number of items eaten, and number of items left.
- Find the difference between the number of items on a plate. E.g. number of sausages on parent's plate and on child's plate. How many more does parent have?
- Put a number of toys on the bed, e.g. 5. Close your eyes and remove some, can you guess how many have gone, and which ones?
- Any "Spot the Difference" pictures where the difference changes a number of items, e.g. picture A has 4 buttons on teddy's jumper and 5 stars in the sky; picture B has 2 buttons and 7 stars.
- Count the petals on a flower or letters in a word - find one with less or more. How many more/less?
- Looking at some shoes or pencils or cups, how many more black ones than white ones, or dark ones than light ones, or plastic ones than china ones.
- Play Snakes and Ladders with a number 1-100 board. When throwing the dice, notice the score is the difference between your starting square and finishing square.

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Activities for Sharing, Odd and Even Numbers:

- Help with laying the table and putting the correct number of plates, cutlery around.
- Work out how many food items each person will get, e.g. Fish fingers, or sausages, or potatoes.
- Find different ways of sharing out flowers between two vases, or cakes into tins. There are many ways but only one is fair.
- When playing team games, can you work out how many will be on each side. Will it work out equally?
- Share out a packet of sweets between family members or friends. Can you find a method of doing it fairly?
- Cutting sandwiches, cakes, apples in half, how many different ways can it be done?
- If you cut a sandwich into 4 or 8 pieces and you eat half of the pieces - how many would that be?
- Share out books equally on two shelves.
- Share out different numbers of biscuits between two plates. E.g. 3, 4, 5, 6, 7 etc. If there is one left over it could be eaten! Can you spot when that is going to happen?

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Activities for 2D Shapes and Patterns:

- Try some printing using fruit and vegetables. Create patterns using repeated types of fruit or the same fruit with different colours.
- Design some wallpaper using a repeating pattern.
- Look at wallpaper designs or fabric design, find where the sections of pattern start and finish.
- Look for patterns that change with colours or shapes or sizes.
- Create collages or mosaics using different items e.g. sweets, flowers, leaves, dried pasta, which involve repeating patterns.
- Put pegs on a washing line in a colour pattern, ready for use.
- Decorate cakes or biscuits with patterns of coloured jelly sweets.
- Arrange vegetables or fruit or cakes on a plate in a repeating pattern.
- Become a shape detective and go on a "Circle Walk". Spot, or draw, or take photos to record all the circles you find.
- Make shape biscuits or shape cakes using cutters.
- Make a shape dice, when you throw, your score is the number of sides on the shape. E.g. Circle - 1, semicircle - 2, triangle - 3, square - 4 etc.