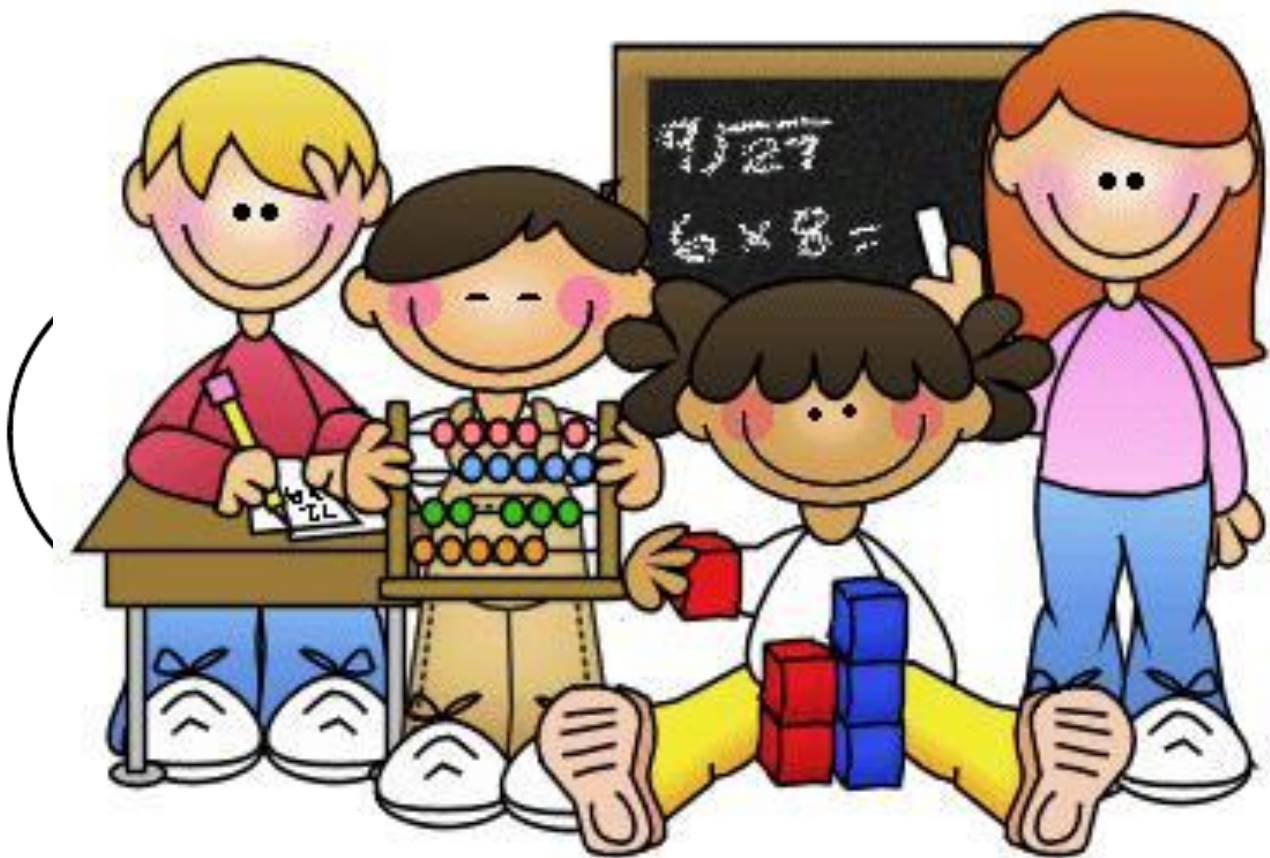


Mathematics in Foundation Stage



Supporting Your Child At Home

Practical Ideas for Early Mathematical Development

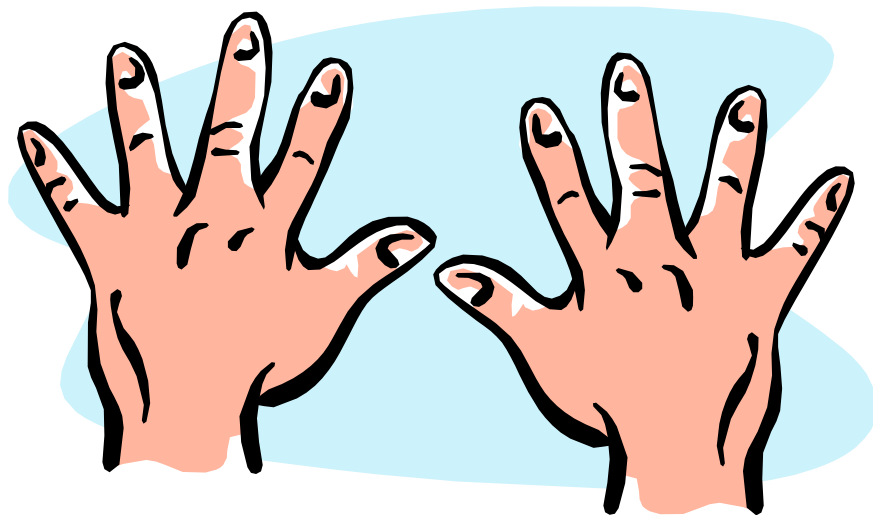
COUNTING

- Get a puppet to make a mistake when counting (missing out a number, saying a number twice, getting numbers in the wrong order etc.). Can the children explain what is wrong?
- Count together as coins, counters or conkers are dropped into a jar. Can you also count quietly using fingers or in your head?
- Guess the amount of cubes, oranges, toy people in a bag. Count each object as you take it out of the bag?
- Hide plastic insects/counters in sand. Scoop up some sand in a cup and count the number of insects caught. Who has the most / least?
- Fish large sequins out of the water using a small sieve. How many can you catch in one go?
- Use a set of 5 cards with pictures of up to 5 objects on (1 cat on the 1st card, 2 cats on the 2nd card). Say a number and the children hold up the corresponding card. Which numbers can they recognise without actually counting?
- Throw a dice. Count that many cups of sand/water into a bucket. Who can fill their bucket first?
- Put some counters in a box. Estimate how many are in the box by shaking. Tip the counters out and count to check.
- Hide objects and then go on a 'hunt' to find them. How many can you collect?
- Spread out about 10 blank carpet tiles to make a trail of stepping stones. Throw a large dice. Jump on this many tiles.
- Find 'four' e.g. 4 cars, 4 bricks, 4 straws. How many different collections can you make?
- Make a picture using sticky shapes. Count the squares, the red shapes, how many shapes in the picture altogether.
- Make a bracelet using 6 red beads and 4 blue beads.
- Make a repeating pattern with beads.
- Pick a number card and then lay the table for a certain number of toys.
- Throw a dice and collect that many straws. Use your straws to make triangles. Who can make the most triangles after 5 throws?
- Each child has 10 nice objects or 'creative counters' on a plate. Throw the dice and give that many objects to the person on your right. After each round, count the objects you have. Talk about who has the most / least and who has more than they started with

- Throw a dice. Can your child guess how many dots there are. Then check by counting.
- Roll you dice and then count back/on from the number.
- Teach number rhymes or songs that you know, particularly ones that involve holding up a number of fingers i.e. five little ducks, 1,2,3,4,5.

- **READING, WRITING AND ORDERING NUMBERS**

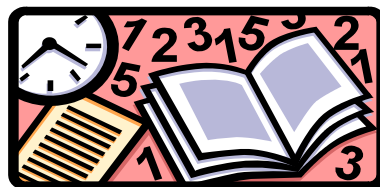
- Use a large paintbrush and water to paint numbers on an outside wall.
- Let the children practise drawing large numerals on the ground outside with chalk.
- Use finger-paint to paint numerals.
- Cut large numerals out of different textured materials e.g. sandpaper, textured wallpaper, velvet.
- Make rubbings using large wooden numerals.
- Make numerals out of playdough and press the correct number of counters into the number.
- Trace numerals in talc / wet sand.
- Float magnetic numbers in the bath. Use a magnet on the end of a piece of string to catch a number. If you can read your number, collect that number of counters? Who



has the most counters after three turns?

- Hide wooden numbers in the sand. Try to guess the number by feel alone before you dig it out of the sand.
- Give out a number card – this must be kept a secret. Then do actions to match the number on the card (if the number is 4, they may do 4 jumps, touch the ground 4 times etc.). Try and guess the number on the card.
- Label small containers with numbers. Then put the correct number of items in each tub.
- Cover all the numbers on your number line with a counter. Remove one of the counters. If the child can read the uncovered number correctly, they keep the counter.
- Cut numerals out of card. Stick the correct number of stars onto each numeral.
- Play a game – skittles, throwing beanbags into a hoop etc. Record your score on a whiteboard by writing the correct numeral.
- Cut up a big cardboard numeral to make a jigsaw for the children.

- Make towers of cubes or bricks to match the numbers on cards. Swap over 2 of the towers. Can you work out which ones have been changed? You could also use beads on a string or biscuits on a plate instead of towers.
- Throw a dice and collect the matching number card. The winner is the first person to collect the number cards 1 to 6.
- Child has a set of number cards (1 to 10) and put these in order. Show a number of fingers and the child has to point to the correct card. If they are correct, they can turn the card over.
- Make door numbers for a road of model houses.
- Make a mobile phone.
- Make numerals using pipe cleaners.
- Look for numbers in newspapers or magazines. Cut them out and put all the numerals that are the same together. Can you find enough numerals to make your own number line?
- Mix up your number cards on the washing line while the child has their eyes shut. Can they spot what has happened and put the numbers back in order? Counting along the washing line may help.
- Can you chalk your own number line outside?
- Order a set of birthday cards with ages on.
- Pick up a number card and then ask your child what number comes before/after.
- Cut a number line into pieces to make a jigsaw for the children to reassemble.
- Use a skipping rope as a number line (1 to 10). Child uses number cards to position them onto the line.



EARLY ADDITION AND SUBTRACTION

- Look at different ways of holding up 8 fingers.
- Find dominoes with a total of 6 dots / dots with a difference of 2 on each side
- Use number cards 2 to 7. Throw a dice. Turn over the number card that is one more than the number on the dice. The first player to turn over all their cards is the winner. Try with number cards 0 to 5 and turn over the number one less.
- How many ways can you arrange six biscuits/ creative counters on two plates?
- Put 6 counters in a line. Cover some of them with a cloth. Ask the child to work out how many are covered.
- Use 8 counters. Put some of them under a beaker and some on top. Can you guess how many are hidden underneath?
- Find different ways of putting 8 buttons/counters into 3 boxes.

- Throw 2 dice. If you score 7, take a counter. The child with the most counters after 10 rounds wins.
- Arrange 5 fish between 2 ponds
- Make 2 different kinds of biscuits using playdough. There need to be 10 biscuits on the plate for a party. What could the biscuits be?
- Each player needs 3 playdough bodies to make hedgehogs. Throw the dice and collect that many spines (cut up plastic drinking straws to make these). Each hedgehog needs 10 spines to be complete. You could also play the same game and make ladybirds by collecting black buttons.
- Put 5 pennies on a picture of a purse (You could use you numbered dice to decide how many pennies to start with). 'Rob' some of the pennies. The child works out how many have gone.
- Use a 1 to 10 number line. Throw 2 dice. If you throw a double, use a counter to cover the answer on the track. Which numbers are covered? Which numbers can't you cover?
- Post two coins into a box with a slot on the top. Say the total amount. Can the others guess what the two coins are? Open the box to check.
- Give your child a number card. Ask your child to stand up if their number is 2 more than 5, 1 less than 7 etc..
- Use the correct coins to buy items i.e. toys, sweets.
- Roll a dice and add up the totals.



In the street

- Recognising bus numbers.
- Number plate hunt. Who can find a 7? Add the numbers up.
- Comparing door numbers
- Counting – how many lampposts on the way to school?

○ **Doing the washing**

- Counting in 2s – matching shoes.
- Sorting by colour and size.
- Matching/pairing up socks.
- Find four shoes that are different sizes. Can you put them in order from smallest to largest?



○ **Time**

- What day is it yesterday, today, tomorrow?
- Use timers, phones and clocks to measure short periods of time.
- Count down 10/ 20 seconds to get to the table/ into bed etc.
- Recognising numbers on the clock. If you cover a number, what number was missing?



Food!

- Can you cut your toast into 4 pieces? Can you cut it into triangles?
- Setting the table. Counting the right number of plates etc. How many more do we need?
- Can you make shapes/ patterns out of the knives and forks? Can you put them in the right place in the drawers?
- Helping with the cooking by measuring and counting ingredients.
- Setting the timer.
- Positional language at dinner time: what is on

the rice, where are the carrots etc?

Going shopping

- Reading price tags.
- Counting items into the basket.
- Finding and counting coins.
- Comparing weights – which is heavier.

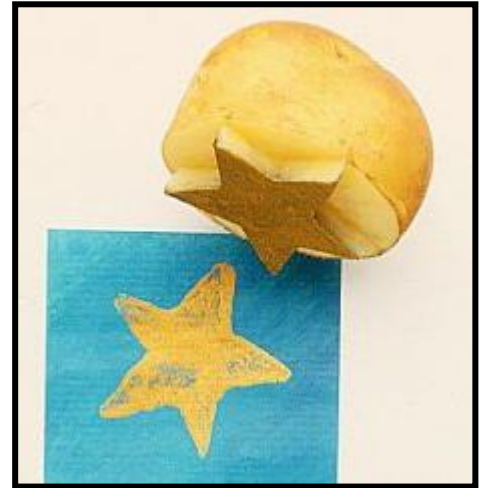




- **Measuring**
- Are you taller than a ...?
- Marking height on the wall.
- Cut hand shapes out of paper. How many hands long is the couch? How long is the table? Which is longer?
- Who has the biggest hands in our family?
- How many steps from the gate to the front door?

Shapes

- Cut a potato into shapes (circles, triangle etc). Use with paint to make pictures and patterns.
- Cut out shapes from coloured paper/ newspaper and arrange into pictures.
- Shape hunt: Can you find a square in your house (windows etc), a circle ...



Playdough

Here's a simple recipe:

1 cup of plain flour

1 cup of water

1 tablespoon cooking oil

2 teaspoons cream of tartar

Half a cup of salt

Food colouring and essences (optional)

Put all ingredients in a large saucepan, and heat

slowly, stirring all the time until it forms a ball. Keep it wrapped in cling film or in a covered tub to stop it drying out.

Then

- Make numerals and shapes.
- Sort shapes into groups, or order by size
- Make long and short wiggly snakes.



Games



- Putting cards into piles.
- Jigsaws (you can make your own by cutting up a magazine picture)
- Snap (matching pairs) or Happy Families (collect 4 of a kind)
- Snakes and ladders or other simple dice games.
- Adding numbers on two dice.
- Bingo, with numbers or shapes.
- Hopscotch.
- Cut out shapes (triangle, square, rectangle, circle)
- Roll a dice and then collect the shape with that number of sides.
- Roll a dice and then collect that many shapes.
- Roll the dice and then pick up the shape with that many sides or corners.



Number rhymes and songs

*Eg: 5 little monkeys jumping on the bed
One fell off and bumped his head
Mummy called the doctor and the doctor said
"No more monkeys jumping on the bed!"
4 little monkeys jumping on the bed ...*



Your child can teach you lots more or try this website below,
that has the words and sings it for you:

http://www.nurseryrhymes4u.com/NURSERY_RHYMES/COUNTING.html



Internet maths games:

www.mathszone.co.uk

<http://www.bbc.co.uk/bitesize/ks1/maths/>

http://www.familylearning.org.uk/online_math_games.html

www.sesamestreet.org

www.topmarks.co.uk

www.ictgames.co.uk



Don't forget, tablets and iPads also have some brilliant educational apps that you can download for free.

**There are endless possibilities – Have lots of fun! 😊
If you come up with any good games we would love to hear about them!**

Over the year the children will have had the opportunities to..

- ☺ Say and use the number names in familiar contexts.
- ☺ Count accurately up to 10 everyday objects.
- ☺ Recognise numerals 1 to 9.
- ☺ Use language such as more or less, greater or smaller, heavier or lighter, to compare two numbers or quantities.
- ☺ In practical activities and discussion, begin to use the vocabulary involved in adding and subtracting.
- ☺ Find one more or less than a number from 1 to 10.
- ☺ Begin to relate addition to combining two groups of objects and subtraction to taking away.
- ☺ Talk about, recognise and recreate simple patterns.
- ☺ Use language such as circle or bigger to describe the shape and size of solid and flat shapes.
- ☺ Use everyday words to describe position.
- ☺ Use developing mathematical ideas and methods to solve practical problems.

**And most importantly
To have fun and enjoy mathematical activities!**