Activities to try at home

Recognising numbers

Choose a number for the week, e.g. 2.
Encourage your child to look out for this number all the time.

♦ Can your child see the number 2 anywhere?

at home - in the kitchen
- on pages in a book
in the street - on doors
- on car number plates
- on buses
while out shopping - on the shop till
- on shelves
- in shop windows
♦ Find two apples, toys, spoons, straws, sweets, etc.
♦ Make patterns, such as two knives, two forks, two spoons, two knives, two forks, two spoons…
♦ Practise writing the number 2.
Choose a different number each week

Dice game

Use a 'dotted' dice and write the numbers 1 to 6 on a sheet of paper (or use the numbered animals).
♦ Throw the dice. Can your child guess how many dots there are? Check by counting.
♦ Ask your child which number on the paper matches the dots on the dice.
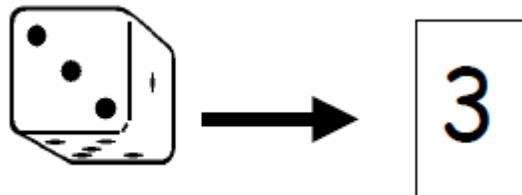
CLEE HILL COMMUNITY ACADEMY

Help your child with mathematics

A booklet for parents

Targets for Age Related Expectations in Reception

To reach your age related expectation by the end of Reception, your child should be able to:

- ➢ Recognise some numerals of personal significance.
- ➢ Recognises numerals 1 to 5, building up to numbers to 10.
- ➢ Counts up to three or four objects by saying one number name for each item.
- ➢ Counts actions or objects which cannot be moved.
- ➢ Counts objects to 10, and beginning to count beyond 10.
- ➢ Counts out up to six objects from a larger group.
- ➢ Selects the correct numeral to represent 1 to 5, then 1 to 10 objects, working up to 20.
- ➢ Counts an irregular arrangement of up to ten objects.
- ➢ Estimates how many objects they can see and checks by
- ➢ counting them.
- ➢ Uses the language of 'more' and 'fewer' to compare two sets
- ➢ of objects.
- ➢ Finds the total number of items in two groups by counting all
- ➢ of them.
- ➢ Says the number that is one more than a given number.
- ➢ Finds one more or one less from a group of up to five objects, then ten objects.
- ➢ In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting.
- ➢ Records, using marks that they can interpret and explain.
- ➢ Begins to identify own mathematical problems based on own interests and fascinations.

Early Learning Goal

Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.

Activities to try at home

Counting and putting numbers in order

Use old magazines, comics or greetings cards.
Cut out pictures of animals, or anything else your child is interested in. Label the animals 1 to 5.
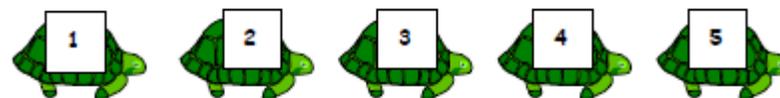
♦ Shuffle the animals. Put them in order from 1 to 5.
♦ Remove one animal. Ask your child which number is missing. Repeat with other numbers and more than one missing number.
♦ Ask your child to say what number comes before or after a number you choose.
When your child can do this, repeat with numbers 1 to 10.

Build a tower

For this game you need a dice
and some building blocks or lego bricks.
♦ Take turns.
♦ Roll the dice.
♦ Collect the number of bricks to build your own tower.
♦ The first to 10 wins!
For a change, start with 10 blocks or bricks each. Take away the number on the dice. First to exactly zero wins.

Roll a shape

Cut out 12 shapes.

Make 3 triangles, 3 squares, 3 rectangles and 3 circles.

♦ Take turns to roll a dice and collect a shape that has that number of sides, e.g. roll a 4, collect a square.

♦ The first to have four different shapes wins.

♦ If you can name each shape you go first next time!
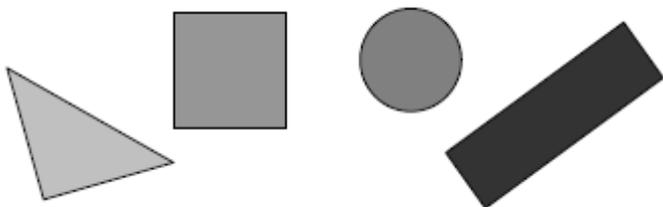
Rhymes

Teach your child any number rhymes or songs that you know, particularly ones that involve holding up a number of fingers, like *Five little speckled frogs*. Practise them regularly, with actions. You can get counting songs on audio tape for a very reasonable price.

Dicey counting

Take turns to roll a dice and count back to zero from the number thrown. For example:

Four, three, two, one, zero!

One more, one less

For this game you need a dice, a coin and some building blocks or Lego bricks.

♦ Take turns to roll the dice.

♦ Build a tower with that number of blocks or bricks.

♦ Then toss the coin. Heads means take one brick off. Tails means add one on.

♦ If you can guess how many bricks there will be after this, you keep them!

♦ The first to collect 20 bricks or more wins!

Counting

Practise counting. Start at 5, and count on from there to 11. Start at 9, count back from there to zero. Choose a different starting number each time.

Cupboard maths

Ask your child to help you sort a food cupboard out, putting **heavier** items on the lower shelf and **lighter** items on an upper shelf.

Positive relationships: other ways to support your child at home

Encourage estimation, e.g. estimate how many sandwiches to make for the picnic.

• Encourage use of mathematical language, e.g. number names to ten: *'Have you got enough to give me three?'*

• Ensure that children are involved in making displays, e.g. making their own pictograms of lunch choices. Develop this as a 3D representation using bricks and discuss the most popular choices.

• Add numerals to all areas of learning and development, e.g. to a display of a favourite story, such as 'The Three Billy Goats Gruff'. Make books about numbers that have meaning for the child such as favourite numbers, birth dates or telephone numbers.

• Use rhymes, songs and stories involving counting on and counting back in ones, twos, fives and tens.

• Emphasise the empty set and introduce the concept of nothing or zero.

• Show interest in how children solve problems and value their different solutions.

• Make sure children are secure about the order of numbers before asking what comes after or before each number.

• Discuss with children how problems relate to others they have met, and their different solutions.

• Talk about the methods children use to answer a problem they have posed, e.g. *'Get one more, and then we will both have two.'*

• Encourage children to make up their own story problems for other children to solve.

• Encourage children to extend problems, e.g. *"Suppose there were three people to share the bricks between instead of two"*.

• Use mathematical vocabulary and demonstrate methods of recording, using standard notation where appropriate.

• Give children learning English as additional language opportunities to work in their home language to ensure accurate understanding of concepts.

Enabling environments: other ways to support your child at home

➢ Provide collections of interesting things for children to sort, order, count and label in their play.

➢ Display numerals in purposeful contexts, e.g. a sign showing how many children can play on a number track.

➢ Use tactile numeral cards made from sandpaper, velvet or string.

➢ Create opportunities for children to experiment with a number of objects, the written numeral and the written number word. Develop this through matching activities with a range of numbers, numerals and a selection of objects.

➢ Use a 100 square to show number patterns.

➢ Encourage children to count the things they see and talk about and use numbers beyond ten

➢ Make number games readily available and teach children how to use them.

➢ Display interesting books about number.

➢ Play games such as hide and seek that involve counting.

➢ Encourage children to record what they have done, e.g. by drawing or tallying.

➢ Use number staircases to show a starting point and how you arrive at another point when something is added or taken away.

➢ Provide a wide range of number resources and encourage children to be creative in identifying and devising problems and solutions in all areas of learning.

➢ Make number lines available for reference and encourage children to use them in their own play.

➢ Big number lines may be more appropriate than counters for children with physical impairments.

➢ Help children to understand that five fingers on each hand make a total of ten fingers altogether, or that two rows of three eggs in the box make six eggs altogether