

Maths in Reception



How to help your child at home and have fun!

The National curriculum Maths Early Learning Goals for children in Reception are on the back of this leaflet. Some targets are harder than they seem. For example, a child may be able to count to 10 or even 20, but can they recognise the size of a set of objects? Similarly, can they count on from 3 to 8 without seeing any objects at all?

Numbers

30 - 50 Months	
13	Uses some number names and number language spontaneously.
14	Uses some number names accurately in play.
15	Recites numbers in order to 10.
16	Knows that numbers identify how many objects are in a set.
17	Beginning to represent numbers using fingers, marks on paper or pictures.
18	Sometimes matches numeral and quantity correctly.
19	Shows curiosity about numbers by offering comments or asking questions.
20	Compares two groups of objects, saying when they have the same number.
21	Shows an interest in number problems.
22	Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same.
23	Shows an interest in numerals in the environment.
24	Shows an interest in representing numbers.
25	Realises not only objects, but anything can be counted, including steps, clips or bumps.

Mathematics

40 - 60+ Months	
26	Recognise some numerals of personal significance.
27	Recognises numerals 1 to 5.
28	Counts up to three or four objects by saying one number name for each item.
29	Counts actions or objects which cannot be moved.
30	Counts objects to 10, and beginning to count beyond 10.
31	Counts out up to six objects from a larger group.
32	Selects the correct numeral to represent 1 to 5, then 1 to 10 objects.
33	Counts an irregular arrangement of up to ten objects.
34	Estimates how many objects they can see and checks by counting them.
35	Uses the language of 'more' and 'fewer' to compare two sets of objects.
36	Finds the total number of items in two groups by counting all of them.
37	Says the number that is one more than a given number.
38	Finds one more or one less from a group of up to five objects, then ten objects.
39	In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting.
40	Records, using marks that they can interpret and explain.
41	Begins to identify own mathematical problems based on own interests and fascinations.
42	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.
43	Under quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer.
44	They solve problems, including doubling, halving and sharing.
45	Children estimate a number of objects and check quantities by counting up to 20.
46	They solve practical problems that involve combining groups of 2, 5 or 10, or sharing into equal groups.

Exceeding	ELG
46	They solve practical problems that involve combining groups of 2, 5 or 10, or sharing into equal groups.

Shape, Space & Measure

30 - 50 Months	
13	Shows an interest in shape and space by playing with shapes or making arrangements with objects.
14	Shows awareness of similarities of shapes in the environment.
15	Uses positional language.
16	Shows interest in shape by sustained construction activity or by talking about shapes or arrangements.
17	Shows interest in shapes in the environment.
18	Uses shapes appropriately for tasks.
19	Beginning to talk about the shape of everyday objects, e.g. 'round' and 'tall'.
20	Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes.
21	Selects a particular named shape.
22	Can describe their relative position such as 'behind' or 'next to'.
23	Orders two or three items by length or height.
24	Orders two items by weight or capacity.
25	Uses familiar objects and common shapes to create and recreate patterns and build models.
26	Uses everyday language related to time.
27	Beginning to use everyday language related to money.
28	Orders and sequences familiar events.
29	Measure short periods of time in simple ways.
30	Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.
31	They recognise, create and describe patterns.
32	They explore characteristics of everyday objects and shapes and use mathematical language to describe them.
33	Children estimate, measure, weigh and compare and order objects and talk about properties, position and time.

Exceeding	ELG
33	Children estimate, measure, weigh and compare and order objects and talk about properties, position and time.



Year R

Maths in Reception—Games to play:

Counting and putting in order

- ◆ Use old magazines or cards. Cut out the pictures of animals or anything your child is interested in. Label them 1-5. Ask the child to put them in order. Remove one and ask which number is missing. Repeat and remove more than one. Choose a picture and ask what number comes before or after that number.

Dice game

- ◆ Use a dotted dice and write the numbers 1-6 on paper. Throw the dice, can the child match the spots with the number? Similarly ask the child if a number and the dice spots match.

Recognising numbers

- ◆ Choose a number for the week eg: 2 Look for that number all around:
 - *At home—in the kitchen, or in a book
 - *In the street—on doors, on cars, on buses
 - *At the shops—on the till, on shelves
 - *Make patterns such as 2 knives, 2 forks etc.
 - *Practise writing the number 2



Build a tower

- ◆ Take turns to roll the dice. Take that number of bricks to build a tower. Each time you get to 10 you win a point.

Roll a shape

- ◆ Cut out 12 shapes—3 squares 3 circles 3 rectangles 3 triangles. Roll the dice—if you get 1 you can collect a circle, as it has 1 side. If you get a 3 you collect a triangle as it has 3 sides. If you throw a 4 you can choose a rectangle or a square, as they both have 4 sides. The first to collect one of each shape wins.



Maths in Reception—Games to play:

Dicey counting

- ◆ Throw the dice. Try and count from 0 to that number then back from that number to 0. If you can you win a point.

Collections

- ◆ You need something to collect that will interest your child—animals, stickers, little toys. In turn, one player claps 1 2 3 4 or 5 times. The other player closes their eyes and listens. *How many claps did you hear?* Take that many of the collection. Swap roles. The first to collect 10 things wins.

Spot the difference

- ◆ Draw a row of 6 big coloured spots. One player shuts their eyes whilst the other covers some of the spots with some paper. *How many spots are left? How many spots are hidden?* Try with different amounts of spots.



One more, one less

- ◆ Take turns to roll the dice. Build a tower with that number of blocks. Now toss the coin. If you get heads, you add one on to the number of blocks. If you get tails, you take one away from the number. Answer correctly and you keep a block. First to 10 wins

Counting

- ◆ Practise counting—how far can you go? Now start at 5 and count on to 11. Can you count back from 7 to 0? Choose different numbers to start on.

Cupboard maths

- ◆ Sort food packets from the cupboard. Hold them in your hands to decide which is heavier and which is lighter. Try and put them in order.

