These examples illustrate what the oldest reception children should be able to do by the end of the reception year.

☐ Say and use number names in order in familiar contexts.
(Say numbers and hold up that number of fingers)
□ Count reliably up to 10 (and more) everyday objects.
Recognise numerals 1-9 (and above)
☐ Use developing mathematical ideas and methods to
solve practical problems (How many snacks are there? Are
there enough for everyone?)
☐ Use language such as 'more' and 'fewer' to compare two
sets of objects.
☐ Begin to relate addition to combining two groups of ob-
jects and subtraction to 'taking away'.
☐ Use language such as 'greater', 'smaller', 'heavier' or
'lighter' to compare quantities.
☐ Use language such as 'circle' or 'bigger' to describe the
shape and size of solids and flat shapes.
☐ Use everyday words to describe position. (behind, in, un-
der, beside)
☐ Use developing mathematical ideas and methods to
solve practical
problems (Does my jug hold more tea than my mug?)

About the statements

These statements show some of the things your child should be able to do by the end of the Reception year.

Some statements are harder than they seem, e.g.children who can count up to 10 may still have trouble saying which number comes after 5. They may have to start at 1 and count from there.



A BOOKLET FOR PARENTS



Guide to Mathematics at home

Nursery / Reception

Mathematics Booklet

The information in this booklet is to help you to help your child with maths. Children experience maths as part of their everyday environment. The type of maths young children now do is not writing sums but sorting socks. They need to touch and do in order to learn, so their early maths is based on practical activities that can be incorporated into their play.

Here are a few ideas to try at home:-

COUNTING



- Get a puppet or teddy bear 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 are dropped into a jar. Can the children also count quietly using their fingers or in their head?
- Guess the amount of cubes, oranges, toy people in a bag. Count each object as you take it out of the bag?
- Put some small toys in a box. Ask the children to estimate how many are in the box by shaking. Tip the toys out and count to check.
- Find 'four' e.g. 4 cars, 4 bricks, 4 straws. How many different collections can you make?
- Lay the table for a certain number of toys.

OTHER IDEAS!

- singing nursery rhymes and songs
- clapping in different sequences
- reading stories with a number element

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!





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.



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 bookin the street - on doors, on car number plates, on buseswhile 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



Collections

You need something to collect, e.g. sticky shapes, dried pasta.

In turn, one player claps 1, 2, 3, or 4 times while the other player closes his eyes and listens.

How many claps did you hear? Take that number of shapes.

After four goes make a pattern with your shapes or pasta.

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.

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.



Dice counting

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



Four, three, two, one, zero

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.

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.

READING, WRITING AND ORDERING NUMBERS

- Use a large paintbrush and water to paint numbers on an outside wall or paper.
- Cut large numbers out of different textured materials e.g. sandpaper, textured wallpaper, fabric
- Play a game skittles, throwing beanbags into a hoop etc. Record your score on a whiteboard by writing the correct number.
- Make door numbers for a road of model houses.
- Look for numbers in newspapers or magazines. Cut them out and put all the numbers that are the same together. Can you find enough numbers to make your own number line?
- Order a set of birthday cards with ages on.
- Use a skipping rope as a number line (1 to 10). Children turn over each number card in turn and estimate its position on the line.

EARLY ADDITION AND SUBTRACTION

- Look at different ways of holding up 8 fingers
- How many ways can you arrange six biscuits/ apples on two plates?
- Find different ways of putting 8 beads into 3 boxes
- Throw 2 dice. If you score 7, take a counter. How long does it take for you to collect 5 counters?
- Investigate different ways of making 7p.