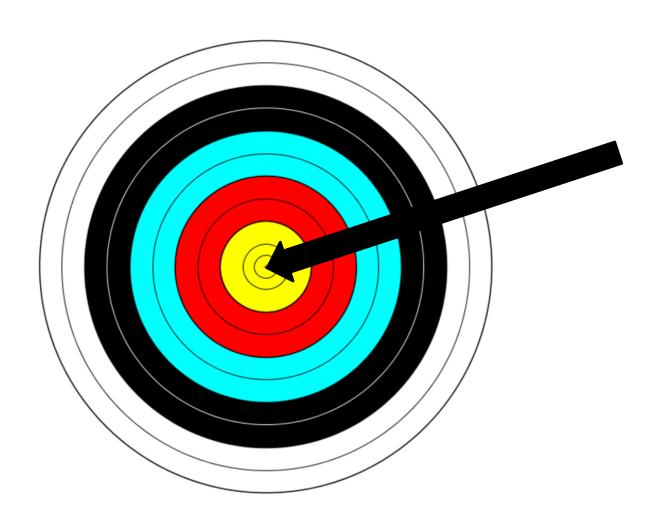
# A booklet for parents Help your child with mathematics



Targets for pupils
Information on calculation

# **Targets**

Say one, two, three, four to twenty.
Select the correct number to represent 1 to 9 objects.
Count up to 10 objects and beyond.
Recognise, write and order the numerals 1,2,3,4 to 9.
Use words such as <i>more, less, greater, smaller, heavier, lighter</i> to compare things.
Find 1 more or less than any number from 1 to 10.
Add two small groups of objects (total 10 or less).
Partition a group of objects e.g. six cubes into 2 sets 3+3 or 4+2 or 5+1
Count how many are left when some are taken away.
Select two groups of objects to make a given total.
Solve simple problems such as finding ways to arrange 8 crayons in two pots.
Count aloud in twos, fives, or tens.
Decide on a criteria for sorting a set of objects.
Make simple patterns and talk about them.
Name shapes such as a <i>circle, square, triangle, rectangle, cube, cone</i> and <i>sphere</i> .
Use words such as <i>over, under, above, below, on, in, next to, beside</i> to describe where things are.

## **About the targets**

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

Some targets are harder than they seem, e.g. Children who may be able to say what 4+1 makes might not be able to tell you 3 different ways to make 5, e.g. 3+2, 5+0 and 1+4.

#### Fun activities to do at home

## **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 for a 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!



#### **Build a tower**

For this game you need a dice and some building blocks or

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

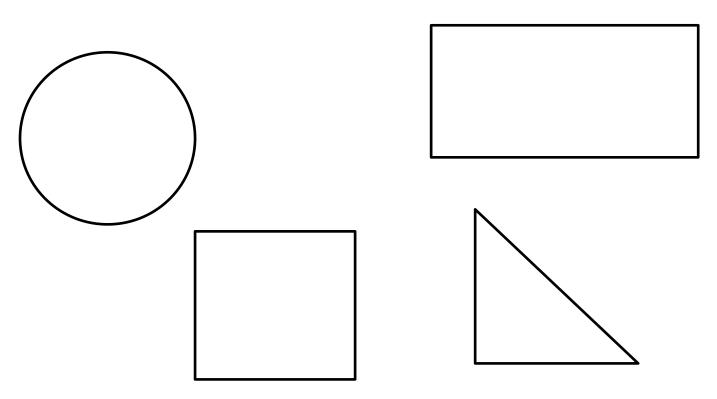
Cut out 12 shapes.

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 four, collect a square.

The first to have four different shapes wins.

If you can name each shape you go first next time.





## **Progression in Calculations**

## **Counting**

Counting is important so that children learn the order of numbers and where numbers are in relation to other numbers.

Practise counting small sets of objects e.g. how many sweets have you got? Or how many birds on a wall?

Counting forwards and backward set a foundation for early addition and subtraction.

Counting in different steps sets a foundation for early multiplication and division.

Using a number track or number line, helps the children to see and recognise the number they are saying and also to see where that number appears in relation to the other numbers.

It's important for children to know how close 10 is to 7 and how far 10 is away from 27.

Practise counting in ones with your child forwards and backwards, starting with 0 first and then from different starting numbers e.g. count forward from 13, count backwards from 11, count backwards from 24 and count forwards from 5. Practise counting forwards in twos, fives or tens from zero at first, then any number up to 20, then 30 or more (100 when counting in tens).



#### **Addition and Subtraction**

Very early addition and subtraction begins with finding one more or one less than a number and then two more or two less than a number. Children use the number track or number line to do this. Ask your child to put their finger on a number on the number track, number line, and then get them to point to the number that is: one more then ... two less than ...etc..

Children can use this method of counting on and counting back to add and subtract other numbers.

Use toys or other household objects to practise grouping two sets e.g. 2 and 3 makes 5.

Children could be asked to use a number track to find examples such as:

Make a hop of 5 spaces on the number track.

Now hop 4 more.

Start at 5 and count on 4.

What number have you got to?

Start at 10 on the number track and hop back 3.

What number do you finish at?

# Multiplication

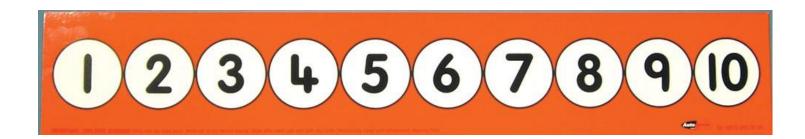
Early multiplication skills begin in reception with counting in different steps.

Group objects into piles of the same number e.g. in pairs or groups of 5 or 10.

Practise counting in twos and tens and then fives.



# **Number Tracks**



We can	1	2	3	4	5	6	7	8	9	10
	one	two	three	four	five	six	seven	eight	nine	ten
to ten!	•	•	••	• •	**				•	

# **Number Lines**



