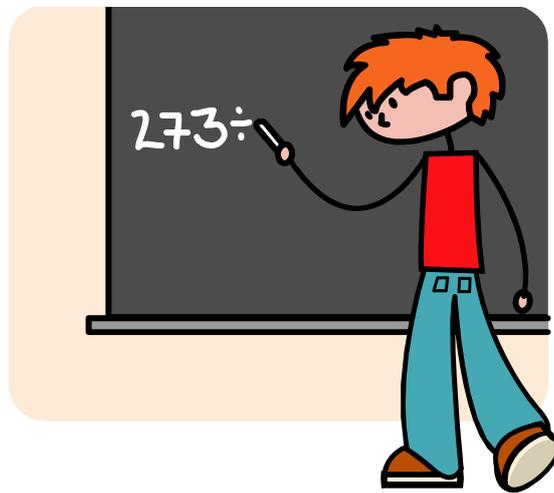


# Supporting your child at home



## Year 4



Mathematics

A booklet for parents

### About the statements

These statements show some of the things most children should be able to do by the end of Year 4.

A statement may be more complex than it seems, e.g. children may be able to subtract 497 from 506 by writing it in columns without realising it is quicker to count on from 497 up to 506 in their heads.

(See Calculation Methodology Guidelines)

By the end of year 4, most children should be able to...

- use diagrams to identify equivalent fractions (e.g.  $\frac{6}{8}$  and  $\frac{3}{4}$  or  $\frac{70}{100}$  and  $\frac{7}{10}$ )
- interpret mixed number fractions and position them on a number line (e.g.  $3\frac{1}{2}$ )
- derive and recall multiplication facts up to  $10 \times 10$ , the corresponding division facts and multiples of numbers up to the tenth multiple
- add or subtract mentally pairs of 2 digit numbers (e.g.  $47 + 58$ ,  $91 - 35$ )
- develop and use written methods to record, support and explain multiplication and division of two digit numbers by a one digit number, include division with remainders (e.g.  $15 \times 9$ ,  $98 \div 6$ )
- know that angles are measured in degrees and that one whole turn is  $360^\circ$ , compare and order angles less than  $180^\circ$
- choose and use standard metric units and their abbreviations when estimating, measuring and recording length, weight and capacity; know the meaning of 'kilo', 'centi' and 'milli' and where appropriate, use decimal notation to record measurements (e.g. 1.3 m or 0.6 kg)
- answer a question by identifying what data to collect; organise, present, analyse and interpret the data in tables, diagrams.

Alongside all of these statements children need to be continuously learning and applying their skills in solving problems and become confident when faced with challenges.

## Fun activities to do at home

### Pairs to 100

This is a game for two players.

- ◆ Each draw 10 circles. Write a different two-digit number in each circle - but not a 'tens' number (10, 20, 30, 40...).
- ◆ In turn, choose one of the other player's numbers.
- ◆ The other player must then say what to add to that number to make 100, e.g. choose 64, add 36.
- ◆ If the other player is right, she crosses out the chosen number.
- ◆ The first to cross out 6 numbers wins.

### Looking around

Choose a room at home.

Challenge your child to spot 20 right angles in it.



### Sum it up

- ◆ Each player needs a dice.
- ◆ Say: *Go!* Then each rolls a dice at the same time.
- ◆ Add up all the numbers showing on your own dice, at the sides as well as at the top.
- ◆ Whoever has the highest total scores 1 point.
- ◆ The first to get 10 points wins.

## Mugs



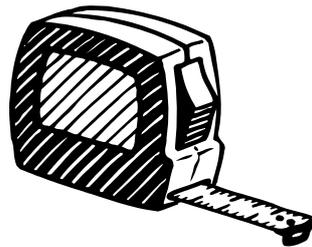
You need a 1 litre measuring jug and a selection of different mugs, cups or beakers.

- ◆ Ask your child to fill a mug with water.
- ◆ Pour the water carefully into the jug.
- ◆ Read the measurement to the nearest 10 millilitres.
- ◆ Write the measurement on a piece of paper.
- ◆ Do this for each mug or cup.

Now ask your child to write all the measurements in order.

## Measuring

Use a tape measure that shows centimetres.



- ◆ Take turns measuring lengths of different objects, e.g. the length of a sofa, the width of a table, the length of the bath, the height of a door.
- ◆ Record the measurement in centimetres, or metres and centimetres if it is more than a metre, e.g. if the bath is 165 cm long, you could say it is 1m 65cm (or 1.65m).
- ◆ Write all the measurements in order.

## Dicey division

You each need a piece of paper. Each of you should choose five numbers from the list below and write them on your paper.

5    6    8    9    12    15    20    30    40    50

- ◆ Take turns to roll a dice. If the number you roll divides exactly into one of your numbers, then cross it out, e.g. you roll a 4, it goes into 8, cross out 8.
- ◆ If you roll a 1, miss that go. If you roll a 6 have an extra go.
- ◆ The first to cross out all five of their numbers wins.

## Tables

Practise the 3x, 4x and 5x tables. Say them forwards and backwards.

Ask your child questions like:

What are five threes? What is 15 divided by 5?

Seven times three? How many threes in 21?

## Out and about

- ◆ Choose a three-digit car number, e.g. 569.
- ◆ Make a subtraction from this, e.g.  $56 - 9$ .
- ◆ Work it out in your head. Say the answer.
- ◆ If you are right, score a point.
- ◆ The first to get 10 points wins.



## Number game 1

You need about 20 counters or coins.

- ◆ Take turns. Roll two dice to make a two-digit number, e.g. if you roll a 4 and 1, this could be 41 or 14.
- ◆ Add these two numbers in your head. If you are right, you win a counter. Tell your partner how you worked out the sum.
- ◆ The first to get 10 counters wins.

Now try subtracting the smaller number from the larger one.

## Number Game 2



Put some dominoes face down

- ◆ Shuffle them.
- ◆ Each choose a domino.
- ◆ Multiply the two numbers on your domino.
- ◆ Whoever has the biggest answer keeps the two dominoes.
- ◆ The winner is the person with the most dominoes when they have all been used.

## Number game 3

Use three dice.

If you have only one dice, roll it 3 times.

- ◆ Make three-digit numbers, e.g. if you roll 2, 4 and 6, you could make 246, 264, 426, 462, 624 and 642.
- ◆ Ask your child to round the three-digit number to the nearest multiple of 10. Check whether it is correct, e.g. 76 to the nearest multiple of 10 is 80.

134 to the nearest multiple of 10 is 130.

(A number ending in a **5** always **rounds up**.)

- ◆ Roll again. This time round three-digit numbers to the nearest 100.

## Left overs

- ◆ Take turns to choose a two-digit number less than 50.
- ◆ Write it down. Now count up to it in fours. What number is left over?
- ◆ The number left is the number of points you score, e.g.
- ◆ The first person to get 12 or more points wins.

Choose 27.

Count: 4, 8, 12, 16, 20, 24.

3 left over to get to 27.

So you score 3 points.

Now try the same game counting in threes, or in fives.

Can you spot which numbers will score you points?

## Dicey Tens



For this game you need a 1-100 square (a snakes and ladders board will do), 20 counters or coins, and a dice.

- ◆ Take turns.
- ◆ Choose a two-digit number on the board e.g. 24.
- ◆ Roll the dice. If you roll a 6, miss that turn.
- ◆ Multiply the dice number by 10, e.g. if you roll a 4, it becomes 40.
- ◆ Either add or subtract this number to or from your two-digit number on the board, e.g.  $24 + 40 = 64$ .
- ◆ If you are right, put a coin on the answer.
- ◆ The first to get 10 coins on the board wins.