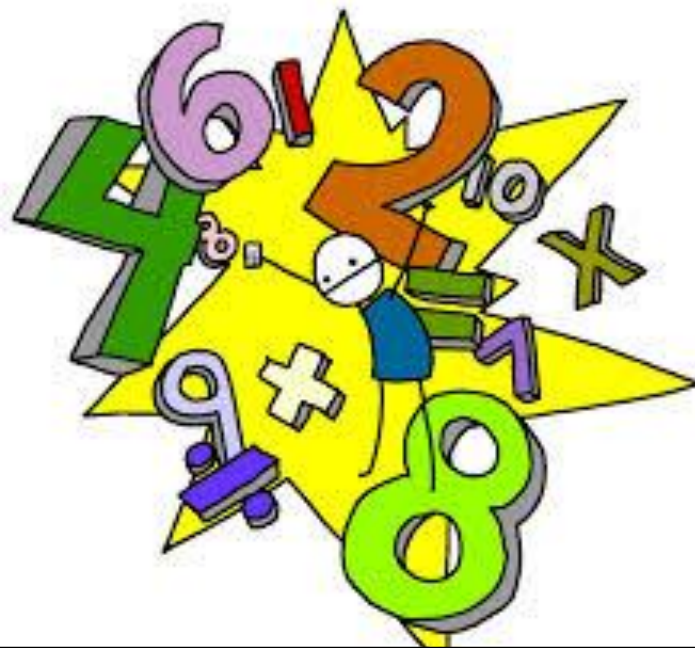


# End of year expectations for pupils in Year Two



A booklet for parents  
Help your child with  
mathematics

## **New Year 2 expectations**

### **Number and Place Value**

- count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- recognise the place value of each digit in a two-digit number (tens, ones)
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 up to 100; use  $<$ ,  $>$  and  $=$  signs
- read and write numbers to at least 100 in numerals and in words
- use place value and number facts to solve problems.

## Addition and Subtraction

- solve problems with addition and subtraction:
  - using concrete objects and pictorial representations, including those involving numbers, quantities and measures
  - applying their increasing knowledge of mental and written methods
- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
  - a two-digit number and ones
  - a two-digit number and tens
  - two two-digit numbers
  - adding three one-digit numbers
- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

## Multiplication and Division

- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals (=) signs
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

## Fractions (including decimals and percentages)

- recognise, find, name and write fractions  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{4}$  and  $\frac{3}{4}$  of a length, shape, set of objects or quantity
- write simple fractions e.g.  $\frac{1}{2}$  of 6 = 3 and recognise the equivalence of two quarters and one half.

## Statistics

- interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- ask and answer questions about totalling and comparing categorical data.

## Measurement

- choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ( $^{\circ}\text{C}$ ); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
- compare and order lengths, mass, volume/capacity and record the results using  $>$ ,  $<$  and  $=$
- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
- compare and sequence intervals of time
- tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
- know the number of minutes in an hour and the number of hours in a day.

## **Geometry - properties of space**

- identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
- identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
- identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
- compare and sort common 2-D and 3-D shapes and everyday objects.

## **Geometry - position and direction**

- order and arrange combinations of mathematical objects in patterns and sequences
- use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

The most important  
thing is to have lots  
of fun!





## Websites

There are lots of websites with fun maths activities. Here are a few suggestions.

<http://www.maths-games.org/adding-games.html>

<http://www.ictgames.com/>

<http://www.bbc.co.uk/bitesize/ks1/maths/>

<http://www.topmarks.co.uk/maths-games/5-7-years/counting>

<http://www.crickweb.co.uk/ks1numeracy.html>

<http://www.primaryinteractive.co.uk/maths.htm>

# How can you support your child with their maths?

Take advantage of numbers wherever and whenever!

## Walking to school



- Identifying house numbers. What is ten more or less? Can you double or halve the number?
- Talk about how long it takes you to get to and from school. Can you recognise on a clock the time you leave your home and return in the afternoon?
- Chant times tables on the way to school
- Count how many cuboids, spheres and cylinders you can spot. Describe how many corners each shape has.

## **Stamp Clap Click**

Choose a 2 - digit number e.g. 53 and again write a **T** and an **O** above the correct digit. Explain that we can use actions/sounds to represent the digits in the number. Use claps to show how many Tens are in the number, and clicks of fingers to show how many Ones there are. Clap 5 times to show there is 5 Tens and then click 3 times to model 3 Ones. What number have we sounded out? 53.

## Dicey coins

For this game you need a dice and some 5p coins ( you can change the coins as you wish).

- ◆ Take turns to roll the dice and take that number of 5p coins.
- ◆ Guess how much money this is. Then count aloud in tens to check, e.g. *saying five, ten, fifteen, twenty...*
- ◆ If you do this correctly you keep one of the 5p pieces.
- ◆ First person to collect £1 wins.
- ◆ Don't forget to give the coins back!

## In the car



- Listen and sing along to times tables cds.
- Choose a colour car each and keep a count/tally of how many cars you each see. The person with the most wins.
- Add the numbers together on car number plates. You can multiply the numerals by 2, 5 or 10, This can be developed to car bingo - each chooses a target number (best to 20). Think about which pairs of numbers add to make your target. Look out for cars that have two (or 3) numbers that add up to your target number. The first person to shout bingo when they see a car with their target number wins.

## At home



- Count the steps as you go upstairs, count backwards as you come down in 2s, 10s, or 5s as you go up/down each step.
- Have count downs to special events.  
Look at a calendar. Find out how many days there are in a week, in each month, in a year. How many weeks are in a year? How many months are there in a year? Name them. Which is the sixth/last/month etc.? When are the birthdays or important dates in your family's year? Put them in order.
- Count how long it takes to brush your teeth, tie your shoelaces etc.
- Fractions - Use 12 buttons, or paper clips or pieces of pasta... Can you find

half of the 12 things. Now find one quarter of the same group. Find one third of the whole group. Repeat with other numbers

- Use a watch or clock whenever you can to tell the time - to the nearest five minutes.
- Have fun playing maths games - snakes and ladders etc. or make up your own. Below is one example.

Order, Order! A game for two players. Each of you should draw 6 circles in a row.

- ♦ Take turns.
- ♦ Roll two dice and make a two-digit number
- ♦ Write the number in one of your circles. Once the number is written in a circle you cannot change it or move it!
- ♦ The first to get all six of their circle numbers in order wins. Move onto rolling a dice 3 times and making 3 digit numbers

