



Christ Church, Church of England (VC) Primary School

Aspire, celebrate and learn in an inclusive community

# NATIONAL CURRICULUM 2014

## **A parent's guide to Year 1 Maths**

**By the end of Year 1 most children should be able to...**

<b>Learning objectives</b>	<b>Success criteria</b>
<b>1.</b> Read and write numbers from 1 to 20 in numerals and words.	I read and write numbers from 1 to 20 in numbers and words.
<b>2.</b> Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	I know and can use the maths symbols + - and = in a number sentence.
<b>3.</b> Represent and use number bonds and related subtraction facts within 20.	I know my number bond facts to 20 - such as $1+5 = 6$ and $5 = 6 - 1$ .
<b>4.</b> Add and subtract one-digit and two-digit numbers to 20, including zero.	I add and subtract numbers up to 20 - such as $5+5$ or $12-8$ .
<b>5.</b> Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ .	I can solve some number problems such as $7 = ? - 9$ .
<b>6.</b> Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	I know that a half is one of two equal parts, and I find half of a shape or a set of objects by sharing the shape or set into two equal parts.
<b>7.</b> Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	I find a quarter of a shape or a set of objects by sharing the shape or set into four equal parts.
<b>8.</b> Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half].	I use words such as long/short, longer/shorter, tall/short, double/half to describe my maths work when I am measuring.
<b>9.</b> Compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than].	When weighing, I use the words heavy/light, heavier than, lighter than to explain my work.
<b>10.</b> Compare, describe and solve practical problems for capacity and volume [for example, full/empty, more than, less than, half, half full, quarter].	When working with capacity, I use the words full/empty, more than, less than, half, half full and quarter to explain my work.
<b>11.</b> Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later].	I can answer questions about time, such as Who is quicker? or What is earlier?
<b>12.</b> Measure and begin to record lengths and heights.	I can measure the length or height of something and write down what measure.
<b>13.</b> Measure and begin to record mass/weight.	I can measure how heavy an object is and write down what I find.
<b>14.</b> Measure and begin to record capacity and volume.	I can measure the capacity of jugs of water and write down what I measure.
<b>15.</b> Measure and begin to record time (hours, minutes, seconds).	I can measure how long something takes to happen - such as how long it takes me to run around the playground.

<b>16.</b> Recognise and know the value of different denominations of coins and notes.	I know that coins have different values - such as 2p, 5p, 10p and 50p.
<b>17.</b> Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].	I use special time words such as before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.
<b>18.</b> Recognise and use language relating to dates, including days of the week, weeks, months and years.	I can tell you the days of the week and months of the year and I can talk about weeks and months and years and what they mean.
<b>19.</b> Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	I can tell the time and draw hands on a clock for to the hour and half past the hour times.
<b>20.</b> Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	I answer maths multiplication or division problems with help from an adult and using objects to see what the problem means.
<b>21.</b> Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.	I can count up and down from 0 to 100 and more.
<b>22.</b> Count, read and write numbers to 100 in numerals.	I can count, read and write numbers up to 100.
<b>23.</b> Count in multiples of twos, fives and tens.	I can count in 2 or 5 or 10.
<b>24.</b> Given a number, identify one more and one less. <a href="http://urbrainy.com/get/308/one-less-and-one-more-penguins-8406">http://urbrainy.com/get/308/one-less-and-one-more-penguins-8406</a>	When you show me a number, I can tell you what is one more and one less.
<b>25.</b> Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.	I can find numbers on a number line when I am solving problems with questions using equal to, more than, less than, most and least.
<b>26.</b> Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	I can describe my position, direction and movement, including whole turns, half turns, quarter turns and three-quarter turns.
<b>27.</b> Recognise and name common 2-D and 3-D shapes, including 2-D shapes [for example, rectangles (including squares), circles and triangles].	I can name common 2-D shapes such as rectangles, squares, circles and triangles.
<b>28.</b> Recognise and name common 2-D and 3-D shapes, including 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].	I can name some 3-D shapes such as cuboids and cubes, pyramids and spheres.

**Strategies my child will be learning throughout the year**

## Addition

1. Children start off by doing lots of practical work and drawing pictures to represent calculations.

Drawing pictures/objects

I buy 2 cakes and my friend buys 3 cakes.

How many cakes do we buy altogether?



Might be recorded as:

$$2 + 3 = 5$$

Draw symbols to represent objects

$$2 + 3 = 5$$



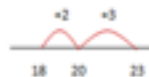
3. By the end of year 1 we hope children will be able to use a number line.

2. Children then move onto using both pictures and numbers, still supported by practical equipment.

Simple number line 2-digits add 1-digit bridging a ten

Number line (efficient jumps)

$$18 + 5 = 23$$



## Subtraction

1. Children start off by doing lots of practical work and drawing pictures to represent calculations

Drawing pictures/objects

I buy 5 cakes and my friend eats 2. How many cakes do I have left?



2. Children then move onto using both pictures and numbers. They also use practical equipment to support their calculations.

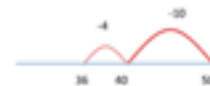


3. By the end of year 1 we hope children will be able to use a number line to represent their workings out.

Draw symbols to represent objects

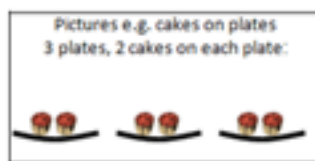
Counting backwards on a number line

$$50 - 14 = 36$$

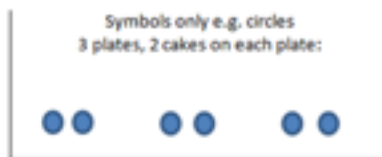


### Multiplication

Children use practical objects to solve simple problems



Children continue to use practical objects and start to use symbols to record.



Throughout year 1 children will practice these key skills.

- Doubling numbers and quantities
- Making connections between arrays, number patterns and counting in 2s, 5s and 10s

### Division

Children will use practical objects to group  
Objects moving onto recording with symbols.



## Games to play to support your child at home with maths

### Secret numbers

**0123456789**

- ◆ Write the numbers 0 to 20 on a sheet of paper.
- ◆ Ask your child secretly to choose a number on the paper. Then ask him / her some questions to find out what the secret number is, e.g.

Is it less than 10?

Is it between 10 and 20?

Does it have a 5 in it?

He / she may answer only yes or no.

- ◆ Once you have guessed the number, it is your turn to choose a number. Your child asks the questions.

For an easier game, use numbers up to 10. For a harder game, use only 5 questions, or use bigger numbers.

### How old?

Start with your child's age. Ask your child:

How old will you be when you are 1 year older?

How old were you last year?

How old will you be 10 years from now?

and so on.

## **Dice game**

You need a 1–6 dice, paper and pencil.

- ◆ Take turns.
- ◆ Choose a number between 1 and 10 and write it down.
- ◆ Throw the dice and say the dice number.
- ◆ Work out the difference between the chosen number and the dice number, e.g. if you wrote down a 2 and the dice shows 5, the difference is 3.

You could also draw a number line to help your child to see the difference between the two numbers.

## **Shape activity**

At home, or when you are out, look at the surface of shapes.

- ◆ Ask your child – what shape is this plate, this mirror, the bath mat, the tea towel, the window, the door, the red traffic light, and so on.
- ◆ Choose a shape for the week, e.g. a square.

How many of these shapes can your child spot during the week, at home and when you are out?

## **Cupboard maths**

- ◆ Choose two tins or packets from your food cupboard.
- ◆ Ask your child to hold one in each hand and tell you which is heavier, and which is lighter. (Check by reading the weight on each tin or packet.)
- ◆ If he / she is right, they keep the lighter one. Then choose another item from the cupboard, trying to find one that is lighter still.

Carry on until your child has found the lightest item in the cupboard. It might be suitable to eat as a prize!

## **Out and about**

On the way to school, see how many cuboids, spheres and cylinders you can spot. Which did you see most of?



## Car number bingo

- ◆ Each person chooses a target number, e.g. 10. Think about which pairs of numbers add to make your target.
- ◆ You have to see a car that has two numbers that add up to your target number.

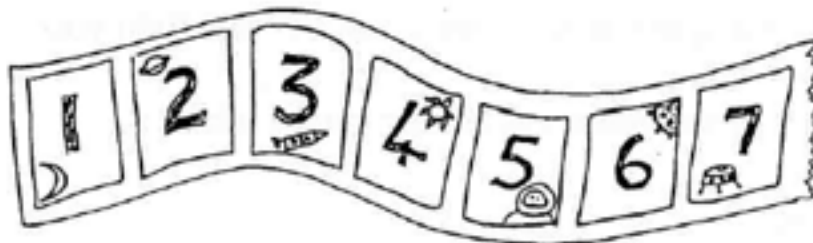
**K456 XWL**

- ◆ Say:  $4 + 6 = 10$ , bingo!
- ◆ Change the target number each week.

You can extend this activity by looking for three numbers which add up to your target number.

## Track games

Make a number track to 20, or longer. Make it relevant to your child's interests – sea world, space, monsters... Then play games on it.

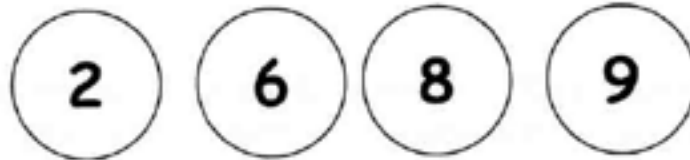


- ◆ Throw a dice. Move along that number of spaces. BUT before you move, you must work out what number you will land on. If you are wrong, you don't move! The winner is the first to land exactly on 20. Now play going backwards to 1.
- ◆ Throw a dice. Find a number on the track that goes with the number thrown to make either 10 or 20. Put a counter on it, e.g. you throw a '4' and put a counter on either 6 or 16. If someone else's counter is there already, you may replace it with yours! The winner is the first person to have a counter on 8 different numbers.

## Adding circles

For this game, you need a dice and pencil and paper.

- ◆ Each of you should draw four circles on your piece of paper. Write a different number between 2 and 12 in each circle.



- ◆ Roll the dice twice. Add the two numbers.
- ◆ If the total is one of the numbers in your circles then you may cross it out.
- ◆ The first person to cross out all four circles wins.