

Useful Websites

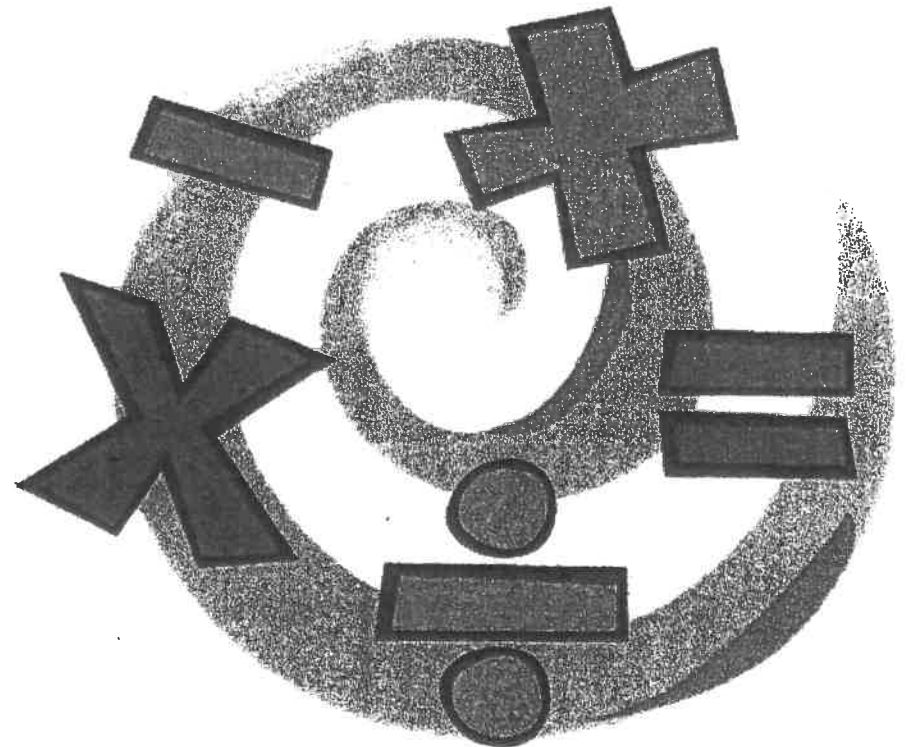
<http://www.bbc.co.uk/bitesize/ks1/maths/>

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

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

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

Year 2 Maths Booklet



**This booklet contains the key skills
covered in Year 2**

It would be beneficial if your child was secure in the following key basic skills:

- **identifying odd & even numbers**
e.g. even numbers end in 0, 2, 4, 6 or 8
odd numbers end in 1, 3, 5, 7 or 9
- **recalling number bonds to 10 & 20 fluently**
e.g. $6 + 4 = 10$ $16 + 4 = 20$
- **halving numbers (up to 20)**
- **doubling numbers (up to 20)**
- **recognising & naming common 2D & 3D shapes**
e.g. 2D - circle, triangle, square, rectangle,
pentagon, hexagon, heptagon, octagon
3D - sphere, cone, cylinder, pyramid, cube,
cuboid, triangular prism
- **recognising different units of measurement**
e.g. – length/height - centimetres (cm), metres (m),
kilometres (km)
mass - grams (g), kilograms (kg)
capacity - millilitres (ml), litres (l)

Number & Place Value

- **compare & order numbers from 0 to 100**
(extension - beyond 100)
- **use the signs: < (less than), > (more than) & = (equals) for 1, 2 & 3 digit numbers**
e.g. $5 < 8$
 $43 > 36$
(extension) $123 < 150$
- **count in steps of 2, 10 & 3 from 0**
e.g. 0, 2, 4, 6, 8, 10 ...
0, 10, 20, 30, 40 ...
0, 3, 6, 9, 12
- **count in 10's & 5's from any number, forward or backward**
e.g. 2, 12, 22, 32, or 95, 85, 75, 65
(extension – 3 digits)
e.g. 97, 107, 117, 127 or 170, 165, 160
- **recognise the place value of each digit in a 2 digit number (tens, ones)**
e.g. $21 = 2 \text{ tens } 1 \text{ unit or } 20 + 1$
(extension - 3 digits - hundreds, tens, ones)
e.g. $145 = 1 \text{ hundred, } 4 \text{ tens, } 5 \text{ units or } 100 + 40 + 5$
- **read & write numbers to at least 50, 100 & then over 100 in numerals & words**
e.g. 49 forty nine 123 one hundred and twenty three

Addition & Subtraction

- recall & use addition & subtraction facts to 20 & 100 fluently

e.g. $16 + 4 = 20$, $20 - 4 = 16$
 $60 + 40 = 100$, $100 - 40 = 60$

- add & subtract, including:

a 2 digit number & ones e.g. $56 + 9 =$ $64 - 8 =$

a 2 digit number & tens e.g. $74 + 10 =$ $87 - 10 =$

two 2 digit numbers e.g. $82 + 47 =$ $56 - 36 =$

(extension – 3 digits) e.g. $135 + 126 =$ $187 - 123 =$

- add three 1 digit numbers & larger numbers

e.g. $9 + 3 + 1 =$ $25 + 14 + 11 =$

- solve problems with addition & subtraction involving numbers, quantities & measures

e.g. 11 people are on a bus, 4 more get on, how many altogether?

A girl needs 25g of sugar, she buys 12g, how much more does she need?

- know that addition can be done in any order (although it is easier to put the biggest number first) & subtraction cannot

e.g. $23 + 7 = 30$ or $7 + 23 = 30$

$23 - 7 = 16$ (biggest number has to go first)

- recognise & use the inverse relationship between addition & subtraction & use this to check calculations & missing number problems

e.g. $12 + \underline{\quad} = 20$ (use $20 - 12$ to find the answer)

The children are encouraged to use partitioning to help them add & subtract.

e.g.

addition - $36 + 21 =$ (partition the smallest number into 10's & units)

$36 + 20 = 56$ (add the 10's)

$56 + 1 = 57$ (add the units)

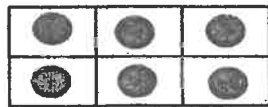
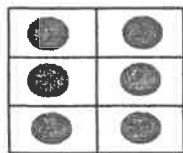
subtraction - $54 - 23 =$ (partition the smallest number into 10's & units)

$54 - 20 = 34$ (take away the 10's)

$34 - 3 = 31$ (take away the units)

Multiplication & Division

- recall & use multiplication & division facts for the 2, 5 & 10 multiplication tables
- recall & use other multiplication & division facts
- recognise & use the inverse relationship between multiplication & division in calculations
e.g. $2 \times 5 = 10$ $5 \times 2 = 10$
 $10 \div 5 = 2$ $10 \div 2 = 5$
- show that multiplication of two numbers can be done in any order & division for one number by another cannot
e.g. $2 \times 4 = 8$ or $4 \times 2 = 8$
 $8 \div 4 = 2$ or $8 \div 2 = 4$ (biggest number has to go first)
- begin to relate multiplication to fractions & measures
- Solve problems involving multiplication & division, using: - arrays, e.g. $2 \times 3 =$ $3 \times 2 =$



- repeated addition

e.g. $2 \times 3 = 6$

$2 + 2 + 2 = 6$ or $3 + 3 = 6$

- mental methods & multiplication & division facts

Division is taught via:

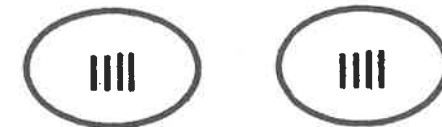
- sharing

e.g. $8 \div 4 = 2$

(8 shared equally into 4 groups – count how many is in 1 group to find the answer)



- grouping (8 grouped into 4's – count how many groups to find the answer)



Fractions (find fractions of quantities, shapes & sets of objects)

• connect fractions to equal sharing or grouping

e.g. $1/3$ of 9 = 3

(9 shared equally into 3 groups – count how many in 1 group to find the answer)



• recognise, find, name & write fractions $1/3$, $1/4$, $2/4$ & $3/4$

• write simple fractions & recognise the equivalence of $2/4$ & $1/2$

Measurement

- **choose & use appropriate standard units (cm/m) to estimate & measure length and height**
- **choose & use appropriate standard units to estimate & measure mass (g/kg), volume & capacity (ml/l)**
- **choose & use appropriate standard units to estimate & measure temperature ($^{\circ}\text{C}$)**
- **read scales, e.g. read temperature on a thermometer or measure capacity using a measuring jug, using scales in 1's, 2's, 5's & 10's**
- **compare & order lengths, mass, volume, capacity & temperature & record the results using $<$, $>$ & $=$**
e.g. $35\text{cm} < 50\text{cm}$, $1\text{kg} > 100\text{g}$
- **recognise & use the symbols for pounds (£) & pence (p); combine amounts to make a particular value**
e.g. use coins to make 50p in different ways
- **find different combinations of coins that equal the same amounts of money**
e.g. £1.26 or 126p
- **solve problems involving addition & subtraction of money, including giving change**
- **compare & sequence intervals of time**
e.g. 15 seconds, 30 seconds, 1 minute
- **know the number of minutes in an hour & the number of hours in a day**
- **revise o'clock & half past**
- **tell & write the time to 5 minutes, including quarter past/to the hour & draw the hands on a clock face to show these times**
- **become fluent in telling the time on analogue clocks & record it**

Geometry (shape, position & direction)

- **identify & describe the properties of 2D shapes, including the number of sides & symmetry in a vertical line**
e.g. a rectangle has 4 straight sides (2 long and 2 short), 4 corners and 2 lines of symmetry
- **identify & describe the properties of 3D shapes, including the number of edges, vertices & faces**
e.g. a cylinder has 2 curved edges, 1 curved face, 2 flat, circular faces & no vertices
- **identify 2D shapes on the surface of 3D shapes**
e.g. a circle on a cylinder
- **compare & sort common 2D & 3D shapes & everyday objects**
- **order & arrange combinations of mathematical objects in patterns**
e.g. triangle, circle, square, triangle, circle, square,
- **use mathematical vocabulary to describe position, direction & movement**
e.g. next to, behind, in front
clockwise, anti-clockwise
half turn, quarter turn
- **understand & recognise $\frac{1}{4}$, $\frac{1}{2}$, & $\frac{3}{4}$ turns, clockwise & anti-clockwise**

Statistics

- **read & make tally charts & simple tables**
- **read & make simple pictograms & block diagrams**
- **ask & answer simple questions by counting the number of objects in each category & sort the categories by quantity**
- **ask & answer questions about totalling & comparing data**
- **record, read, collate, organise & compare information**