

How heavy?

You will need some kitchen scales that can weigh things in kilograms.

- Ask your child to find something that weighs close to 1 kilogram.
- Can he / she find something that weighs exactly 1 kilogram?
- Find some things that weigh about half a kilogram.



Out and about

- During a week, look on house doors, number plates, bus stops for numbers, etc. How many can you spot? What is the biggest one you can find?

31 39 36 35 33

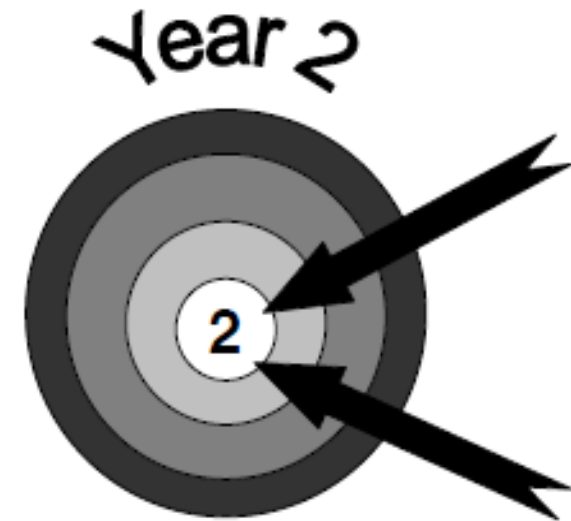
- Next week, look for 'fifties' numbers or 'sixties'...

How much?

- Once a week, tip out the small change from a purse. Count it up with your child. *What if I spent 10p? 5p? 2p? etc*



Supporting your child at home



Mathematics

A booklet for parents

By the end of year 2, most children should be able to...

- Locate any 2-digit number on a landmarked line and use this to compare numbers; record comparisons using crocodile signs, e.g. $56 > 39$.
- Identify any number on the 1-100 number grid; understand that each number is a multiple of ten and some ones, e.g. 54 is 50 and 4 more.
- Know securely number pairs for all the numbers up to and including 12, e.g. pairs which make 8 ($4+4$, $5+3$, $6+2$, $7+1$, $8+0$) and bonds to 10 ($1+9$, $2+8$, $3+7$, $4+6$, $5+5$).
- Recognise that addition and subtraction are inverse operations and understand that $10 - 4 = 6$ as well as $6 + 4 = 10$.
- Count in steps of 2, 5, and 10 from 0.
- Count in halves e.g. $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3...
- Know different unit patterns when not crossing a ten, e.g. $4 + 3 = 7$, $14 + 3 = 17$, $24 + 3 = 27$, etc.
- Begin to recognise unit patterns when crossing a ten, e.g. $5 + 6 = 11$, $15 + 6 = 21$, $25 + 6 = 31$, etc.
- Add two single digit numbers ($8 + 7$) by counting up; add two 2-digit numbers which total less than 100 by counting on in tens and ones, e.g. $54 + 37$ as $54 + 30 + 7$.
- Count back in ones or tens to take away, e.g. $27 - 3 =$ or $54 - 20 =$.
- Begin to count up to find a difference between two numbers with a small gap ($42 - 38$).
- Know the 2X, 5X and 10X tables and begin to say how many 10s are in 40 or how many 5s are in 30; use X sign correctly and begin to use \div sign.
- Understand the concept of one half, one quarter and three quarters as numbers ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$) and as operators ($\frac{1}{2}$ of 6 is...?) in a practical context, e.g. on a fraction strip or with smarties on a cake.
- Compare and order objects according to their lengths, weights and capacities using suitable units.
- Identify and describe, with reference to relevant properties, 4 or more common 2-D and 3-D shapes.
- Tell the time on digital and analogue clocks to the nearest quarter of an hour.

Counting

Practise counting. Start at 5, and count on from there to 11.

Start at 9, count back from there to zero.

Choose a different starting number each time.

Number facts

You need a 1-6 dice.

❖ Take turns. Roll the dice. See how quickly you can say the number to add to the number on the dice to make 10, e.g.



and 4

❖ If you are right, you score a point.

❖ The first to get 10 points wins.

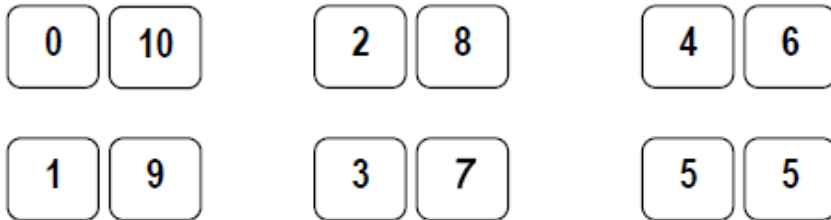
❖

You can extend this activity by making the two numbers add up to 20, or 50.

Speedy pairs to 10

Make a set of 12 cards showing the numbers 0 to 10, but with two 5s. If you wish, you could use playing cards.

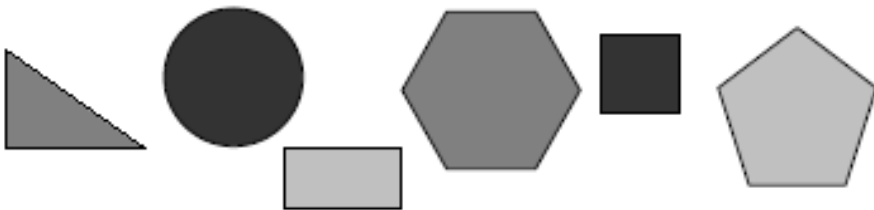
- Shuffle the cards and give them to your child.
- Time how long it takes to find all the pairs to 10.



Repeat later in the week. See if your child can beat his / her time.

Guess my shape

- Think of a 2-D shape (triangle, circle, rectangle, square, pentagon or hexagon). Ask your child to ask questions to try and guess what it is.
- You can only answer *Yes* or *No*. For example, your child could ask: *Does it have 3 sides?* or: *Are its sides straight?*
- See if they can guess your shape using fewer than five questions.
- Now ask them to choose a shape so you can ask questions.



Board Games

Make a board like this.

The numbers are arranged differently from usual, but the games will still work if you use a normal snakes and ladders board.

91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

- Roll a dice twice. Add the two numbers.
- Move along that number of spaces. Before you move, you must work out what number you will land on.
- If you are wrong, you don't move!
- The first to the end of the board wins.

For a change, you could roll the dice and move backwards or you could roll the dice once, then move the number that goes with your dice number to make 10, e.g. throw a 3, move 7.

Straight lines

Choose 4 toys and lay them on the table in order of length. Use a ruler to measure each toy to the nearest cm.

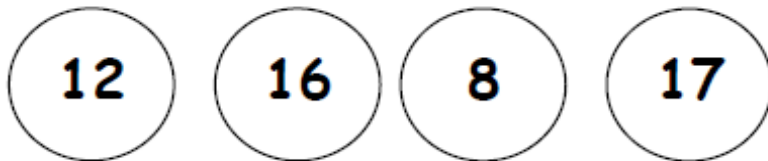
Shopping maths

After you have been shopping, choose 6 different items each costing less than £1. Make a price label for each one, e.g. 39p, 78p. Shuffle the labels and then ask your child to complete one or more of these:

- Place the labels in order, starting with the lowest.
- Say which price is an odd number and which is an even number.
- Add 9p to each price in their head.
- Take 20p from each price in their head.
- Say which coins to use to pay exactly for each item.
- Choose any two of the items, and find their total cost.
- Work out the change from £1 for each item.

Circle trios

Draw four circles each on your piece of paper. Write four numbers between 3 and 18, one in each circle.



- Take turns to roll a dice three times and add the three numbers.
- If the total is one of the numbers in your circles, then you may cross it out.
- The first to cross out all four circles wins.

About the statements

These targets show some of the things your child should be able to do by the end of Year 2.

Some statements are harder than they seem, e.g. children who can count up to 100 may still have trouble saying which number comes after 47 or which number comes before 50.

Fun activities to do at home

Pasta subtraction

For this game you need a dice and some dried pasta or buttons.



- Start with a pile of pasta in the middle; count them.
- Throw a dice; say how many pieces of pasta will be left if you subtract that number.
- Then take the pieces of pasta away and check if you were right!
- Keep playing.
- The person to take the last piece wins!

Useful websites:

http://www.bbc.co.uk/schools/websites/4_11/site/numeracy.shtml

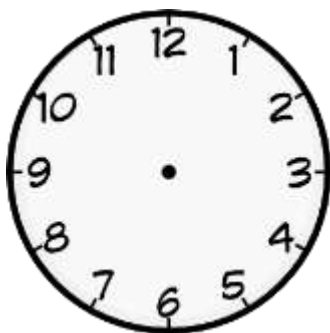
<http://www.topmarks.co.uk/flash.aspx?f=hitthebuttonv11>

http://www.offbyheart.co.uk/maths/yr2_m_g.php

Number squares:

101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200

Clock face:



Number line:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

