

Mugs

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

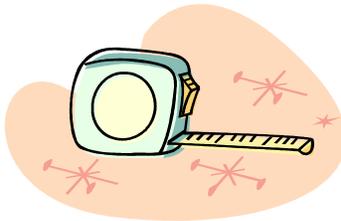
- Ask your child to fill a mug with water.
- Pour the water carefully into the jug.
- Read the measurement to the nearest 10 millilitres.
- Write the measurement on a piece of paper.
- Do this for each mug or cup.

Now ask your child to write all the measurements in order

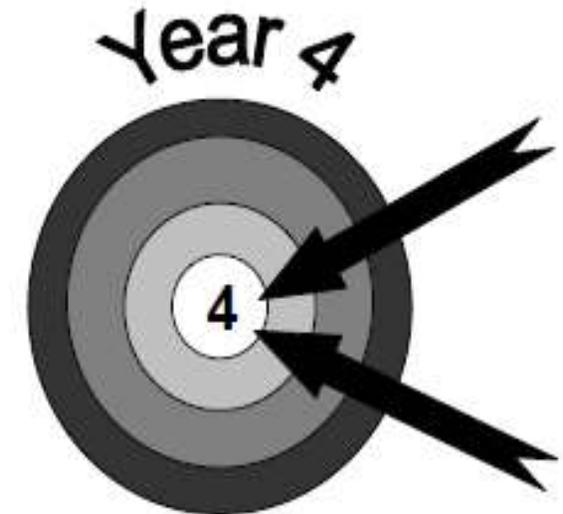
Measuring

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 centimeters 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.



Supporting your child at home



Mathematics

A booklet for parents

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

- Locate 4 and 5 digit numbers on a landmarked line and use this to compare and order numbers; round to ten, a hundred and a thousand.
- Understand the numbers of 1s, 10s, 100s, 1000s and 10,000s in a 5-digit number and the use of zero as a place holder.
- Know that one-place decimal numbers represent ones and tenths e.g. $3.7 = 3$ ones and 7 tenths.
- Count in steps of 2, 4, 5, 10, 50, 100 and 1000.
- Recognise negative numbers in relation to number lines and temperature.
- Add multiples of 1, 10, 100, 1000 without difficulty, e.g. $15,347 + 3000$, $434 + 300$ and $648 - 220$
- Mentally add and subtract any pair of two digit numbers.
- Know how to use the written addition: first expanded method, moving onto concise method
- Subtract 3 digit numbers from 3 digit numbers
- Multiply 1 and 2 digit numbers by 10, 100 and 1000; divide 1 and 2 digit numbers by 10 and 100 to understand place value in decimal numbers with one place.
- Know and recite 2x, 3x, 4x, 5x, 9x, 10x times tables incl. division facts up to 12th multiple; include multiplying by 0 (e.g. $5 \times 0 = 0$, $7 \times 0 = 0$) or by 1 (e.g. $5 \times 1 = 5$, $\frac{1}{2} \times 1 = \frac{1}{2}$).
- Multiply 1- digit numbers by 2-digit or friendly 3-digit numbers using grid method.
- Write the equivalent fraction for fractions with given denominators or numerators, e.g. $\frac{1}{2} = \frac{?}{8}$; reduce a fraction to its simplest form, e.g. $\frac{6}{12} \equiv \frac{1}{2}$.
- Convert between units of measurement, e.g. cm to m, g to Kg and ml to L; convert between units of time and between analogue and digital times.
- Identify acute and obtuse angles, compare and order angles up to 180° .
- Interpret and present discreet data using bar charts and pictograms.

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.



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. Choose 27. Count: 4, 8, 12, 16, 20, 24. 3 left over to get to 27, so you score 3 points.
- The first person to get 12 or more points wins.

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

Can you spot which numbers will score you points?

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.

About the statements

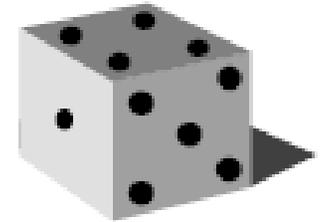
These statements show some of the things children should be able to do by the end of Year 4.

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.

Fun activities to do at home

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.

Useful websites:

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

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

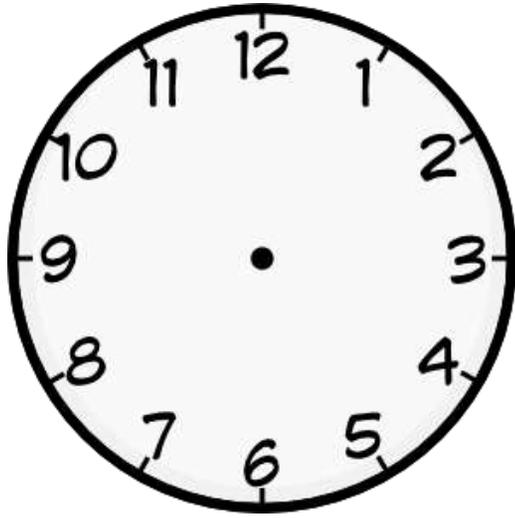
http://www.offbyheart.co.uk/english/yr4_e_g.php

Number squares:

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

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:

