

### Can you tell the time?

Whenever possible, ask your child to tell you the time to the nearest 5 minutes. Use a clock with hands as well as a digital watch or clock.

Also ask:

- What time will it be one hour from now?
- What time was it one hour ago?

Time your child doing various tasks, e.g.

- getting ready for school;
- tidying a bedroom;
- saying the 5 times, 10 times or 2 times table....

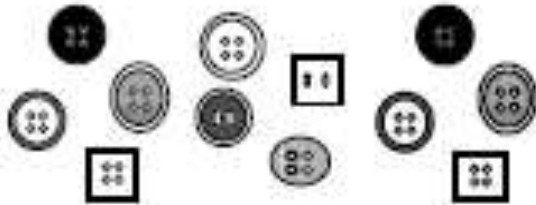
Ask your child to guess in advance how long they think an activity will take. Can they beat their time when they repeat it?

### Fractions

Use 12 buttons, or paper clips or dried beans or....

- Ask your child to 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.

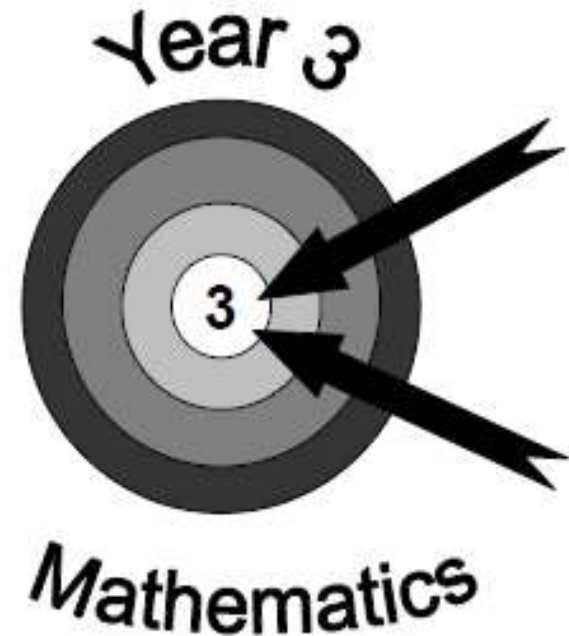


### Order, order!

Each of you needs to draw 6 circles in a row.

- Take turns.
- Roll two dice and make a two-digit number (see Number games).
- 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.

# Supporting your child at home



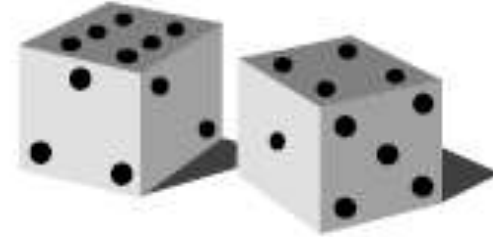
A booklet for parents

### By the end of year 3, most children should be able to...

- Locate any 3-digit number on a landmarked line from 0-1000 and use this to order and compare numbers.
- Understand place value in 3-digit numbers; add and subtract 1s, 10s or 100s without difficulty; use this to add and subtract multiples of 1, 10, 100 to/from 3-digit numbers.
- Know securely number pairs for all the numbers up to and including 20, e.g. pairs which make 15 (7+8, 6+9, 5+10, 4+11, 3+12, 2+13, 1+14, 0+15)
- Round to the nearest ten and hundred, e.g. 34 to the nearest ten is 30, 276 to the nearest hundred is 300.
- Mentally add or subtract any pair of 2 digit numbers, e.g.  $75 + 58$  or  $75 - 58$
- Recognise that there are two ways of completing subtractions, either by counting up or by counting back, e.g.  $54 - 27$  (counting up),  $54 - 21$  (counting back)
- Subtract larger numbers with confidence, using Frog for counting up, e.g.  $302 - 288$
- Understand that multiplication is commutative, e.g.  $4 \times 8$  is the same as  $8 \times 4$ .
- Know the 2x, 3x, 5x and 10x times tables. All tables need to be learned to 12th multiple. Include division facts (important). So we know how many 3s in 36, i.e.  $36 \div 3 = 12$ , as well as knowing  $12 \times 3 = 36$ .
- Multiply any 2-digit number by 10 or a single-digit number by 100; divide any multiple of 10 or 100 by 10 or 100. Understand the effect of multiplying and dividing whole numbers by 10 and 100.
- Multiply a 1 digit number by a 2 digit number starting to use the grid e.g.  $4 \times 13 =$
- Partition to double and halve numbers
- Know that division is the inverse of multiplication, e.g. that  $\square \times 3 = 21 \equiv 21 \div 3 = ?$
- Recognise and derive equivalent fractions for  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{3}{4}$ , e.g.  $\frac{1}{4} \equiv \frac{3}{12}$ .
- Find unit and non-unit fractions of small amounts.
- Add and subtract easy amounts of money, e.g.  $\pounds 3.64 + \pounds 4.50$ , and give change by counting up, e.g.  $\pounds 10 - \pounds 6.95$  as  $\pounds 6.95 + 5p + \pounds 3$  so change is  $\pounds 3.05$ .
- Compare durations of events using analogue and digital times.
- Know that there are 100cm in a metre and that there are 10mm in a centimetre; use a ruler to measure lines.
- Identify right angles as  $90^\circ$  in shapes, and also as turns; recognise angles as less than or greater than  $90^\circ$ ; identify horizontal and vertical lines.

### Number games

Roll two dice. Make two-digit numbers, e.g. if you roll a 6 and 4, this could be 64 or 46. If you haven't got two dice, roll one dice twice. Ask your child to do one or more of the activities below.



- Count on or back from each number in tens.
- Add 19 to each number in their head. (A quick way is to add 20 then take away 1.)
- Subtract 9 from each number. (A quick way is to take away 10 then add back one.)
- Double each number.

### Cupboard maths

Ask your child to help you sort a food cupboard out, putting *heavier* items on the lower shelf and *lighter* items on an upper shelf.



### Board games

For these games you need to sketch a board like this. Notice how the numbers are arranged.

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

- Start on 1. Toss a coin. If it lands heads, move 1 place along. If it lands tails, add 10, saying the total correctly before moving. First person to reach the bottom row wins.
- Start anywhere on the board. Roll a dice. Even numbers move you forwards and odd numbers move you backwards. If you land on a multiple of five, you can move either 10 forwards or 10 backwards.

The first person to reach either the top or bottom of the board wins.

### Up and down the scales

- Guess with your child the weights of people in your home.
- Then weigh them (if they agree!). Help your child to read the scales.
- Record each weight, then write all the weights in order.

Repeat after two weeks. What, if any, is the difference in the weights?

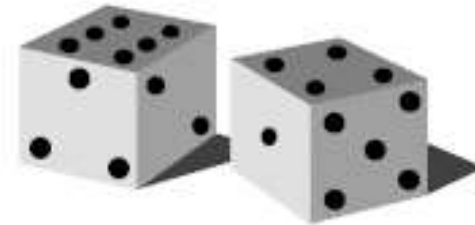
### Bingo!

One person has the 2x table and the other has the 5x table. Write six numbers in that table on your piece of paper, e.g.

4 8 10 16 18 20

- Roll one or two dice. If you choose to roll two dice, add the numbers, e.g. roll two dice, get 3 and 4, add these to make 7.
- Multiply that number by 2 or by 5 (that is, by your table number, e.g.  $7 \times 2$  or  $7 \times 5$ ).
- If the answer is on your paper, cross it out.

The first to cross out all six of their numbers wins.



### Pasta race

You need two dice and a pile of dried pasta.

- Take turns to roll the two dice.
- Multiply the two numbers and call out the answer.
- If you are right, you win a piece of pasta.
- The first to get 10 pieces of pasta wins.

### Secret sums

- Ask your child to say a number, e.g. 43.
- Secretly do something to it (e.g. add 30). Say the answer, e.g. 73.
- The child then says another number to you, e.g. 61.
- Do the same to that number and say the answer.
- The child has to guess what you are doing to the number each time!
- Then they can have a turn at secretly adding or subtracting something to each number that you say to them.



### Digit Divide

Make digit cards 0-9 cut out and place face down on a surface. Choose 3 and make a 3 digit number. Ask your child to read aloud the number and then partition it.

Eg



- four hundred and fifty six → four hundreds, five tens and six units.

### About the statements

These statements show some of the things your child should be able to do by the end of Year 3.

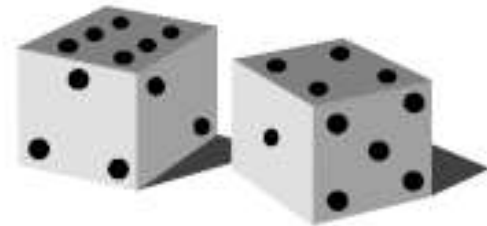
A statement may be more complex than it seems, e.g. a child who can count to 1000 may not know what each digit represents. In 784, for example, the '8' is worth 80 not just 8.

### Fun activities to do at home

#### Make 20

For this game you need to write out numbers 0 to 20 on a piece of paper. Make them big enough to put counters or coins on.

- Take turns. Roll a dice. Put a coin on the number that goes with the dice number to make 20, e.g. throw a '4.' and put a coin on 16.
- If someone else's counter is there already, replace it with yours!
- The first person to have counters on 6 different numbers wins.



**Useful websites:**

[http://www.bbc.co.uk/schools/websites/4\\_11/site/numeracy.shtml](http://www.bbc.co.uk/schools/websites/4_11/site/numeracy.shtml)

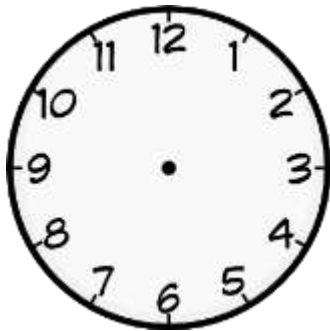
<http://www.topmarks.co.uk/flash.aspx?f=hitthebuttonv11>

[http://www.offbyheart.co.uk/maths/yr3\\_m\\_g.php](http://www.offbyheart.co.uk/maths/yr3_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
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