

### Decimal number plates

- ✚ Choose 2 digits from a car registration plate.
- ✚ Make the smallest and largest numbers you can, each with 1 decimal place, e.g. 5.6 and 6.5.
- ✚ Now find the difference between the two decimal numbers,
- ✚ Whoever makes the biggest difference scores 10 points.
- ✚ The person with the most points wins.

**FD56 UPN**

e.g.  $6.5 - 5.6 = 0.9$ .

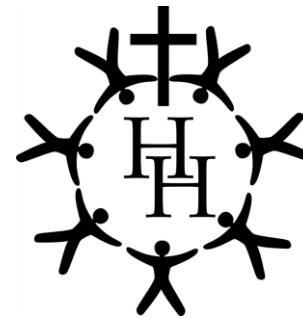
Play the game again, but this time score 10 points for the smallest difference, or 10 points for the biggest total.(If you add the numbers)

### Guess my number

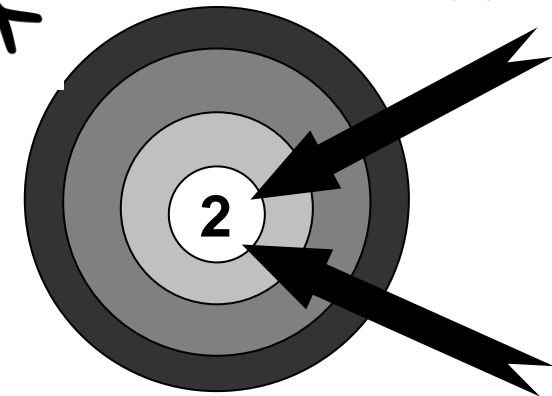
- ✚ Choose a number between 0 and 1 with one decimal place, e.g. 0.6.
- ✚ Challenge your child to ask you questions to guess your number. You may only answer 'Yes' or 'No'. For example, he could ask questions like 'Is it less than a half?'
- ✚ See if he can guess your number in fewer than 5 questions.
- ✚ Now let your child choose a mystery number for you to guess.

Extend the game by choosing a number with one decimal place between 1 and 10, e.g. 3.6. You may need more questions

# Supporting your child at home



**Year 5**



**Mathematics**

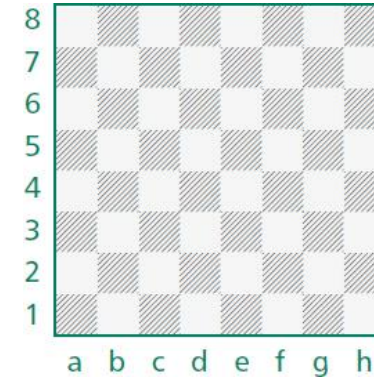
**A booklet for parents**

**By the end of Year 5. most children should be able to...**

- ✚ Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit, count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 , interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero and round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- ✚ Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) and add and subtract numbers mentally with increasingly large numbers
- ✚ Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers and establish whether a number up to 100 is prime and recall prime numbers up to 19
- ✚ Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers, Divide numbers up to 4 digits by one digit.
- ✚ Multiply proper fractions and mixed numbers, read, write order and compare numbers up to 3 decimal places. Recognise %.
- ✚ Recognise and draw 2 angles. Identify position after reflection or translation.
- ✚ Solve comparison, sum and difference problems using information presented in a line graph

## Battleships

Draw two grids like this



- ✚ Choose ships of various lengths (use between 2 and 4 squares)
- ✚ Hide your grid from your partner
- ✚ Take it in turns to guess the co-ordinates of your opponents ships.
- ✚ Respond with "hit" or "miss"
- ✚ The winner is the person to sink all their opponents ships

## How much?

- ✚ While shopping, point out an item costing less than £1.
- ✚ Ask your child to work out in their head the cost of 3 items.
- ✚ Ask them to guess first. See how close they come.
- ✚ If you see any items labelled, for example, '2 for £3.50', ask them to work out the cost of 1 item for you, and to explain how they got the answer.

## Times tables

Say together the six times table forwards, then backwards. Ask your child questions, such as:

Nine sixes? How many sixes in 42?

Six times four? Forty-eight divided by six?

Three multiplied by six? Six times what equals sixty?

Repeat with the seven, eight and nine times tables.

Make a times-table grid like this.

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

- ✚ Shade in all the tables facts that your child knows, probably the 1s, 2s, 3s, 4s, 5s and 10s.
- ✚ Some facts appear twice, e.g.  $7 \times 3$  and  $3 \times 7$ , so cross out one of each.
- ✚ Are you surprised how few facts are left?
- ✚ There might only be 10 facts to learn. So take one fact a day and make up a silly rhyme together to help your child to learn it, e.g. *nine sevens are sixty-three, let's have lots of chips for tea!*

## Target 1000

- ✚ Roll a dice 6 times.
- ✚ Use the six digits to make two three-digit numbers.
- ✚ Add the two numbers together.
- ✚ How close to 1000 can you get?

## Finding areas and perimeters

*Perimeter = distance around the edge of a shape*

*Area of a rectangle = length  $\times$  breadth (width)*

- ✚ Collect 5 or 6 used envelopes of different sizes.
- ✚ Ask your child to estimate the perimeter of each one to the nearest centimetre. Write the estimate on the back.
- ✚ Now measure. Write the estimate next to the measurement.
- ✚ How close did your child get?
- ✚ Now choose 5 or 6 adverts from newspapers or magazines.

You could do something similar using an old newspaper, e.g.

- ✚ Ask your child to estimate the area of each advert to the nearest centimetre squared - write these down.
- ✚ Now measure and calculate
- ✚ How close did your child get?

## Telephone challenges

- ✚ Challenge your child to find numbers in the telephone directory where the digits add up to 42.
- ✚ Find as many as possible in 10 minutes.

On another day, see if they can beat their previous total

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## Dicey subtractions

✚ Take turns to roll a dice twice.

✚ Fill in the missing boxes.

$$400? - 399?$$

e.g.  $4002 - 3994$

✚ Count on from the smaller to the larger number, e.g. 3995, 3996, 3997, 3998, 3999, 4000, 4001, 4002.

✚ You counted on 8, so you score 8 points.

✚ Keep a running total of your score .

✚ The first to get 50 or more points wins.

## Dicey division

For this game you need a 1-100 board (a snakes and ladders board will do), a dice and 20 coins or counters.

✚ Take turns.

✚ Choose a two-digit number. Roll a dice. If you roll 1, roll again.

✚ If your two-digit number divides exactly by the dice number, put a coin on your chosen two-digit number. Otherwise, miss that turn.

✚ The first to get 10 counters on the board wins.

## About the statements

These statements show some of the things your child should be able to do by the end of Year 5.

A statement may be harder than it seems, e.g. a child may subtract 3994 from 9007 by using a formal written method, without realising it is quicker to count on from 3994 up to 9007 in his / her head.

## Fun activities to do at home

### Line it up

You need a ruler marked in centimetres and millimetres.

- ✚ Use the ruler to draw 10 different straight lines on a piece of paper.
- ✚ Ask your child to estimate the length of each line and write the estimate on the line.
- ✚ Now give them the ruler and ask them to measure each line to the nearest millimetre.
- ✚ Ask them to write the measurement next to the estimate, and work out the difference.
- ✚ A difference of 5 millimetres or less scores 10 points. A difference of 1 centimetre or less scores 5 points.
- ✚ How close to 100 points can she get?