Hiltingbury Infant School

Year 2 Maths

Ways to help at home

The Golden Rules

DO 'little and often'! Counting sultanas as you eat them or stairs when going up to a first floor flat is a much better way of rehearsing counting than sitting over a workbook.

DON'T push a skill, especially if a child is becoming confused or is feeling pressured. It always pays to talk to the teacher if you feel your child is not understanding something, rather than confuse them further by teaching them in a different way.

DO give LOTS of praise. Resist the temptation to say, 'but' or to point out mistakes every time. Children need encouragement and positive reinforcement to be confident, and a confident child makes a better learner.

DON'T force workbooks on your child. They will do plenty of writing in their maths books at school. At home, you have the opportunity to help them memorise their number facts and perform mathematical calculations in their heads.

DO play games! Dice, dominoes, track games and cards all make excellent excuses for using and applying our number skills. And at the same time your child is learning the important skills of losing with grace and winning with style!

DON'T stress written sums laid out as you used to do them! Nowadays it is the development of what we call 'numerical fluency' that counts. Children need to be comfortable with numbers, to understand how they work and to be confident in doing mental calculations.

DO remember that your focussed attention is a far more important and pleasurable commodity for any child than any amount of TV or video game activity. Every child wants to be doing things one-on-one with someone they love and trust.

Vocabulary to use and model at home

Using the wide range of mathematical vocabulary with and around your child is very important. Below is a list of the vocabulary your child will need to use and understand in school.

Numbers and place value
number, digit, unit, one, teen, tens, hundred, thousand, place value, biggest, smallest, most, fewest, largest, least, greatest, less, more, equal, odd, even, half, double, quarter, third, fraction, order, compare, next, before, between, first, second, third...tenth, predict, estimate, rule, sequence.

Addition, subtraction, multiplication and division
add, sum of, addition, total, altogether, plus, make, subtraction, take away, less than, subtract, minus, fewer, difference, multiplication, times, multiply, sets of, groups of, lots of, array, divide, share equally, shared, equal groups of, multiple of, row, column

Money
money, pound, pence, coin, note, penny, cost, sell, price, buy, pay, change, spend, cheaper

Statistics
count, sort, list, graph, chart, tally, bar chart, group, table, set, block graph, pictogram, most/least popular.

Measures
length, width, height, depth , long, short, tall, high, low, wide, narrow, deep, shallow, thick, thin, ruler, metre stick, centimetre, millimetre, kilometre, mile, metre, weight, weighs, balance, grams, kilograms, heavy, light, scale, measure, ounce, pounds, full, empty, half full/empty, capacity, litres, angle, right-angle, degrees, obtuse, acute, millilitres, container, jug, holds,

Time
time, days of the week(Monday, Tuesday), week, weekend, seasons (Spring, Summer), day, month, year, Months(Januray, February), birthday, holiday, morning, afternoon, evening, night, midnight, noon, bedtime, dinnertime, lunchtime, playtime, today, yesterday, tomorrow, before, after, next, now, soon, early, late, quick, quickly, quicker, slowly, slower, old, new, hours, minutes, seconds, time, clock, analogue, digital, o'clock, half past, quarter past, quarter to, 5 past/to, timer,

Geometry – properties of shapes
Shape, pattern, 2D, 3D, square, rectangle, oblong, triangle, circle, hexagon, star, diamond, kite, pentagon, octagon, cube, cuboid, prism, pyramid, sphere, cone, cylinder, corner, edge, side, length, curved, straight, flat, net, hollow, solid, face, symmetrical, repeating pattern, match

Geometry – position and direction
over, under, underneath, above, below, top, bottom,, on, in, outside, inside, around, in front, behind, front, back, before, after, beside, next to, opposite, apart, middle
direction, journey, left, right, up, down, forwards, backwards, sideways, across, close, far, near, along, through, to, from, towards, away from, turn, whole turn, half turn, quarter turn, clockwise, anticlockwise

Ways to support Maths learning at home during Year 2

Give us a clue

You will need a 100 square and a pen or pencil.

- One player chooses a number and hides it.
- The other player is allowed to ask 6 questions before trying to guess the number.
- After asking a question, they should try to cross out all the numbers that it cannot be, e.g. Is it an odd number? No—then cross out all the odd numbers.
- If the person guesses correctly they score a point. If not, the other player scores a point.

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

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, 46p. Shuffle the labels. Ask you child to do one or more of the following:

- Place the labels in order of price.
- Say which price is an odd / even number.
- Add 9p to each price by adding 10p, then taking 1p off.
- Add 20p to each price.
- Choose two items, and work out the total cost.

- Work out the change for each item from £1.

Car numbers

- Each person chooses a target number e.g. 15.
- How many car number plates can you spot with 3 digits adding up to your number (e.g. K456 XWL)
- So 4+5+6=15 Bingo!

Speedy pairs to 10 / 20 / 100

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

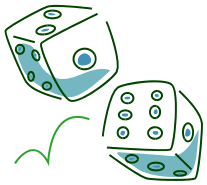
- Shuffle the cards and give them to your child.
- Time how long it takes for them to find all the pairs to 10.
- Repeat later in the week. See if they can beat their time!

Once children are secure with this, make the cards 0-20 to make pairs to 20 (including two 10s). You could also do the same with multiples of 10 to find ways of making 100 (including two 50s).

Bean subtraction

- Start with a pile of beans in the middle. Count them.
- Throw a die, Say how many beans will be left if you subtract that number.
- Take the beans away to check if you were right.

- Keep playing. The person to take the last bean is the winner.



Aim for £1

You need lots of 10p, 5p and 1p coins and a die.

- Take turns to throw the die and take that many coins. The coins must be the same value.
- Add up the total value of your coins.
- Keep track of how much money you have. If the coins go over £1, you miss a turn.
- The winner if the first person to get exactly £1.

Extend the game by using other coin denominations and new totals.

Fish for ten

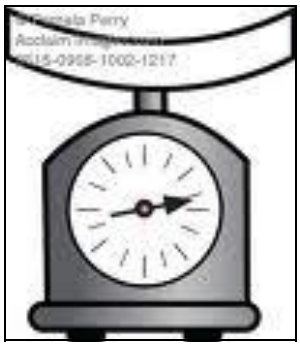
For this game you will need a pack of cards with the kings and jacks removed (the queen counts as zero).

- Deal out 5 cards per player.
- Put the rest of the cards in a central pile, face down.
- The aim is to collect pairs of cards which add up to 10. If you collect a pair, take it out of your hand and put it, face up, in front of you.
- Take turns to choose a player and ask them for a card e.g. a 4. If they have it they must give it to you. If not they say 'fish' and you have to take a card from the central pile.

- At the end of the game, when all the cards have gone from the pile, the player who has the most pairs wins.

How heavy?

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



- Ask your children to find something that weighs close to 1kg.
- Can they find something that weighs exactly 1kg?
- Find some things that weigh half a kilogram.

Guess my shape

Think of a 2D shape. Ask your child to ask you questions to guess what it is. You can only answer yes or no!

- See if they can guess your shape using fewer than five questions. Now swap.
- Example questions: Does it have 5 corners? Are the sides curved? Does it have a right angle in it?

Circle trios

You will need a die and a pencil and paper.

- Draw four circles. Write four numbers between 3 and 18, one in each circle.
- Take turns to roll a die three times and add the three numbers up.

- If the total matches one of your numbers, cross it out. The first to cross out all four circles wins.

Useful websites to support learning in Maths:

www.bbc.co.uk/cbeebies

www.topmarks.co.uk

www.ictgames.com

http://www.poissonrouge.com

www.bbc.co.uk/schools

www.eductioncity.com (this is a paid site)

www.resources.oswego.org/games

www.woodlands-junior.kent.sch.uk/maths/

www.maths-games.org/

www.primaryinteractive.co.uk/maths

www.coolmath4kids.com/

www.mathszone.co.uk/

For those lucky enough to happy a tablet or ipad, here are some useful apps:

Maths Trainer

DoodleMaths

Maths, age 3-5

Penguin Jump Maths

AB Maths lite