



Brickhouse Primary School: A Guide For Parents

Math Matters



Year 6

At Brickhouse Primary School, after the time away from school our children have had, our aim is to work in partnership with you to enhance your child's progress and enjoyment of Maths as quickly as possible! This leaflet is an aid to help you to support your child to develop their understanding of the range of Maths concepts they will cover while in school. It aims to offer ideas of fun activities to engage your child's love of Maths at home.



During Year 6 most children will learn how to:

- Read, write, order, compare and round numbers up to 10, 000, 000
- Recognise and use negative numbers in a context
- Solve number problems involving rounding
- \times and \div Thousand, Hundreds, Ten and Ones by Tens and Ones
(5643×23 and $4567 \div 34$)
- Use addition and subtraction to solve multistep problems carrying out calculations using a clear order of operations.
- Identify common factors, multiples and prime numbers
- Simplify, order and compare fractions using common factors.
- Add, subtract, multiply and divide fractions simplifying the answer.
- Relate fractions, decimals and percentages together in the simplest form.
- Multiply by 10, 100 and 1000 up to three decimal places
- Solve problems using direct ratio and proportion
- Solve problems involving calculating % of a number and show a number as a % of another
- Solve problems involving measures
- Read, write and convert between a range of measurements
- Convert between miles and kilometres
- Calculate the area, perimeter and volume of shapes including triangles, parallelograms, cubes and cuboids
- Recognise, classify and draw 2D and 3D shapes including nets
- Find unknown angles
- Understand the radius, diameter and circumference
- Interpret pie charts and line graphs to solve problems
- Express missing number problems using algebra.





Fun activities to do at home

It is a known fact that playing card and board games can really help children's Maths. Adding dice scores, playing dominoes, track or card games all help children's Mathematics. Some of the Year 6 objectives may be more complex than they seem.

For example, children may know how to work out calculations on paper but need to be able to identify when it is quicker to work them out in their heads. Understanding of the most efficient method and rapid recall of basic number facts is essential to create good foundations to learn more complex Maths concepts.

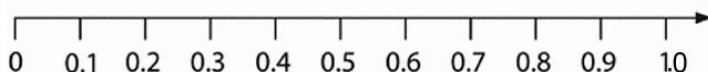


Topic numbers

- ❖ Take turns to think of a word based on an agreed topic, e.g. animals, countries, cars or flowers.
- ❖ Use an alphabet code, A= 1, B=2, C=3... up to Z=26
- ❖ Find the number for the first and last letters of your word, e.g. for ROSE, R= 18 and E= 5.
- ❖ Multiply the two numbers together, e.g. $18 \times 5 = 90$
- ❖ The person with the biggest answer scores a point
- ❖ The winner is the first person to get to 5points

Three in a row

For this game you need a calculator. Draw a line like this:



- ❖ Take it in turns to choose a fraction, say $\frac{2}{5}$. Use the calculator to convert it to decimal (i.e. $2 \div 5 = 0.4$) and mark your initials at this point on the line.
- ❖ The aim of the game is to get 3 crosses in a row without any of the other player's marks in between.
- ❖ Some fractions are harder to place than others, e.g. ninths.

One million pounds

- ❖ Assume you have £1 000 000 to spend or give away.
- ❖ Plan with your child what to do with it, down to the last penny.
Multiplication could be used to find the total of multiple objects.



Sale of the century

- ❖ When you go shopping, or see a shop with a sale on, ask your child to work out what some items would cost with:
 - 50% off
 - 25% off
 - 10% off
 - 5% off
 - 17% off
 - 42% off
- ❖ Ask your child to explain how they worked it out.



Recipes

- ❖ Find a recipe for 4 people and rewrite it for 8 people, e.g.

4 people	8 people
125g flour	250g flour
50g butter	100g butter
75g sugar	150g sugar
30ml treacle	60ml treacle
1 teaspoon ginger	2 teaspoons ginger
- ❖ Can you rewrite it for 3 people? Or 5 people?



26	54	47	21	19	5
38	9	25	67	56	31
49	13	39	41	6	1
75	28	90	14	50	81
23	43	4	37	45	29
72	34	7	58	17	36
2	55	11	22	40	42

Connect four

- ❖ Draw a 6 x 7 grid
- ❖ Fill it within numbers under 100.
- ❖ Take it in turns to roll a dice three times.
- ❖ Use all three numbers to make a number on the grid.
- ❖ You can add, subtract, multiply or divide the numbers, e.g. if you roll 3, 4 and 5 you could make $3 \times 4 - 5 = 7$, $54 \div 3 = 18$, $(4+5) \times 3 = 27$, and so on,
- ❖ Cover the number you make using a coin or counter.
- ❖ The first to get four of their counters in a straight line wins.