

- Decimals e.g.  $3.2 \times 10$
- Carry out division calculations with remainders.
- Know and use square number facts.
- Use order of operation - knowing that multiplication and division take priority over addition and subtraction to do calculations.

### Fractions, Decimals and Percentages

- Find fractions of a number e.g.  $\frac{1}{3}$  of 24 then  $\frac{2}{3}$  of 24
- Make equivalent fractions for a common fraction.
- Simplify common fractions.
- Compare common fractions, saying which is larger or smaller.
- Carry out simple percentage calculations e.g. 10% of 50, 25% of 60
- Convert between frequently used fractions, decimal fractions and percentages.

## Fun Activities

### Card Game

Use a pack of playing cards. Take out the jacks, queens and kings. Take a card and roll the dice. Multiply the two numbers and write down the answer. Keep a running total. Take turns. The first person to go over 301 is the winner.

### Doubles & trebles

Roll two dice. Multiply the two numbers to get your score. Roll one of the dice again. If it is an even number, double your score. If it is an odd number, treble your score. Keep a running total of your score. The first to get over 301 wins.

### Broken Calculator

Pretend that the number 8 key on the calculator is

broken. Without it, how can you make the number 18 appear on the screen? e.g.  $20 - 2$ ,  $15 + 3$ . Ask other questions using different 'broken' keys.

This is the answer, what is the question?

Choose a number from 1 to 100. List as many different ways as you can to make that answer within 5 minutes. Try to do so by adding, subtracting, multiplying and dividing. You can build up to using two or three different operations in the one sum.

### Times Tables

Practise the times tables. Knowledge of times tables are essential in many other concepts, such as division, fractions and decimals. Test your child with Quick fire question sessions.

### Real Life Situations

Incorporate number work into everyday situations e.g. shopping to a specific budget, working out % discounts in shops, planning a day trip / holiday, using the football league tables to create number problems.

## Recommended Websites

The following websites contain a variety of activities and games on spelling, grammar, punctuation and writing.

[www.sumdog.com](http://www.sumdog.com)

[www.topmarks.co.uk/maths-games/7-11years](http://www.topmarks.co.uk/maths-games/7-11years)

[www.mathplayground.com](http://www.mathplayground.com)

[www.mathsisfun.com/numbers/index.html](http://www.mathsisfun.com/numbers/index.html)

[www.bbc.co.uk/bitesize/secondlevel/mathematics/](http://www.bbc.co.uk/bitesize/secondlevel/mathematics/)



## Brownhall Primary Numeracy Information Second Level

Ideas to use to support your child at home in mental agility and skills in Numeracy





## Parents as Partners

Dear Parents and Carers,

We hope you find these Numeracy guidelines helpful. They are designed to help raise your child's attainment. Some pupils will exceed these guidelines and some pupils may not yet be able to complete all the outcomes.

Numeracy is a life skill which all children need. However, we emphasise that numeracy should be fun and therefore it really helps if adults involved try to show a positive attitude.

Please do contact the school if we can be of further help.

## Key Elements in Second Level Counting

- Count forwards and backwards in multiples for the 2 to the 10 times tables e.g. 6, 12, 18, 24... 24, 18, 12, 6
- Say the number before / after the times tables covered e.g. what is 6 more than 42?
- Count forwards and backwards in decimal tenths e.g. 2.3, 2.4, 2.5, 2.6 ...
- Say the number a tenth more / less than e.g. what is a tenth more than 6.2?

### Recognise and Identify Numbers

- Recognise numbers in the range 1 to 1,000,000 e.g. point to number 20,120 (knowing a number from a displayed number).
- Identify numbers in range from 1 to 1,000,000 (finding a number amongst other numbers)
- Recognise / identify numbers with a decimal / fraction part.

### Sequencing and Ordering Numbers

- Sequence numbers in the range 1 to 1,000,000 including negative numbers.
- Order numbers in the range 1 to 1,000,000.
- Order numbers with a decimal part.

### Using Number Lines

- Place a number on a number line up to 1,000,000.
- Place positive and negative numbers on a number line.
- Estimate where a number goes on an empty number line, including decimals.

### Number Structures and Place Value

- Demonstrate how the value of a digit depends on where it is placed (numbers up to 1,000,000).
- Split a number into its place value parts in the range 1 to 1,000,000.
- Show how the value of a digit depends on where it is placed within the number.
- Split a number into its place value parts for decimals up to 2 decimal places e.g. 2.5 is 2 units and 5 tenths.

### Addition and Subtraction

- Add and subtract for 2, 3 and 4 digit numbers using a variety of mental / written strategies.
- Add and subtract multiples of tens and hundreds e.g.  $300+520$
- Use a variety of strategies to find a pair of numbers that add to make 100 and then 1000.
- Identify the number partner to go with a decimal hundredth to make 1 e.g. what goes with 0.37 to make 1?
- Add and subtract decimal numbers using a variety of written strategies.
- Add and subtract simple fractions e.g.  $\frac{1}{2} + \frac{1}{4}$

### Multiplication and Division

- Count forwards and backwards in multiples beyond the times tables.
- Know the multiplication and division family facts e.g.  $3 \times 6 = 18$   $6 \times 3 = 18$   $18 \div 3 = 6$   $18 \div 6 = 3$
- Know and use all the times table facts to solve appropriate problems.
- Multiple and divide 2, 3 and 4 digit numbers by a single digit by using the written method.
- Multiply and divide by 10, 100 and 1000
- Whole numbers e.g.  $73 \times 10$