

Micklefield Preparatory School

Approach to the 4 Operations

Addition

This can be done using:

- A number line
- Column addition
- Partitioning

Subtraction

This can be done using:

- Number line
- Compensation
- Partitioning

Multiplication

This can be done using:

- Viewing multiplication as repeated addition
- Using times tables
- Using long multiplication
- Using the grid method

Division

This can be done using:

- Viewing division as repeated subtraction – taking away easy multiples of...
- Short division
- Long division

Of course all 4 operations can be done using a calculator, but the importance of estimating an answer first should be emphasised (use numbers to nearest sensible magnitude to estimate). There are many other methods which can be used.

Micklefield Preparatory School

Maths Forum Parents' Handout

Useful websites

There are lots of websites giving advice to parents on primary maths. Just do an Internet trawl and see. The following are particularly useful. You might want to go to the home pages and follow the links, rather than type the whole lot out!)

http://www.direct.gov.uk/en/Parents/Schoolslearninganddevelopment/ExamsTestsAndTheCurriculum/DG_4015959

http://www.bbc.co.uk/schools/parents/work/primary/numeracy_and_science/maths_at_home_primary.shtml

<http://www.standards.dfes.gov.uk/primary/publications/mathematics/12792/>

The last address above is the page where you can access the parents' booklets mentioned during the Forum.

Other useful websites, for companies that sell maths toys and games, are:

www.brightminds.co.uk

www.juniorscholars.co.uk

There are many more companies like this. A quick look on the Internet will also reveal lots of online maths games for children.

Micklefield Preparatory School



Ideas for helping your child with maths at home – Year 3 to Year 6

Everyday situations:

- ❖ Weighing, measuring capacity and timing when cooking. Converting a recipe for 4 people to one for 6 people.
- ❖ Being involved with measuring and calculating how much curtain fabric is needed, how much wood for shelves, how many wall or floor tiles are needed, how much carpet etc.
- ❖ Talking about time, e.g. How long is it until lunch time? The journey takes 2½ hours, when will we arrive? We need to be there at 2.00pm, when do we need to leave home? Many children will still need practice with reading clock times, particularly minutes past and minutes to the hour.
- ❖ Handling amounts of money when shopping, working out total costs, working out change, checking receipts. Working out prices of sale items, e.g. 20% off. Managing pocket money and saving for things.
- ❖ Working out distances and directions from maps.
- ❖ Discussing and comparing house prices from newspaper house sales pages.
- ❖ Working out how much petrol will be used on a journey, working out average speed for a journey, costing journeys or holidays etc.

Play activities/games:

- ❖ Card games such as sevens, cribbage, pontoon etc.
- ❖ Any games involving calculating scores, e.g. scrabble, quoits, darts, bowling.
- ❖ Beat the calculator. In pairs, one with a calculator, one without, each works out the answer to a calculation aiming for the one without the calculator to say the answer first.
- ❖ Games involving strategic thinking/logic, e.g. draughts, chess, mastermind.
- ❖ Specialised computer games designed for using and developing maths.

Mental activities:

- ❖ Practising and developing knowledge of addition and subtraction facts within 20 (7+8, 13-5 etc) and multiplication and division facts to 10 x 10 (6x7, 35/5 etc). Make it into a game if possible, e.g. have a set of cards numbered 1-10, pick a number such as 4, say 4 times the number on the card as each is turned over, keep all the cards you get right. Beat the calculator as above. On a journey, adult passenger times response, try to beat your own time.
- ❖ Ask 'progressive' calculations, e.g. 7 + 6, 17 + 6, 27 + 6, 47 + 6, 147 + 6; 5 x 2, 50 x 2, 500 x 2, 500 x 20.
- ❖ Working out 2-digit additions and subtractions, multiplying and dividing 2-digit numbers by 1 digit numbers mentally. Talk about how to make it easier, e.g. for 28 + 15, call it 30 add 13 and that's easy; for 16 x 4, double 16, then double 32.
- ❖ Open-ended activities, e.g. The answer's 25, what's the question? How can you use combinations of 3 and 6 to make different numbers? (Use each number as many times as you like with addition, subtraction, multiplication or division).