Supporting maths at home: Years 5 and 6

Whatever you do with your child, have a positive attitude towards maths yourself!

Everyday situations:

- **Measuring** – Weighing and measuring capacity of ingredients and looking at timings when cooking with your child. Converting a recipe for 4 people to one for 6 people.

- Being involved with measuring and calculating materials e.g. how much curtain fabric is needed, how much wood for shelves, how many wall or floor tiles, how much carpet etc.

- **Journeys**

Use the chart in the front of a road atlas that tells you the distance between places.

- Find the nearest place to you.
- Ask your child to work out how long it would take to travel from this place to some other places in England if you travelled at an average of 60 miles per hour, i.e. 1 mile per minute, e.g.

York to Preston: 90 miles = 1 hour 30 minutes

York to Dover: 280 miles = 4 hours 40 minutes

Encourage your child to count in 60's to work out the answers mentally.

- Extend this by asking questions like "What if you travelled at 30 mph? What if we started in London?"

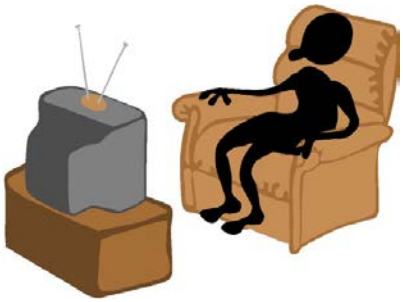
- Working out distances and directions from maps.
- Working out how much petrol will be used on a journey, the average speed for a journey, costing journeys or holidays etc.
- **Time** – Discuss time with your child e.g. How long is it until lunch time? The journey takes $2\frac{1}{2}$ hours, when will we arrive? We need to be there at 2.00 pm, 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.
- **Money** – Let your child handle amounts of money when shopping, work out total costs, work out change, check receipts. Work out the prices of sale items, e.g. 20% off. Managing pocket money and saving for things is a good way to introduce financial awareness for the future.
- Discuss and compare house prices from newspaper house sales pages.

- **TV addicts**

  Ask your child to keep a record of how long they watch television each day for a week. Then ask them to do the following:-

  - Work out the total watching time for the week.
  - Work out the average watching time for a day (that is, the total time divided by 7).

  Instead of watching television, you could ask them to keep a record of time spent eating meals, playing outdoors, or anything else they do each day. Then work out the daily average.



Play activities/games:

- Card games such as Sevens, Cribbage, Pontoon etc.
- Any games involving calculating scores, e.g. Scrabble, Monopoly, quoits, darts, bowling.
- Beat the calculator. In pairs, one with a calculator and 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.

- **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.

- **Animals**
  - Take turns to think of an animal.
  - Use an alphabet code, A = 1, B = 2, C = 3... up to Z = 26.
  - Find the value for the first and last letters of your animal, e.g. for a TIGER, T = 20, and R = 18.
  - Multiply the two numbers together, e.g. 20 x 18 = 360.
  - The person with the biggest answer scores a point.
  - The winner is the first to get 5 points.
  - When you play again you could think of names, food, countries or your own idea.

- **Rhymes**
  - Make up rhymes together to help your child to remember the harder times-tables facts, e.g.

    6 x 7 = 42 phew! 7 x 7 = 49 fine! 6 x 8 = 48 great!

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.)

- **What's the question?**

  Give your child an answer and they must think of as many different questions for it as possible.

Possible responses for an answer of 10:

- 8 plus 2
- 1 million divided by one hundred thousand
- 5 x 2
- 25 - 15
- 2.5 times 4
- the number before 11
- 9999 subtract 9989
- the square root of 100

Websites:

http://www.bbc.co.uk/bitesize/ks2/maths/

http://uk.ixl.com/math/year-5

http://uk.ixl.com/math/year-6

http://primarygamesarena.com/Year-6

http://primarygamesarena.com/Year-5

http://mrnussbaum.com/mathcode/