Making Maths Meaningful

Ideas to help your child have fun with maths and support their understanding of number, calculation and measures

Key Stage 2

Children need to have a feel for number.
They need to understand what numbers mean and have a range of strategies that they can use to manipulate them in different contexts.

Children need to be able to choose the right operation or combination of operations (+, -, x, ÷), work out the order in which to do them, select the most appropriate way of working out a problem and be able to talk about and/or show how they have worked this out.

Guide children towards a solution, try not to do it for them, or impose a strategy which they may not be ready for and will therefore not retain and not be able to apply in different situations.

Playing Games

Top Trumps

Uno

Card Games
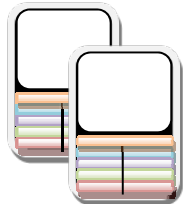
playing cards
e.g. solitaire, Pontoon (21), Cribbage

Family Games

dominoes, Triominoes, Connect 4, Monopoly. Payday, Mastermind, Snakes and Ladders, Ludo, Battleships, Guess Who, bingo

darts

snooker

Sports

sports tables
- arrange teams alphabetically and then work out point differences
- calculate the total amount of points of all teams beginning with a particular letter or in a particular region e.g. south east. Compare totals and work out differences.
- play 'fantasy football'. Calculate the points if a team were to win, draw or lose against different teams

Dice Games

Dice Darts
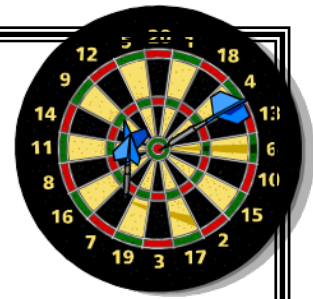
Addition
Decide on target 101 or 301.

Each person takes it in turn to throw two dice, add the faces together and record the score.

Keep a running total. First to reach 101/301 is the winner. NB They must score exactly 101/301 so they may choose to use just one die as they get close.

Subtraction
Decide on starting number 101 or 301.

Each person takes it in turn to throw two dice, add the faces together and subtract the score.

Keep a running total. First to reach 0 is the winner. NB They must score exactly 0 so they may choose to use just one die as they get close.

Multiplication
Decide on starting number 301 or 501.

Each person takes it in turn to throw two dice, multiply the faces together and subtract the score.

Keep a running total. First to reach 0 is the winner. NB They must score exactly 0 so they may choose to use just one die as they get close.
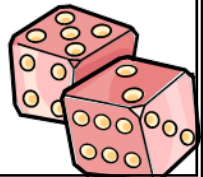
Real Life

Menus

Use takeaway menus to construct different meal combinations for a fixed price e.g. £10.00 and calculate change: estimate total first, use pencil and paper to calculate, check with a calculator

Recipes

Estimate the cost of the recipe, use the internet to find out prices or take a fact finding mission to the supermarket. Alter the recipe for a different number of people or a different quantity, work out how much of each ingredient will then be needed and the cost

Packaging

Look at the packaging of different foods and drinks and discuss the ingredients. Order the ingredients according to size – highest to lowest and vice versa. Compare foods with similar ingredients and work out the differences. Calculate the total amount of a particular ingredient in a meal.

Catalogues

Create a new bedroom on a given budget for a particular person. Itemise purchases, keep a running total and calculate change. Create a Christmas or birthday list for a given person on a given budget. What would happen if there was a ½ price sale or 25% off?

Comics or magazines

Cut pictures out of comics or magazines and make paper frames for them. Measure each length accurately and calculate the total perimeter.

T.V. schedule

Read times and show on an analogue clock. Convert from 24 hour to 12 hour and vice versa. Calculate the duration of different programmes. Find the total duration of different types of programmes on one channel e.g. news, and compare with different channels.
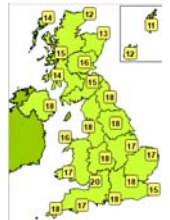
Stock market

Create a fantasy share portfolio. Read the share prices paying particular attention to place value with decimals. Review prices weekly. Calculate fluctuations and changing value of portfolio.
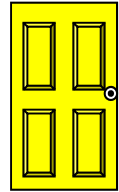
Weather map

Look at the temperatures in different parts of the U.K. and temperatures from other countries. Calculate differences in temperature especially when there are negative values.

Number Hunt

Look for numbers in the environment e.g. door numbers, road signs, bus numbers, sports shirts, number plates, advertising – phone numbers. Order numbers according to their size. Find numbers that meet different criteria e.g. greater than (>) or less than (<) a given number, multiples of … or multiples of … and … Find totals. Find differences. Choose and use the most appropriate method of calculation e.g. mentally, pencil and paper, calculator. Race another person to a given target number on a walk or a car journey.

Shape Hunt

Look for, name and describe the properties of shapes (2-D and 3-D) around the house and/or in the environment. Talk about specific properties such as number of sides (2-D), number and shape of faces (3-D), lines of symmetry in 2-D shapes, angles and their types (2-D) – right angle 90°, acute - less than 90°, obtuse – greater than 90°. Make it a competition. Challenge children to spot and sketch shapes in a given time frame and then award points according to the number of sides for 2-D shapes e.g. triangle = 3 points or number of faces for 3-D shapes e.g. cube = 6 points.

Try to make it fun

Try to make it real

Encourage children to ask questions
and guide them in finding solutions

Engage in conversation

Encourage curiosity and
a love of learning