Finding areas and perimeters

> *Perimeter = distance around the edge of a shape*
> *Area of a rectangle = length x breadth (width)*

- Collect 5 or 6 used envelopes of different sizes.
- Ask your child to estimate the perimeter of each one to the nearest centimetre. Write the estimate on the back.
- Now measure. Write the estimate next to the measurement.
- How close did your child get?
- Now estimate then work out the area of each envelope.
- Were perimeters or areas easier to estimate? Why?

Guess my number
- Choose a number between 0 and 1 with one decimal place, e.g.0.6.
- Challenge your child to ask you questions to guess your number.
- You may only answer 'Yes' or 'No'. For example, he/she could ask questions like 'Is it less than a half?'
- See if he/she can guess your number in fewer than 5 questions.
- Now let your child choose a mystery number for you to guess.
- Extend the game by choosing a number with one decimal place between 1 and 10, e.g. 3.6. You may need more questions!

Telephone challenges
- Challenge your child to find numbers in the telephone directory where the digits add up to 42.
- Find as many as possible in 10 minutes.
- On another day, see if they can beat their previous total.

Car numbers
- Try reading a car number as a measurement in centimetres, then converting it to metres, e.g.
  Reg plate: RF56 8NG
  Centimetres = 568cm
  Metres = 5.68m.
- Try this with car numbers that have zeros in them, e.g. 307cm, which is 3.07m or 370cm, which is 3.7m. These are harder!

Higher Bebington Junior School

Expectations for pupils in Year 5
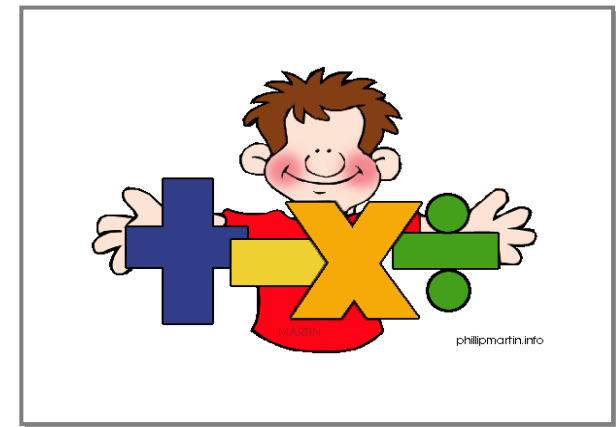
A booklet for parents

Help your child with mathematics

Expectations – Year 5

By the end of Year 5, most children should be able to:

- ✓ Read and write numbers up to 1,000,000 and put them in order, knowing what each digit is worth.
- ✓ Count on or back in steps of powers of 10 for any given number up to 1,000,000.
- ✓ Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 1000,000.
- ✓ Read Roman numerals to 1000 (M).
- ✓ Use negative numbers in contexts such as temperature.
- ✓ Multiply or divide whole numbers and decimals by 10, 100 and 1000.
- ✓ Know by heart the multiplication and division facts for all times tables up to 12 x 12.
- ✓ Know by heart the prime numbers up to 19 (2, 3, 5, 7, 11, 13, 17, 19).
- ✓ Know by heart square numbers up to 10^2 (4, 9, 16, 25, 36, 49, 84, 81, 100).
- ✓ Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
- ✓ Round decimals to two decimal places, to one decimal place and to the nearest whole number (e.g. 3.852 rounded to 2dp = 3.85, rounded to 1dp = 3.9, rounded to nearest whole number = 4).
- ✓ Know the decimal, fraction and percentage equivalents of ½ (0.5 or 50%), ¼ (0.25 or 25%), ¾ (0.75 or 75%), 1/5 (0.2 or 20 %), 2/5 (0.4 or 40%), 4/5 (0.8 or 80%).
- ✓ Continue to read and write the time on an analogue and a 24 hour clock.
- ✓ Add, subtract, multiply and divide amounts of money to solve problems.
- ✓ Measure and calculate the perimeter and area of squares and rectangles.

Fun activities to do at home

How much?

- ♦ While shopping, point out an item costing less than £1.
- ♦ Ask your child to work out in their head the cost of 3 items.
- ♦ Ask them to guess first. See how close they come.
- ♦ If you see any items labelled, for example, '2 for £3.50', ask them to work out the cost of 1 item for you, and to explain how they got the answer.

Times tables

Say together the six times table forwards, then backwards. Ask your child questions, such as:

Nine sixes?	How many sixes in 42?
Six times four?	Forty-eight divided by six?
Three multiplied by six?	Six times what equals sixty?

Repeat with the seven, eight and nine times tables.

Decimal number plates

- ♦ Each choose a car number plate with three digits.

P645 CJM

- ♦ Choose two of the digits, e.g. 4 and 6. Make the smallest and largest numbers you can, each with 1 decimal places, e.g. 4.6 and 6.4.
- ♦ Now find the difference between the two decimal numbers, e.g. 6.4 – 4.6 = 1.8.
- ♦ Whoever makes the biggest difference scores 10 points.
- ♦ The person with the most points wins.

Play the game again, but this time score 10 points for the smallest difference, or 10 points for the biggest total.