

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. To extend, use all 3 digits.

Finding areas and perimeters

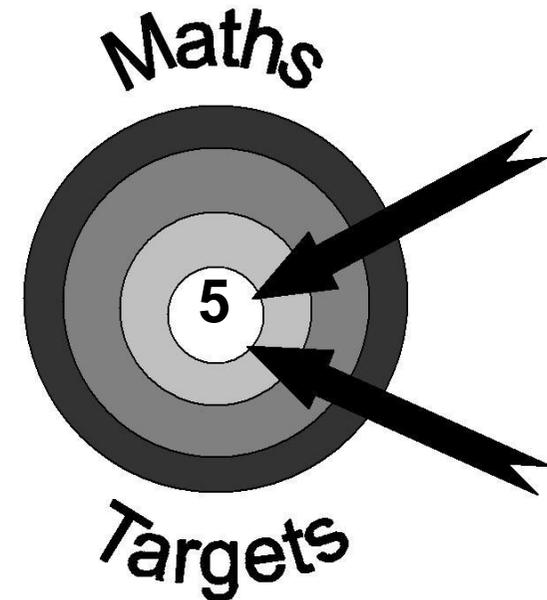
Perimeter = distance around the edge of a shape
Area of a rectangle = length x breadth (width)

- ◆ 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?
- You could do something similar using an old newspaper, e.g.
- ◆ Work out which page has the biggest area used for photographs.
 - ◆ Choose a page and work out the total area of news stories or adverts on that page

Telephone challenges

- ◆ Challenge your child to add digits in a telephone number, split into 1000s or 10s or 1s
- ◆ Can they round the phone number to the nearest 10,100,1000,10000?

Year 5



A booklet for parents

Help your child with mathematics

BATHWICK ST. MARY SCHOOL

Targets – Year 5

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

- ❖ Read, write, order and compare numbers to at least 1 million
- ❖ Count forward and back in powers of 10
- ❖ Interpret negative numbers in context and count backwards and forwards through zero
- ❖ Round any number to the nearest 10, 100, 1000, 10000 or 100000
- ❖ Read Roman numerals to 1000
- ❖ Add and subtract numbers with more than 4 digits using formal written methods
- ❖ Add and subtract mentally
- ❖ Recall and use all times tables to 12x12
- ❖ Identify multiples and factors
- ❖ Know prime numbers up to 19
- ❖ Multiply using short and long multiplication methods
- ❖ Use square numbers and cube numbers

Activities to do at home

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? What are the factors of 36? Give me the 5th multiple of 6. Repeat with the other tables.

Target 1000

- ◆ Roll a dice 6 times.
- ◆ Use the six digits to make two three-digit numbers.
- ◆ Add the two numbers together.
- ◆ How close to 1000 can you get?

Car numbers

◆ Try reading a car number as a measurement in centimetres, then converting it to metres, e.g. 456cm, which is 4.56m, or 4m and 56cm. Try other conversions. E.g. miles to km.

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 could ask questions like 'Is it less than a half?'

◆ See if he 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! Further extend to 2 and 3 decimal places.

**Questions you could ask your child as they are doing
their Mathematics.**

- What is the same or different about these numbers, sums, processes?
- How could you organise your learning?
- Can you show me an example?
- What are the connections between...?
- What do you notice?
- When is it not true?
- Can you find another example?
- Can you find an example that does not work?
- How can you be sure?
- What question can you ask next?
- Can you explain why that happens?
- Can you describe...?
- Can you do this mentally?

- ❖ Compare and order fractions
- ❖ Recognise improper fractions and mixed numbers and convert from one to the other
- ❖ Write decimal numbers as fractions
- ❖ Use tenths, hundredths and thousandths
- ❖ Round decimals to 2 decimal places
- ❖ Recognise the % sign
- ❖ Know decimal equivalents of percentages
- ❖ Distinguish between regular and irregular shapes
- ❖ Identify acute, obtuse and reflex angles and order by size
- ❖ Convert between units of measure e.g. km to m, hour to minute.
- ❖ Find the area and perimeter of shapes
- ❖ Estimate volume and capacity
- ❖ Use and convert metric and imperial units of measurement.

These are examples of some of the mathematical targets your child is working towards this year.

STRATEGIES

ADDITION

Column addition above and beyond 4 digits.

e.g.

$$\begin{array}{r} 83 \\ + 42 \\ \hline 120 \\ \underline{5} \\ 125 \end{array}$$
$$\begin{array}{r} 546 \\ + 259 \\ \hline 805 \\ \underline{11} \end{array}$$
$$\begin{array}{r} 4321 \\ + 3959 \\ \hline 8280 \\ \underline{11} \end{array}$$

SUBTRACTION

Column subtraction above and beyond 4 digits.

e.g.

$$\begin{array}{r} 49 \\ - 17 \\ \hline 32 \end{array}$$
$$\begin{array}{r} 12 \\ \cancel{2}31 \\ - 157 \\ \hline 74 \end{array}$$
$$\begin{array}{r} 47 \\ 65.182 \\ - 4836 \\ \hline 60346 \end{array}$$

MULTIPLICATION

1) Short multiplication methods

e.g.

$$\begin{array}{r} 49 \\ \times 2 \\ \hline 18 \\ 80 \\ \hline 98 \end{array}$$
$$\begin{array}{r} 49 \\ \times 2 \\ \hline 98 \\ 1 \end{array}$$
$$\begin{array}{r} 345 \\ \times 5 \\ \hline 1725 \\ 22 \end{array}$$

2) Long multiplication method

e.g.

$$\begin{array}{r} 345 \\ \times 53 \\ \hline 1035 \\ 111 \\ \hline 17250 \\ \underline{22} \\ 18285 \end{array}$$

(345x3)

(345 x50)

DIVISION

1) Short division

e.g.

$$7 \overline{)182} \begin{array}{l} 26 \\ \hline \end{array}$$

2) Short division with remainders

e.g.

$$8 \overline{)453} \begin{array}{l} 56 \text{ r } 5 \\ \hline \end{array} \quad \text{or } 56 \frac{5}{8}$$