

Maths targets for pupils in Year 5

Line it up

You need a ruler marked in centimetres and millimetres.

- ◆ Use the ruler to draw 10 different straight lines on a piece of paper.
- ◆ Ask your child to estimate the length of each line and write the estimate on the line.
- ◆ Now give them the ruler and ask them to measure each line to the nearest millimetre.
- ◆ Ask them to write the measurement next to the estimate, and work out the difference.
- ◆ A difference of 5 millimetres or less scores 10 points. A difference of 1 centimetre or less scores 5 points.
- ◆ How close to 100 points can she get?

My estimate 8.5 cm



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!

Times tables

Ask your child a different times-table fact every day,

e.g. *What is 6 times 8? Can you use this to work out 12×8 ?*

and: *What is 48 divided by 6?*

Useful Websites:

- mathsframe.co.uk
- topmarks.co.uk
- bbc.co.uk/bitesize/ks2/maths
- ictgames.com
- crickweb.co.uk



A booklet for parents

Help your child with mathematics

Targets – Year 5

By the end of the Autumn Term most children should be able to...

1. read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit

$$1030456 > 706358 \quad (> \text{ is greater than})$$

$$708432 < 2034678 \quad (< \text{ is less than})$$

2. count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000

$$10^0 = 1$$

$$10^1 = 10$$

$$10^2 = 10 \times 10 = 100$$

$$10^3 = 10 \times 10 \times 10 = 1000 \text{ etc}$$

3. multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

$$200 \div 10 = 20 \qquad 2 \times 10 = 20$$

$$200 \div 100 = 2 \qquad 2 \times 100 = 200$$

$$200 \div 1000 = 0.2 \qquad 2 \times 1000 = 2000$$

4. read and write decimal numbers as fractions
for example, $0.71 = 71/100$

5. add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)

$$\begin{array}{r} 76134 \\ +4785 \\ \hline 80919 \end{array}$$

$$\begin{array}{r} 534131211 \\ -23718 \\ \hline 30603 \end{array}$$

6. add and subtract numbers mentally with increasingly large numbers

$$25 + 29 = \square \qquad 58 - 39 = \square$$

7. identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers

A multiple is a result you get when you multiple one whole number with another. e.g. 2, 4, 6, 8, 10 are multiples of 2.
A factor of a number is a whole number that divides exactly into it. E.g. you can divide 12 by 3. 3 and 4 are factors of 12.

8. multiply numbers up to 4 digits by a one-digit number using a formal written method

$$\begin{array}{r} 75658912 \\ \times 9 \\ \hline 689328 \end{array}$$

About the targets

These targets show some of the things your child should be able to do by the end of Year 5.

A target may be harder than it seems, e.g. a child may subtract 3994 from 9007 by writing it in columns, without realising it is quicker to count on from 3994 up to 9007 in his / her head.

Here are some examples of activities children will be expected to do. You could help your child by working on these at home:

- I can explain and represent how I know that 71.7 m is greater than 71.57 m, explain why it is easy to subtract 0.7 m from 71.7 m and why rounding both numbers to the nearest metre gives the same result, suggesting other numbers that would also round to 72 m.

- I can explain and represent the relationship between 71.7 and 717.

- I can choose pairs of numbers from a table of data showing distances between major cities in the world and explain and justify my decisions for: pairs of numbers where I would use a mental method to find the difference or total; and pairs of numbers where I would use a written method to find the difference or total.

- I can explain and represent why the solution to $83 \div 6$ is different in the two contexts: "83 people need to travel in taxis that each carry 6 people, how many taxis do you need?" and "83 eggs have been collected, how many boxes of 6 can be filled?"

