Multiplication and Division Home Information Sheet

Second Level (b)

I can use my knowledge of rounding to routinely estimate the answer to a problem then, after calculating, decide if my answer is reasonable, sharing my solution with others. NMU 2-01a

Having determined which calculations are needed, I can solve problems involving whole numbers using a range of methods, sharing my approaches and solutions with others. NMU 2-03a

Having explored the patterns and relationships in multiplication and division, I can investigate and identify the multiples and factors of numbers. MTH 2-05a

Over the next few weeks we are going to be learning to:

New learning 6,7, 8 and 9 x tables

- Understand the inverse relationships of addition/subtraction and multiplication/division
- Know and understand the effect of multiplying and dividing by 0, 10, 100, 1000
- Appreciate that there are several ways to solve the same problem and that the nature of the problem may determine the strategy chosen
- Use existing knowledge of multiplication tables to derive new facts, e.g. 7 x 6 = (5 x 6) + (2 x 6)**;** 9 x 4 = (10 x 4) - 4
- Recall multiplication and related division facts quickly and accurately
- Select and apply the appropriate operation or process in calculations, justifying their choice
- Use a range of mental and written strategies for addition, subtraction, multiplication and division
- Use their understanding of inverse relationships to find related facts to simplify calculations, e.g. to find 40 ÷ 5 think, "How many 5s make 40?
- Use commutative, associative and distributive properties to simplify mental calculations, e.g. 4 x 36 = (4 x 30) + (4 x 6)
- Calculate exact answers using a range of mental or written methods
- Compare actual answers to estimates and judge whether the answer is reasonable
- Set their own criteria for sorting sets of numbers, explaining and justifying their choices
- Know the meaning of the terms multiple and factor

Here are some ideas of how you can help me at home!

Money grabbing - Ask your child to collect a pile of small coins (about four 10p coins and some 1p, 2p and 5p coins). He/she should then grab some of the coins and write how much they grabbed, e.g. 38p. If this is a multiple of 2, 3, 4, 5, 6, 7, 8, 9 or 10 they score a point for each, e.g. 24p would score 5 points (it is a multiple of 2, 3, 4, 6 and 8), but 17p would score no points. He/she should record their findings in their Homework Jotter.

Linking tests Ask your child to write three rules that show the relationships between some of the tests of divisibility, e.g. 'If a number is divisible by 9 it will also be divisible by 3' or 'If a number is divisible by 3 and by 2 it will also be divisible by 6'. They should provide at least one example for each rule.

Newspaper search - Ask your child to cut out multiples of 1000 from newspapers or magazines (e.g. house or car prices) and stick them into their Homework Jotters. For each number he/she should write a calculation (using × 10/100/1000 or ÷ 10/100/1000) involving that number, e.g. 564 × 1000 = **564 000** or **47 000** ÷ 1000 = 47.

Here are some websites that you may find useful to use with me!

Website 1 - http://www.multiplication.com/games/all-games A wonderful selection of multiplication games with varying degrees of challenge.

Website 2 - http://www.fun4thebrain.com/Division/luckydiv.html Practise division facts in this colourful game.

Website 3 - http://www.kidsnumbers.com/long-division.php Use this website to help with your written division calculations.