A little bit of Maths EVERY DAY ...

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
MARCH 2017		**1** Calculate: $$1\frac{2}{5} \div \frac{3}{4}$$	**2** Which is faster? 80 km per hour or the speed I am travelling at if I do 15 km in 10 minutes	**3** Calculate 0.2 x 0.3 1.2 ÷ 0.2	**4** I travel from "A" to "B" at an average speed of 50 mph. I then travel from "B" to "C", which is 210 miles at an average speed of 70 mph. My total journey time is 5 hours. What is my average speed for the total distance travelled from "A" to "C"?	**5**
6 Factorise fully $4ab + 12a^2b^2$	**7** Work out the value of $(3 \times 10^8) \div (6 \times 10^7)$	**8** Solve $2x^3 = 128$	**9** Write these in size order - from smallest to largest $2^5 \quad 4^3 \quad 16 \quad 64^0$	**10** Simplify fully $$\frac{m^{0.5} \times m^6}{m^3}$$	**11** A TV is reduced by 30% in a sale. The sale price of the television is £350 Work out the normal price of the television.	**12**
13 Robert has a biased coin; the probability that the coin will land on heads is 0.6. What is the probability of flipping the coin three times and getting a tails all three times?	**14** Without a calculator, work out: 349 x 54	**15** I invest some money in account that pays compound interest of 5% per annum. How many years does it take to double my money?	**16** List all the factors of 32	**17** What is the value of n? $2^3 \times 2^n = 2^9$	**18** An adult meal costs £4.50 and a childs meal costs £2.75 Will £500 be enough to pay for meals for 84 adults and 42 children?	**19**
20 Simplify $2a^2 + 2(3a - 5)$	**21** Draw a venn diagram representing the below: $\mathcal{E}$ = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10} A = {even numbers} B = {multiples of 3}	**22** Calculate: $$3\frac{3}{5} \times 2\frac{1}{7}$$	**23** Expand and simplify (x + 4)(x - 6) 4xy(2x + 3y)	**24** The length, L cm, of a pencil is measured as 17cm correct to the nearest centimetre. What is the error interval of L?	**25** Adam thinks of a number. He divides his number by 6 He then adds 13 His answer is 16 What number did Adam first think of?	**26**
27 Expand & simplify (3x + y)(x + 2y)	**28** Simplify 4e + 6f + 3e – 2f	**29** Lois and Robert share a sum of money in the ratio 2 : 5 Lois has £45 more than Robert. How much does Robert have?	**30** Estimate $$\frac{6.8 \times 191}{0.051}$$	**31** Find the fourth term of this quadratic sequence: $n^2 + 3n - 2$	**REMEMBER:** The best way to revise maths is to "do Maths"!	