Rocket Card Year 5

Challenge 1:	Challenge 2:	Challenge 3:	Challenge 4:	Challenge 5:
a) Adding fractions with the same and different denominators	a) Subtracting fractions with the same and different denominators	a) Multiplying pairs of fractions b) Multiplying fractions by a whole number	a) Dividing pairs of fractions b) Dividing pairs of fractions by a whole number	a) Mixed fraction problems

Congratulations! You have completed all of the KS1 and KS2 Mental Maths objectives. Now it is time for you to face your toughest challenge... written arithmetic!

Captain
Mixed tests for all steps

Chief Navigator	Pilot	First Mate
Mixed steps 1-3	Mixed steps 4-6	Mixed steps 7-9

Step 8
a) Recognise and use square numbers up to 12 x 12 *(i.e. 4² = 4 x 4 = 16)*
b) Use knowledge of fractions to find 10%, 20%, 25% and 50% of a number with the answer being a whole number *(i.e. 25% = ¼, so 25% of 80 = 80 ÷ 4)*
c) Mentally identify whether a number is a prime number to 50 *(i.e. use knowledge of times tables)*

Step 7
a) Use times table facts to divide other numbers mentally *(i.e. 640 ÷ 8 = ?, 7.2 ÷ 9 = ?)*
b) Extend simple linear sequences for fractions and decimals *(i.e. 0.7, 1.4, 2.2… 1 ¾, 2, 2 ¼ …)*
c) Use knowledge of place value to double and halve decimal numbers *(i.e. double 4.2, half of 12.6)*

Step 6
a) Count forwards in multiples of 25, including not starting at zero *(i.e. 200, 225, 250…)*
b) Use times table facts to multiply other numbers mentally *(i.e. 7 x 0.8 = ?, 50 x 6 = ?)*
c) Find complements of 1 *(i.e. 0.73 + ? = 1)*

Step 5
a) Count forwards in multiples of 50, including not starting at zero *(i.e. 350, 400, 450…)*
b) Count forwards in all multiples of 2, 3, 4, 5, 6, 7, 8, 9 and 10 *(i.e. 7, 14, 21…)*
c) Use times table facts to divide larger whole numbers mentally *(i.e. 480 ÷ 6, 92 ÷ 4)*

Step 4
a) Count forwards and backwards in steps of thousands to 1,000,000 *(i.e. 4,000, 8,000, 12,000…/7,000, 14,000…)*
b) Count forwards and backwards with positive and negative whole numbers *(i.e. the temperature is 12ºC in London and -15ºC in Moscow. What is the difference?)*
c) Recall division facts for all times tables to 12 x 12 *(consolidation from years 1-4)**

Step 3
a) Use times table facts to multiply larger numbers mentally *(i.e. 15 x 7 = 10 x 7 + 5 x 7, 70 x 6)*
b) Given a number, add and subtract 10/100/1,000 to 100,000 *(i.e. what is 1,000 more than 23,751?)*
c) Count forwards and backwards in steps of tens of thousands to 1,000,000 *(i.e. 30,000, 60,000, 90,000)*

Step 2
a) Divide numbers by 10 and 100 to 2 decimal places *(i.e. 34.2 ÷ 100, 1.5 ÷ 100)*
b) Add three 2-digit numbers together mentally *(i.e. 56 + 25 + 19)*
c) Double and halve 3 and 4-digit numbers using knowledge of partitioning/place value *(i.e. double 246 = double 200 + double 40 + double 6, Half of 528 = half of 500 + half of 20 + half of 8)*

Step 1
a) Recall multiplication facts for all times tables to 12 x 12 *(consolidation from years 1-4)**
b) Find all factor pairs for a given number *(i.e. factors of 24 are 1, 2, 3, 4, 6, 8, 12 and 24)*
c) Multiply numbers by 10 and 100 to 2 decimal places *(i.e. 2.45 x 100, 0.12 x 100)*

* Consolidate times table facts throughout the year

Each child will be told which objective to begin with. These will then be taught in class as mental maths starters alongside home learning.	At the end of each week, the children will sit a short 10 question Rocket Test.	For a child to move on to the next step, they need to show that they are able to meet each of the objectives within the step that they are working on.	When a step is completed, each child will receive a certificate during Rewards Assembly and a prize.	Please support your child at home and contact your child's class teacher if you have any questions.