

LIFT OFF!

Captain

Mixed tests for all steps

Chief Navigator

Mixed steps 1-3

Pilot

Mixed steps 4-6

First Mate

Mixed steps 7-9

Step 9

- Halve three-digit numbers using knowledge of partitioning and place value (i.e. $\text{half of } 846 = \text{half of } 800 + \text{half of } 40 + \text{half of } 6$)
- Mentally subtract three or more 3-digit numbers (i.e. $645 - 222 - 113 = ?$)
- Multiply and divide numbers to 2 decimal places by 10 and 100 (i.e. 3.47×100 , $23 \div 10$)

Step 8

- Derive division facts for the 12 times table to the 12th multiple (i.e. $48 \div 12 = ?$)
- Double three-digit numbers using knowledge of partitioning and place value (i.e. $\text{double } 243 = \text{double } 200 + \text{double } 40 + \text{double } 3$)
- Mentally add three or more 3-digit numbers together (i.e. $345 + 212 + 136 = ?$)

Step 7

- Recall times table facts for the 12 times tables to the 12th multiple (i.e. *what is 8×12 ?*)
- Add and subtract negative numbers between 10 and -10 (i.e. *the temperature is 4°C and falls by 7°C .*)
- Find pairs of decimals that total 1 (i.e. $0.35 + \underline{\quad} = 1$, $1 - 0.43 = ?$)
- Use known multiplication and division facts to derive other related facts (i.e. $4 \times 7 = 28$, $40 \times 7 = 280$, $280 \div 7 = 40$)

Step 6

- Derive division facts for the 11 times table to the 12th multiple (i.e. $66 \div 11 = ?$)
- Multiply and divide numbers by 10 to 1 decimal place (i.e. $7 \div 10 = ?$, $0.6 \times 10 = ?$)
- Count forwards and backwards through zero from 10 to -10 (i.e. -2, -1, 0, 1, 2 etc.)

Step 5

- Recall times table facts for the 11 times tables to the 12th multiple (i.e. *what is 7×11 ?*)
- Derive subtraction facts for multiples of 10 to 1,000 (i.e. $1,000 - \underline{\quad} = 860$)
- Multiply and divide numbers by 10 to 3-digits (i.e. $180 \div 10 = ?$, $64 \times 10 = ?$)

Step 4

- Mentally subtract pairs of 3-digit numbers that are multiples of 10 (i.e. $570 - 240$)
- Given a number, identify the number that is 1,000 more/less than a number to 4-digits (i.e. *1,000 less than 3,623*)
- Derive addition facts for multiples of 10 to 1,000 (i.e. $350 + \underline{\quad} = 1,000$)
- Add 3 or more numbers that total no more than 100 mentally (i.e. $25 + 17 + 13 = ?$)

Step 3

- Recognise and use inverse operations/commutativity to derive other related facts for the 2, 3, 4, 5, 6, 8 and 10 times table (i.e. *use $4 \times 6 = 24$ to calculate $6 \times 4 = 24$, $24 \div 6 = 4$, $24 \div 4 = 6$*)
- Mentally add pairs of 3-digit numbers that are multiples of 10 (i.e. $430 + 350$)
- Recall factor pairs of numbers using known times tables (i.e. *6 and 4 are factors of 24, 12 and 2 are factors of 24*)

Step 2

- Count forwards and backwards in multiples of 25 to 1,000 (i.e. 100, 125, 150, 175 etc.)
- Recall all multiplication and division facts for the 6, 7 and 9 times tables to the 12th multiple (i.e. $6 \times 7 = ?$, $63 \div 9 = ?$)
- Recall complements of 1 for both fractions and decimals (i.e. $0.2 + \underline{\quad} = 1$, $\frac{1}{4} + \underline{\quad} = 1$)

Step 1

- Count forwards and backwards in multiples of 50 to 1,000 (i.e. 50, 100, 150, 200 etc.)
- Given a number, identify the number that is 100 more/less than a number to 4-digits (i.e. *100 more than 2,345*)
- Double 3-digit numbers for multiples of 10 (i.e. $\text{double } 220 = ?$)

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.