Hi Yachts!

Mental Maths

Choose the best option for you then solve the problem in your head:

Option 1: How much is $\frac{1}{4}$ of 20? How much is $\frac{2}{4}$ of 20?

Option 2: How much is $\frac{1}{9}$ of 90? How much is $\frac{6}{9}$ of 90?

Option 3: Which fractions are equivalent to $\frac{1}{4}$?

Use the RUCSAC method to solve the problems:

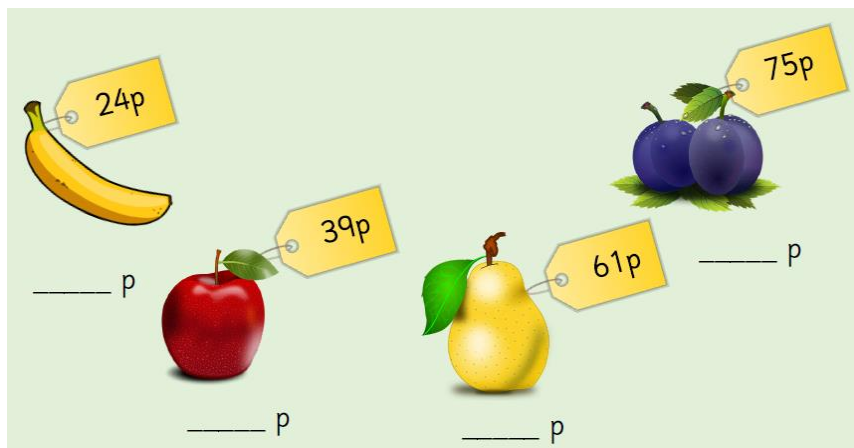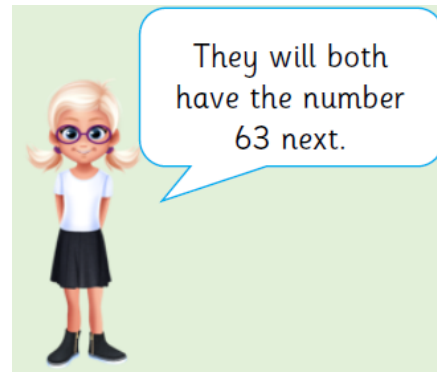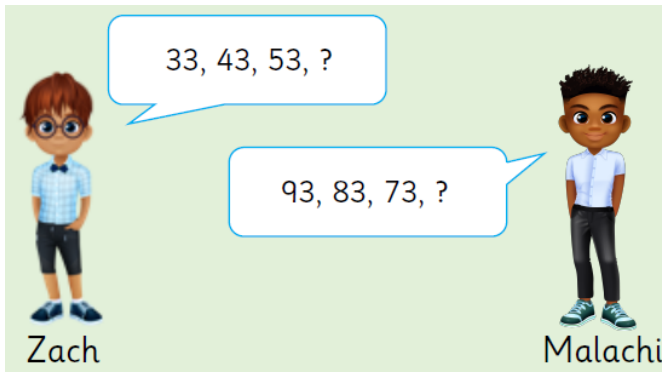|		
	Read	Read the question carefully.
	Underline	Underline or write down the keywords and numbers.
	Choose	Choose the correct operation (+ - x or ÷) and a mental or written method of calculation (you could use diagrams).
	Solve	Solve it! Make sure you follow the steps carefully.
	Answer	Check that you have answered the question properly. What did you need to find out in the first place?
	Check	Check your answer. Use the inverse calculation or another checking technique (was it close to your estimate?)

---

1. Each piece of fruit is reduced by 10p. What are their new prices?

24p

75p

39p

61p

_____ p

_____ p

_____ p

_____ p

2. Zach and Malachi are counting:

Zach: 33, 43, 53, ?

Malachi: 93, 83, 73, ?

They will both have the number 63 next.

Is the girl correct? How do you know?

3. Tia has some colouring pencils for her class. She gets a new pack of 10 every day. How many colouring pencils will she have after 5 days?

4. When I add 100 to any number, I only need to change the hundreds digit.

   a. Is this true or false?

   b. Prove it with three calculations.

5. 10 more than my number is 100 less than 320.

   a. What is my number? Tip: Start by solving 100 less than 320

   b. Can you write your own problem like this?

6. I think of a number. I add 10 and then take away 100. My answer is 350. What is my number? Tip: Use the inverse operations to help you.

Challenge

7. Fill in the boxes by finding the patterns.

8. Lucy thinks of a number. She says, "The number 1000 more than my number has the digits 1,2,3 and 4. The number 1000 less uses the digits 1, 3 and 4." What number is Lucy thinking of?