Name:

Teacher/Class:

Date:

This is a diagnostic test – that means it is designed to find out what you already understand as well as where you get stuck.

Hopefully some of the questions will be ones that you have not thought about before or are a bit too hard. When this happens, please give an answer or some thoughts even if you are just guessing.

Please draw a star \* to show us when the questions are tricky.

This test is to help us to work out the best way to teach you – it is not for your report cards.

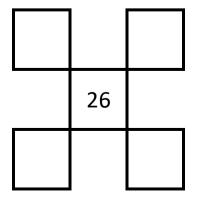
### Section 1: Place Value

 Draw a tens frame or tens block (MAB block). If you don't know what this is, ask your teacher to show you one first. Have a few goes if you need to.

2. Put these numbers in their right spots on the number line below: 2, 3, 8

/
10
TO

3. Some numbers are missing from the hundreds chart below. Fill them in.



4. Put these numbers onto the line below in their right spots: 10, 100



5. Draw these amounts (e.g. that number of blocks):

### 18

## 18.7

6. Write a number in each box that would be in that position on the number line:

200		1200
<	400	> 1200

### Section 2: Visualising operations

7. Draw a picture for each of the following operations to show what they mean, if they were made out of squares. For example, you might draw a number of squares, then cross some out or add extras in a different colour to show the operation.

Do **not** just draw the answer – we want to see what you understand about the operations. Have as many goes as you want and remember to draw a \* on the tricky ones.

5 + 4

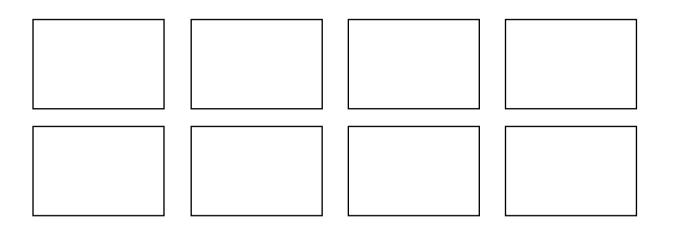
# 5 - 4

5 x 4

5÷4

#### Section 3: Visualising fractions and decimal numbers

8. Draw thirds on the following rectangles in as many ways as you can. Cross off any that don't work. Put a question mark on any that you are unsure of.



- 9. Find one half, one quarter and one third of each of the following numbers if possible. If you can't do it, put a cross next to the number and explain why you think it can't be done.
  - 10: 24: 9:
  - 8:

10. Put these numbers in their right spots on the number line below:

