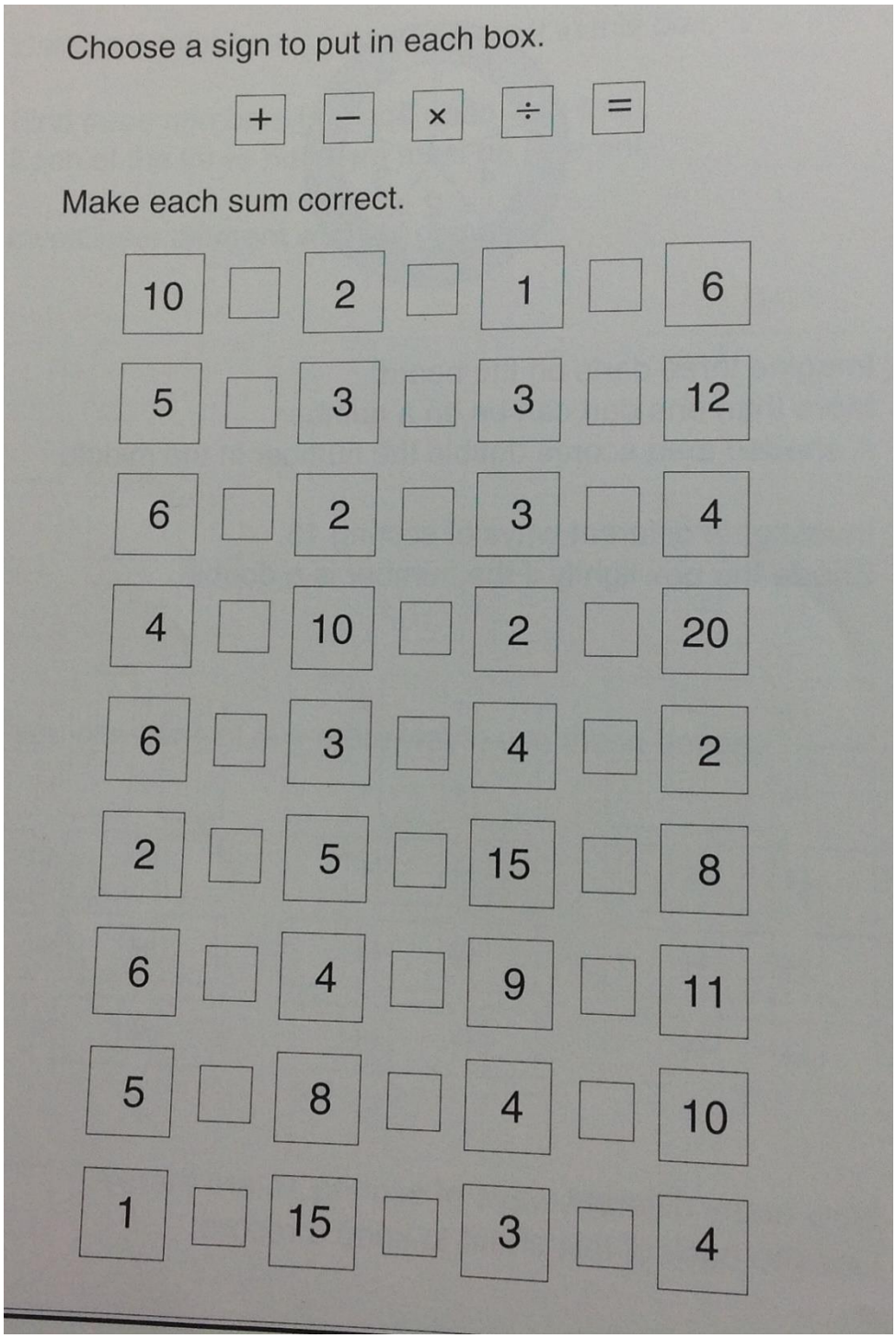
Tuesday 23rd June y5

Today we are going to use mental maths and logical thinking to solve

mathematical puzzles:

First of all read these mathematical sentences from left to right and work out the correct signs and the correct positions.



Choose a sign to put in each box.

+ − × ÷ =

Make each sum correct.

10 □ 2 □ 1 □ 6

5 □ 3 □ 3 □ 12

6 □ 2 □ 3 □ 4

4 □ 10 □ 2 □ 20

6 □ 3 □ 4 □ 2

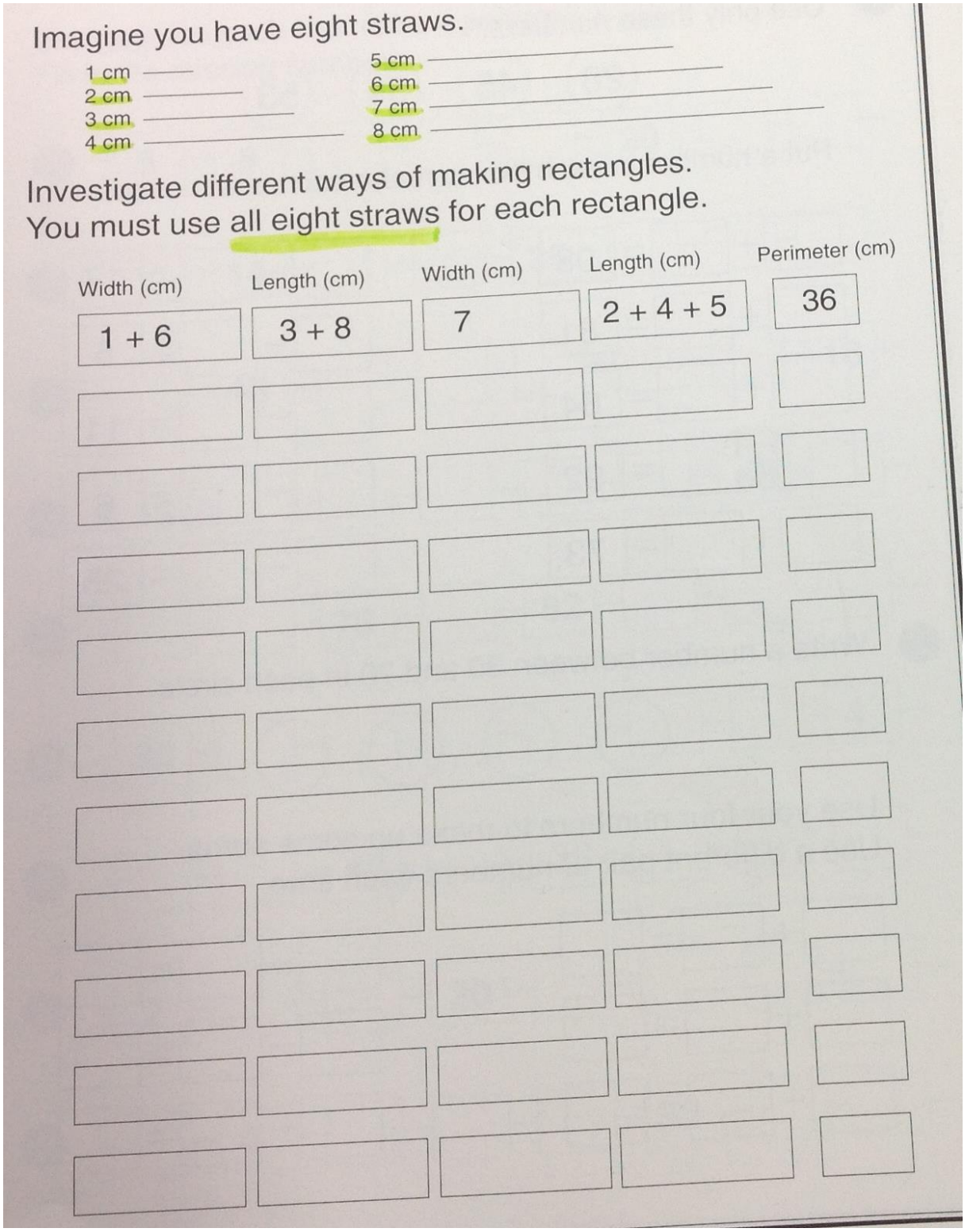
2 □ 5 □ 15 □ 8

6 □ 4 □ 9 □ 11

5 □ 8 □ 4 □ 10

1 □ 15 □ 3 □ 4

Now think carefully about including each of the 8 straws below.



Imagine you have eight straws.

1 cm
2 cm
3 cm
4 cm
5 cm
6 cm
7 cm
8 cm

Investigate different ways of making rectangles.
You must use all eight straws for each rectangle.

Width (cm)	Length (cm)	Width (cm)	Length (cm)	Perimeter (cm)
1 + 6	3 + 8	7	2 + 4 + 5	36

Scroll down for answers...

5 Signs	Multiplication and division to 5×5. For example, $10 \div 2 + 1 = 6$ $5 \times 3 - 3 = 12$ $6 \times 2 = 3 \times 4$ $4 \times 10 \div 2 = 20$ $6 = 3 \times 4 \div 2$ $2 + 5 = 15 - 8$ $6 - 4 + 9 = 11$ $5 \times 8 \div 4 = 10$ $1 = 15 \div 3 - 4$

Perimeters	Sum of a series of single digits to total 18. The sum of the digits is 36 (the perimeter) so length + width = 18. Many solutions are possible: for example, it is possible to make $3 \times 15, 4 \times 14, 5 \times 13, 6 \times 12, 7 \times 11, 8 \times 10, 9 \times 9$ rectangles. Some can be made in more than one way: for example, the four sides of the 5×13 rectangle can be either 1+4, 6+7, 5, 2+3+8 or 2+3, 6+7, 1+4, 5+8.