Y4 Learning at home activity sheet #4

Problem 1:

The ages of a father and son add up to 55.
The age of the dad is the age of the son with the two digits reversed.
How old could they be?

Problem 2:

If you write out all the numbers from 1 to 100, how many 9s do you write?

Problem 3:

There are 12 biscuits in a packet, and 15 lollies in a bag. If a group of friends can share both evenly with none left over, how many friends are there?

Project:

Choose one number with just one digit, one number with two digits, and one number with three digits. Also choose a shape.

Write a story that uses all three numbers and the shape.
You may want to include a picture.

Quick questions:

1. What is 9 + 0?
2. What number is one more than 129?
3. Is 11 an odd number?
4. What is half of 24?
5. Write $\frac{1}{2}$ in words.
6. What number is one less than 220?
7. How many $5 notes does it take to make $10?
8. 13 x 10 = __?
9. Write the number 113 in words.
10. Which of these would you use to measure an amount of liquid: metres, litres, or kilograms?

Number facts:

Cut out the cards on the attached sheet and shuffle them.
How fast can you match each equation with the correct answer?
Try to beat your time.

Shapes with four sides:

Draw as many different four-sided shapes as you can.
Which ones can you write the name of?

nzmaths.

Learning at home: Notes for whānau

When your child finishes each activity, ask them to add a mouth to the face to show how they felt about that activity.

Problem 1:

You can solve this problem by listing the possible ages. Start from 10 as the son's age, since it says they have two digits, and list the pairs of numbers that add to 55:

10 and 45	16 and 39	22 and 33
11 and 44	17 and 38	23 and 32
12 and 43	18 and 37	24 and 31
13 and 42	19 and 36	25 and 30
14 and 41	20 and 35	26 and 29
15 and 40	21 and 34	27 and 28

There are two pairs that have the same digits reversed (highlighted). If the son was 23 and the father was 32 the father would only have been 9 when his son was born, so their ages must be 14 and 41.

Problem 2:

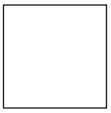
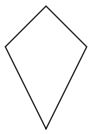
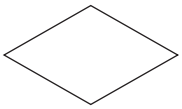
There are ten 9s in the ones place of numbers between 1 and 100:
9, 19, 29, 39…
There are also ten 9s in the tens place of the numbers between 90 and 99:
90, 91, 92, 93…
So there are a total of twenty 9s in the numbers from 1 to 100

Problem 3:

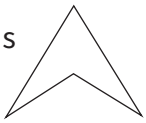
A packet of 12 biscuits shares evenly between 2, 3, 4, or 6 people.
A bag of 15 lollies shares evenly between 3 or 5 people.
If both share evenly between the group of friends, there must be three friends.

Shapes with four sides:

Shapes with four sides are called quadrilaterals. There are many kinds of quadrilateral. Your child is unlikely to know them all. The most common are:

- Square: All four sides the same length and all angles 'square'. 
- Rectangle: Two pairs of sides the same length, and all angles 'square'. 
- Kite: A pair of shorter sides beside each other, and a pair of longer sides beside each other. 
- Diamond: All four sides the same length, but not necessarily 'square' angles. Often drawn with corners at the top and bottom. Also called a rhombus. 

Some they are less likely to know the names for include:

- Parallelogram: Two pairs of parallel sides, but not necessarily 'square' angles. 
- Trapezium: Only one pair of parallel sides. 
- Arrowhead: Two pairs of equal length sides, with the shorter ones pointing in towards the middle of the shape. 

Quick questions:

1. 9
2. 130
3. Yes
4. 12
5. One half
6. 219
7. 2
8. 130
9. One hundred and thirteen
10. Litres

2 + 9	11	3 + 8	11
3 + 9	12	4 + 7	11
4 + 8	12	4 + 9	13
5 + 6	11	5 + 7	12
5 + 8	13	5 + 9	14
6 + 7	13	6 + 8	14
6 + 9	15	7 + 8	15
7 + 9	16	8 + 9	17