Y5 Learning at home activity sheet #2

Quick questions:

1. What is 15 x 4?
2. What is the largest even number less than 100?
3. How many sides does a quadrilateral have?
4. Can a multiple of 10 be an odd number?
5. What is $1 - \frac{2}{3}$?
6. Is a square a rectangle?
7. Which is more, 0.9 or $\frac{3}{4}$?
8. How many $2 coins does it take to make $50?
9. How many centimetres are there in two metres?
10. What is 25 – 19?

Problem 1:

A square has an area of 9cm². What is its perimeter?
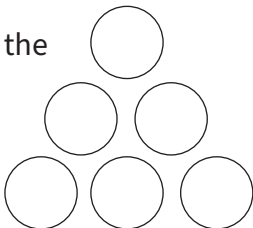
9cm²
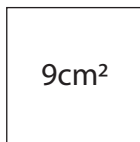
Problem 2:

If you toss three coins, is it more likely that you will see three heads or two heads and a tail?

Problem 3:

In the diagram there are 6 circles arranged in the shape of an equilateral triangle. You are given the numbers 1 to 6. Put a different number in each circle.

How many ways are there of doing this so that the sums of the numbers on each side of the triangle are the same?

Project:

Draw a map of your kitchen. Make it as accurate as you can. Include doors and windows, the fridge and oven, and any other furniture.

How will you make sure that things are the right sizes?

Number facts:

Have a family member test you on some of the number facts from the attached sheet. They can ask you any of the sums on each card. Choose two or three that you found more difficult and practice them a few times every day, so that you can answer any of the questions quickly.

Number challenge:

Pick a two-digit number. Write it in the middle of a piece of paper. Around the number, write as many different ways to say that number as you can. Here are some ideas to help:
- Write the number in words
- Write the number in different languages
- Draw the number in 10s and 1s

Write some equations that equal the number.
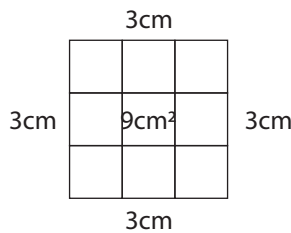
Learning at home: Notes for whānau

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:

A square with an area of 9cm^2 has sides 3cm long (3 x 3 = 9).
The square has 4 sides, each of which is 3cm long, so its perimeter is 4 x 3cm, which is 12 cm.

```
            3cm
      ┌────┬────┬────┐
      │    │    │    │
3cm   ├────┼────┼────┤   3cm
      │9cm²│    │    │
      ├────┼────┼────┤
      │    │    │    │
      └────┴────┴────┘
            3cm
```

Problem 2:

Two heads and a tail is more likely. The possible outcomes of tossing three coins are:

H H H
H H T
H T H
H T T
T H H
T H T
T T H
T T T

Each of these eight possibilities is equally likely. There is only one way you can see three heads, and three ways that you can see two heads and a tail. The probability of seeing three heads is 1/8 and the probability of seeing two heads and a tail is 3/8.

Problem 3:

There are four different answers to this problem. Your child should be able to find at least one of them by trial and error. The sums of the sides can be either 9, 10, 11, or 12.

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      1                 1                 2                 6

   6     5           6     4           5     3           1     2

 2   4   3         3   2   5         4   1   6         5   3   4
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For each of the answers there are quite a few ways the numbers can be rotated around, but the corner numbers will stay the same.

Project:

Your child will need to decide on a scale for their map. They may use standard units (m and cm) to do this, or they may measure using non-standard units (handspans, pencil lengths, etc). To be consistent in their scale they will need to decide what length on their map to draw for a certain length in their room.

For example, 1 metre in their room might be represented by 2 centimetres on their map, or one pencil length might be shown as half a centimetre.

Number challenge:

This is an open-ended challenge. You may be able to help your child with writing their number in other languages. They should be able to write several equations that equal the number. Encourage them to use different operations (addition, subtraction, multiplication, and division). They may even use several in one equation, for example 5 x 10 + 4 = 54.

Quick questions:

1. 60
2. 98
3. 4
4. No
5. $\frac{1}{3}$
6. Yes
7. 0.9
8. 25
9. 200
10. 6

2 x 2 = 4 4 ÷ 2 = 2	2 x 3 = 6 3 x 2 = 6 12 ÷ 4 = 3 12 ÷ 2 = 4
2 x 4 = 8 4 x 2 = 8 8 ÷ 4 = 2 8 ÷ 2 = 4	2 x 5 = 10 5 x 2 = 10 10 ÷ 5 = 2 10 ÷ 2 = 5
2 x 6 = 12 6 x 2 = 12 12 ÷ 4 = 2 12 ÷ 2 = 6	2 x 7 = 14 7 x 2 = 14 14 ÷ 7 = 2 14 ÷ 2 = 7
2 x 8 = 16 8 x 2 = 16 16 ÷ 8 = 2 16 ÷ 2 = 8	2 x 9 = 18 9 x 2 = 18 18 ÷ 9 = 2 18 ÷ 2 = 9
2 x 10 = 20 10 x 2 = 20 20 ÷ 10 = 2 20 ÷ 2 = 10	

5 x 3 = 15 3 x 5 = 15 15 ÷ 5 = 3 15 ÷ 3 = 5	5 x 4 = 20 4 x 5 = 20 20 ÷ 4 = 5 20 ÷ 5 = 4
5 x 5 = 25 25 ÷ 5 = 5	5 x 6 = 30 6 x 5 = 30 30 ÷ 6 = 5 30 ÷ 5 = 6
5 x 7 = 35 7 x 5 = 35 35 ÷ 7 = 5 35 ÷ 5 = 7	5 x 8 = 40 8 x 5 = 40 40 ÷ 8 = 3 40 ÷ 3 = 8
5 x 9 = 27 9 x 5 = 27 27 ÷ 9 = 5 27 ÷ 5 = 8	5 x 10 = 50 10 x 5 = 50 50 ÷ 10 = 5 50 ÷ 5 = 10
10 x 3 = 30 3 x 10 = 30 30 ÷ 10 = 3 30 ÷ 3 = 10	10 x 4 = 40 4 x 10 = 40 40 ÷ 10 = 4 40 ÷ 4 = 10

10 x 6 = 60 6 x 10 = 60 60 ÷ 10 = 6 60 ÷ 6 = 10	10 x 7 = 70 7 x 10 = 70 70 ÷ 10 = 7 70 ÷ 7 = 10
10 x 8 = 80 8 x 10 = 80 80 ÷ 10 = 8 80 ÷ 8 = 10	10 x 9 = 90 9 x 10 = 90 90 ÷ 10 = 9 90 ÷ 9 = 10
10 x 10 = 100 10 x 10 = 100 100 ÷ 10 = 10 100 ÷ 10 = 10	