

# Y4 Learning at home activity sheet #1

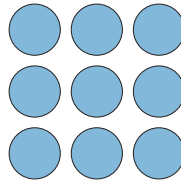
## Problem 1:

The Sloppy Ice Cream Dairy has four flavours of ice cream: vanilla, strawberry, chocolate and hokey pokey. How many different ways can you choose two different flavours to have in the cone?

## Problem 2:

Using the numbers 1-9 put a different number in each circle so that the sum of the numbers on each side are:

- All different
- All the same



What is the biggest and smallest side sums that you can make?

## Problem 3:

A garden is a rectangular shape. The measurement around the perimeter (the outside edge) is 36 metres. Draw what the garden plot might look like and write the measurements on each side.



## Number facts:

Have a family member test you on 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.



## Quick questions:

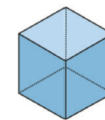
1. One half of my savings is \$10. How much have I saved altogether?
2. What number is one less than 1000?
3. 456 has \_\_ hundreds \_\_ tens and \_\_ ones.
4.  $49 \times 10 = \_\_?$
5. Write the fraction for one quarter.
6. Write the number eight hundred and eleven using digits.
7. Write the number 138 in words.
8. Write down the first 10 odd numbers.
9. What is the largest number you can make using the digits 3, 7 and 2?
10.  $150 + \_\_ = 220$ .



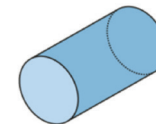
## Project: Finding shapes

Look for these shapes around your home.

Draw a picture of as many as you can find. You might be able to find more than one for some of the shapes.



Cube



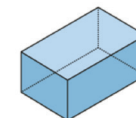
Cylinder



Cone



Sphere



Cuboid



Square-based pyramid

# 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:

There are 6 different pairs of flavours. Most children will use a guess and check approach to start with. Encourage them to think of a way to record the options systematically.

For example, keep one flavour constant and match with the other three:

- Vanilla and strawberry, vanilla and chocolate, vanilla and hokey pokey
- Strawberry and chocolate, strawberry and hokey pokey (note that strawberry and vanilla is the same as vanilla and strawberry, which has already been counted).
- Chocolate and hokey pokey

Usually one scoop goes on top of the other. If you decide that the order of the scoops is important, there are twice as many possibilities.

## Problem 2:

There are many possible answers to the first two parts of the problem. We give some of these below. One way to do the first one might be to try 1 in the top left corner, 2 in the next column to it and 3 in the top right corner. If we keep putting the numbers in systematically, intuition tells us that the top and bottom rows will be different.

1	2	3	(6)
4	5	6	
7	8	9	(24)
(12)	(18)		

To get all the sides the same, you can put the small numbers in the corners and balance them up with the larger numbers. That may take a bit of experimenting as you need to make sure that 1 and 4 are not on the same side.

1	8	3
9	7	5
2	6	4

The largest side that you can make is 24 (9+8+7) and the smallest is 6. (1+2+3)

**Problem 3:**

This is an open-ended problem with nine whole number solutions and an infinite number of fractional solutions. Once your child has found one solution encourage them to find others.

The whole number solutions are:

9, 9, 9, 9

10, 10, 8, 8

11, 11, 7, 7

12, 12, 6, 6

13, 13, 5, 5

14, 14, 4, 4

15, 15, 3, 3

16, 16, 2, 2

17, 17, 1, 1

**Quick questions:**

1. \$20
2. 999
3. 4 hundreds, 5 tens and 6 ones.
4. 490
5.  $\frac{1}{4}$
6. 811
7. One hundred and thirty-eight
8. 1, 3, 5, 7, 9, 11, 13, 15, 17, 19
9. 732
10. 70

Number facts to check:

$2 + 9 = 11$ $9 + 2 = 11$ $11 - 9 = 2$ $11 - 2 = 9$	$3 + 8 = 11$ $8 + 3 = 11$ $11 - 8 = 3$ $11 - 3 = 8$
$3 + 9 = 12$ $9 + 3 = 12$ $12 - 9 = 3$ $12 - 3 = 9$	$4 + 7 = 11$ $7 + 4 = 11$ $11 - 7 = 4$ $11 - 4 = 7$
$4 + 8 = 12$ $8 + 4 = 12$ $12 - 8 = 4$ $12 - 4 = 8$	$4 + 9 = 13$ $9 + 4 = 13$ $13 - 9 = 4$ $13 - 4 = 9$
$5 + 6 = 11$ $6 + 5 = 11$ $11 - 6 = 5$ $11 - 5 = 6$	$5 + 7 = 12$ $7 + 5 = 12$ $12 - 7 = 5$ $12 - 5 = 7$
$5 + 8 = 13$ $8 + 5 = 13$ $13 - 8 = 5$ $13 - 5 = 8$	$5 + 9 = 14$ $9 + 5 = 14$ $14 - 9 = 5$ $14 - 5 = 9$

$$6 + 7 = 13$$

$$7 + 6 = 13$$

$$13 - 7 = 6$$

$$13 - 6 = 7$$

$$6 + 8 = 14$$

$$8 + 6 = 14$$

$$14 - 8 = 6$$

$$14 - 6 = 8$$

$$6 + 9 = 15$$

$$9 + 6 = 15$$

$$15 - 9 = 6$$

$$15 - 6 = 9$$

$$7 + 8 = 15$$

$$8 + 7 = 15$$

$$15 - 8 = 7$$

$$15 - 7 = 8$$

$$7 + 9 = 16$$

$$9 + 7 = 16$$

$$16 - 9 = 7$$

$$16 - 7 = 9$$

$$8 + 9 = 17$$

$$9 + 8 = 17$$

$$17 - 9 = 8$$

$$17 - 8 = 9$$