

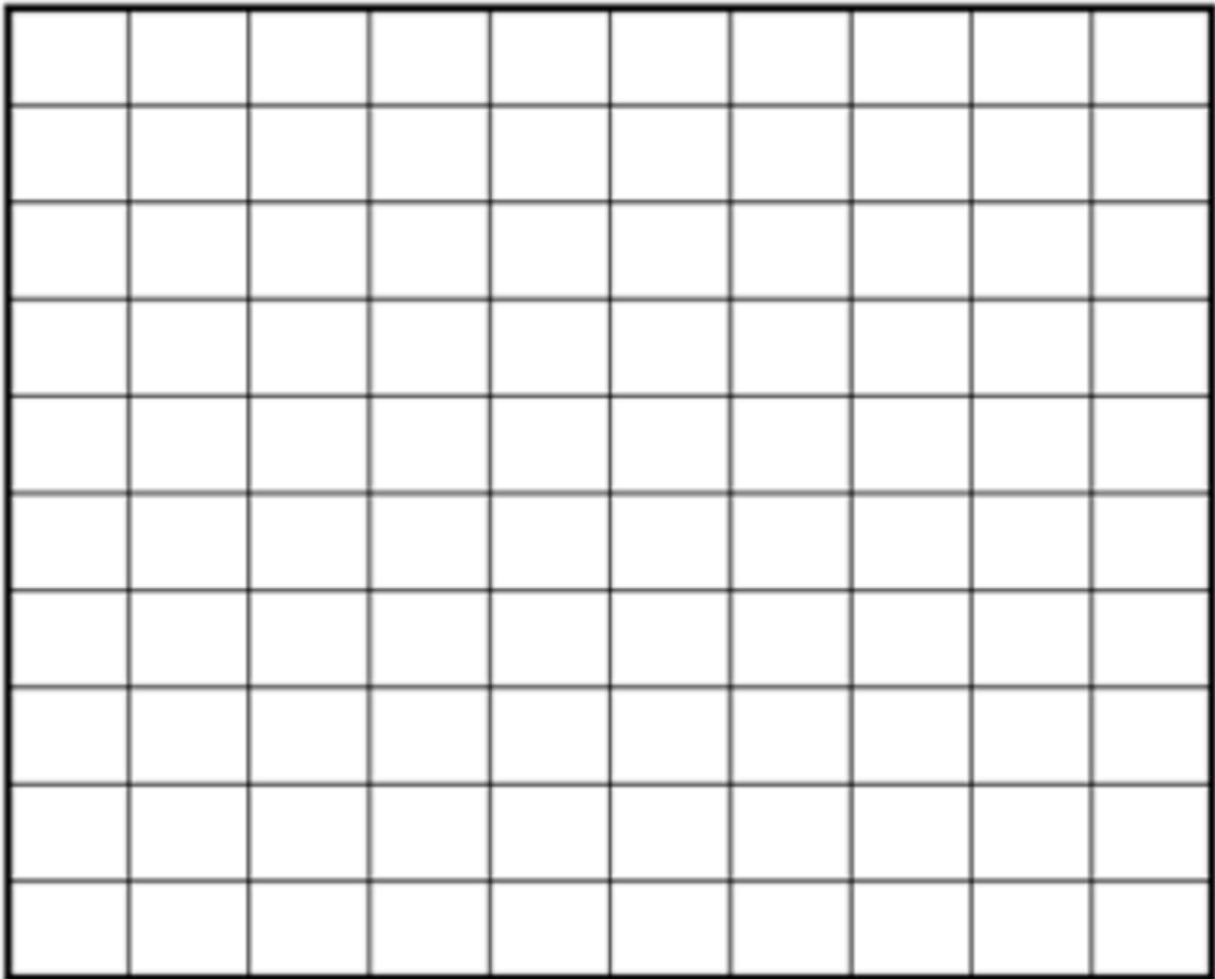


Oakleigh State School presents:

MEASUREMENT WORLD

Task 1 – Measured inside and out

Draw the following rectangles on the grid below, then create them in our world:

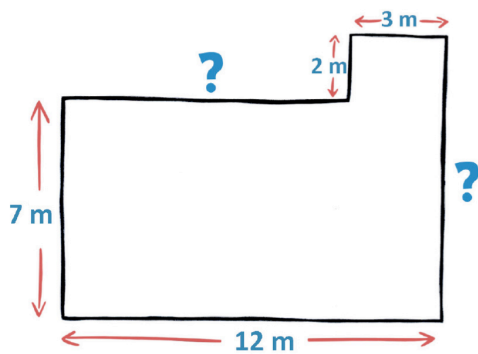


1. Build two different rectangles, both with a perimeter of 18m.
2. Build two different rectangles, both with an area of 12m^2 .
3. Write a sign for all the rectangles that states the perimeter and area using the formulas:
Perimeter = $2(\text{length}) + 2(\text{width})$
Area = length x width

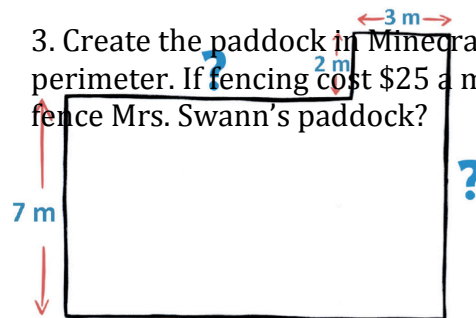
Task 2 – Mrs. Swann’s Farm

The following paddock was made for some pigs on Mrs. Swann’s farm.

1. Write in the unknown lengths.
2. What is the perimeter and area of this paddock? (show all working):



3. Create the paddock in Minecraft using fencing as the perimeter. If fencing cost \$25 a meter how much will it cost to fence Mrs. Swann’s paddock?



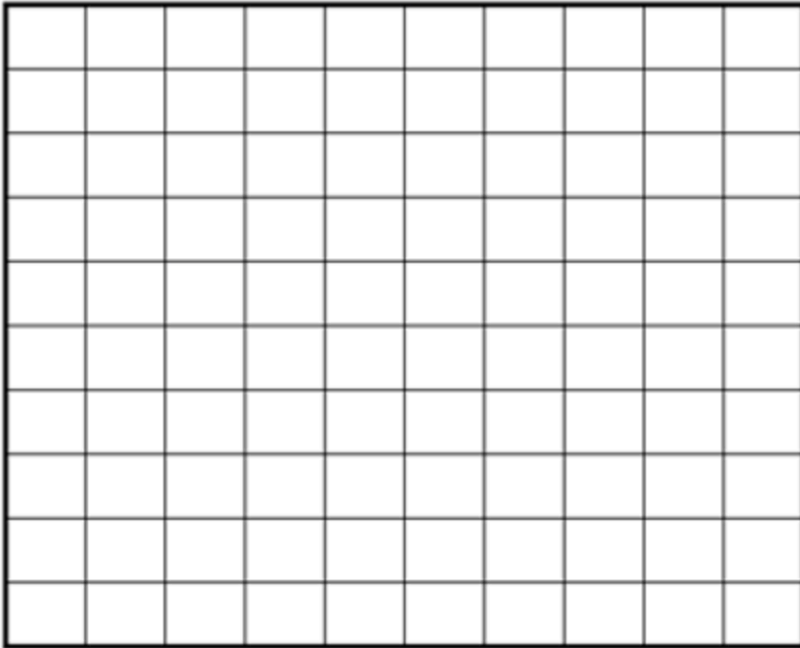
4. Mrs. Swann can have 5 pigs for every 10m² of paddock. How many pigs can she have? Put the pigs in the paddock.

Task 3 – Mrs. Sans’ Garden

The area of Mrs. Sans garden is 64m^2 . The garden has a length of 8m.

1. What is the width of Mrs. Sans garden?

(Use the grid paper below answer the question, include any mathematical working)



2. Half of the garden will be potatoes. What is the width and length of the section of the garden that will be potatoes? (draw this on the grid above)

3. One quarter of the garden will be beans and the other quarter will be strawberries. What area of garden will be strawberries? (draw these sections on the grid)

4. The soil for the garden costs \$4 a square meter. How much will the soil for the garden cost?

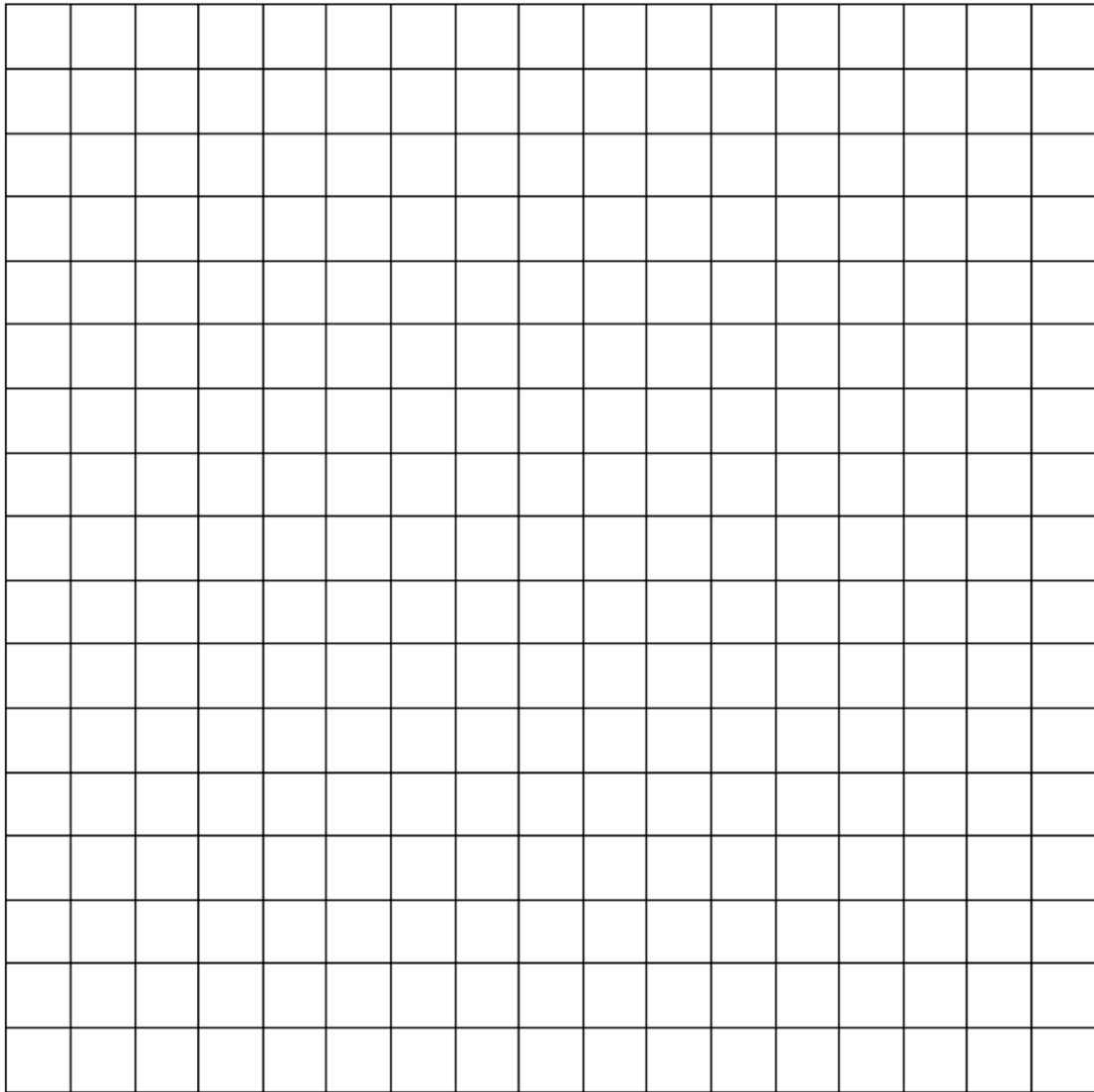


5. Create Mrs. Sans garden in Minecraft. Plant out each section with potatoes, beans and strawberries.

6. Place signs in each section that state the fruit/vegetable that is growing and the area of land it is growing in.

Task 5 – Let's take a swim

Approximately measure the school swimming pool and draw a diagram on the grid paper below.



1. Write in the following measurements:

Length =

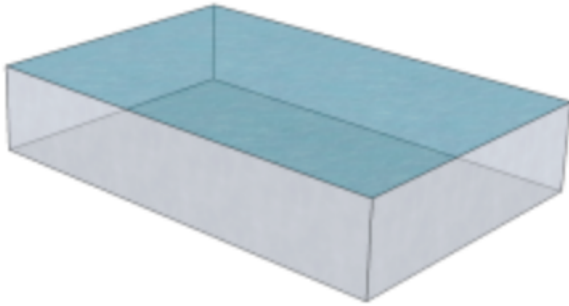
Width =

Depth =

VOLUME

The formula for the Volume of a rectangular prism is:

$$\text{Volume} = \text{Length} \times \text{Width} \times \text{Depth}$$



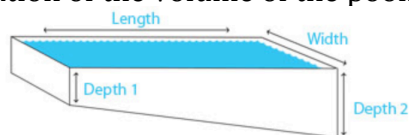
2. Work out the Volume of water in the pool:

3. In Minecraft, create the school swimming pool.

4. Create a sign on the bottom of the pool that shows the volume of the pool. The sign should include the formula.

Challenge

Our pool has a deep end and a shallow end. Figure out a way to make a more accurate estimation of the volume of the pool.



Task 6 – Reflect

Look through the various activities you have completed in this booklet and on Minecraft. Answer the questions below regarding what you have learnt and how Minecraft impacted this unit for you.



1. What is the difference between area and perimeter?

2. How did Minecraft help you understand the mathematical concepts covered in this unit?
