Warlingham School
& Sixth Form College

Wide Horizons
High Aspirations

Year 6-7 Transition

Maths Project

Amazing Plant Investigation

Please watch the video on the link below to help guide you through this amazing activity.

https://www.loom.com/share/acd5d378d8074c9ca103906662d69fc6

Learning Objectives

Can you investigate the way in which certain plants grow?

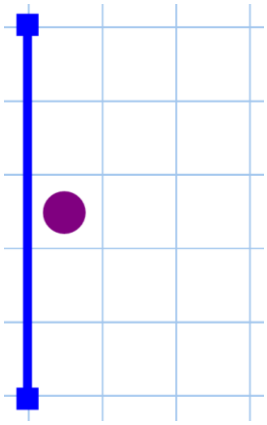
Can you create a general rule for the growth of the plants?

Can you decide what factors can be changed to extend the investigation?

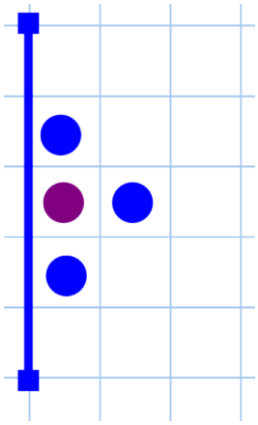
In order to overcome the problems caused by drought (lack of rainfall) and starvation (lack of food), some young scientists have decided to do some research into fast growing plants which needed as little water as possible.

One of them, called Nicola, discovered an amazing seed which works as follows:

If the seed is planted by the edge of a plot of land, which is divided up into small squares, within one hour a plant will be produced.



During the second hour, the roots of the plant will travel into the adjacent squares of land (horizontally and vertically but not diagonally) and produce plants in each of these squares.



After 1 hour 1 plant is produced.

After 2 hours 4 plants are produced.

After 3 hours 9 plants are produced.

Can you continue the pattern and show what will happen for the first 10 hours?

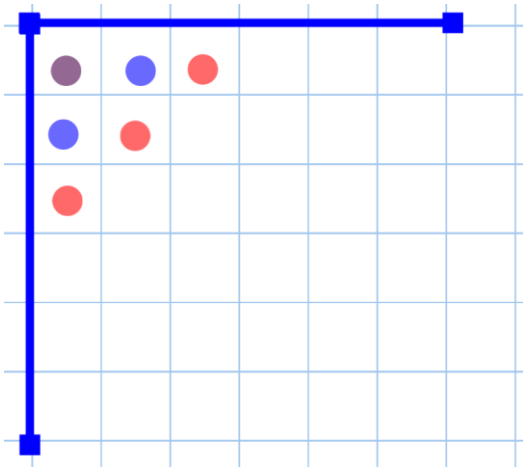
Can you record your results in a table?

Can you explain what you have noticed?

Could you predict how many plants there would be after 15 hours without drawing?

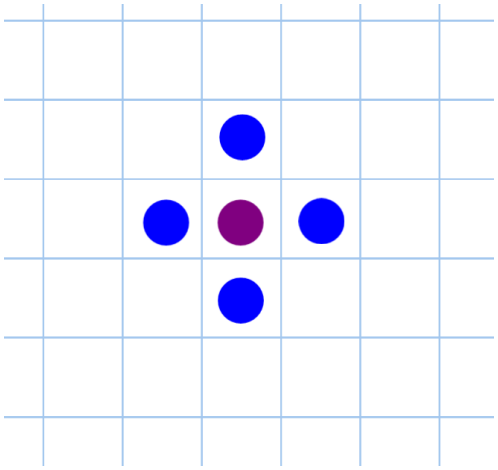
After Nicola's experiment, another scientist, Errol, suggests to plant the first seed in one corner of a plot of land.

Investigate the plant production this time.



Later, the team decided to experiment with the seed planted at the centre of the land.

How would this affect the number of plants produced?



Chris, the Head of the research company is very pleased with the team's results and wants you to continue with the project.

In what ways can they extend their work?

What other factors may they need to consider?

Investigate the plant productions you may go on to consider.