



YEAR 7 MATHEMATICAL LEARNING

Lewis Carroll begins Alice's journey into Wonderland with her following a curious looking rabbit into its burrow and falling for an unexpected period of time. Alice falls until she lands in a very different world to where she is from. To Alice, she was present for the whole journey, she experienced curiosity, the fall and the experience of the new world. For everyone else, they witnessed Alice fall asleep, wake up and struggled to understand how Alice could have experienced what she did.

Motivation in learning starts with curiosity - a desire to understand some hidden truth that is on offer. I'm sure you have been amazed when your child has proudly named 30 different shades of 'green', even though no one was asking.

In Year 7 Mathematics, Mr Andrew Lim has been engaging our high potential learners with a problem designed to spark curiosity. The answer to this math problem may be unclear, only applicable in certain situations, or requiring different content knowledge to come to a solution; but what Mr Lim is really teaching is that Maths in the real world isn't just numbers, but it has to include unknowns, variables, and even human motivation.

Here are some of the problems our high potential learners have been working on:

100 people paid to go to the concert, paying a total of \$95. Adults paid \$10 each, pensioners \$2.50 and children 50 cents.

How many adults, children and pensioners went to the concert?
Carefully explain why there is only one answer.

You Need

- Four [4] toy cars
- Paper to cover unused garages (not supplied)

Your Task

1. Use three [3] cars in three [3] garages.

Find all the ways to park the cars with one car in each garage.

Record all the ways in your journal.

Welcome to PARK 'N' PLACE Garages

--	--	--	--

2. Use four [4] cars in four [4] garages.

Find all the ways to park the cars and record in your journal.

Challenge

Imagine you had five [5] cars in five [5] garages.

Find all the ways to park the cars and record in your journal.

Imagine you had one hundred [100] cars in one hundred [100] garages.

Find all the ways to park the cars and record in your journal.

Mr Andrew Lim

Senior School Teacher - Maths