**G.A.T.E.WAYS** 

invites gifted Year 5 and 6 children

with a love of maths and mystery to

# 'Mission Impossible?'

**G.A.T.E.WAYS** is an independent organization offering challenging and enriching activities and experiences to develop and extend highly able children. Established in 1994, G.A.T.E.WAYS runs a range of stimulating school programs as well as the Saturday *Brainwaves Club*. This *JOURNEY* for both girls and boys will run over four sessions. **Do you love maths? Do you love mystery and detective work?** If you answered yes to these questions then this is the program for YOU! As a member of a detective squad you will attempt to complete an entire mission and catch some villains! Along the way you will earn points for your squad - I wonder which squad will earn the most!

To gain points you will move through the Museum of Mysteries and the Mansion of Mazes completing a series of cases that will challenge your use of number, fractions, sequence, shape, space and measurement. Along with your squad you will need to make the right choices and work together. How quickly will you convert fractions, find the right number sequence, find the prime number, recognise and use Roman numerals, build a shape from its 'net', solve a series of brainteasers, follow directions using compass points and angles, while testing and learning specific mathematical concepts and meeting individual and team challenges as you apply your mathematical skills? Be careful not to get lost or move in the wrong direction! If you don't the villains will get away!!

**Requirements:** Bring a well-stocked pencil case, a stamped, self-addressed DL envelope for your report, a small photo of yourself and a snack – no nuts please. A notebook and folder will be provided, as well as rewards along the way!

## Session One: Title: Calling all Detectives!

Your first challenge is to '**Untie the Bundle'**, the solution to which will help us to form our detective squads. Nothing is easy about how these detective squads work together - you will have to draw on the individual talents and skills of each member to move your squad forward. The first case of our mission is to find the ancient treasure hidden in the museum. Starting from Position 4, your squad will move through the passages using your knowledge of number, fractions, sequence and even a roman numeral or two. Which Detective Squad will pick up bonus points along the way?

### Session Two: A Race To The Treasure

Picking up from where we left off in Session 1, you will now move through the next stages of your case. It will be of the utmost importance that all detectives record all the mathematical tricks and short cuts learnt along the way, as you will need them further down the passage to help you complete your first case. Can you pick up bonus points for your squad by completing the bonus challenges? Today you will need to expand on your knowledge of number and fractions, make the right choices to avoid going backwards, find the clues and take the right passages to find the treasure - if not it will be lost forever! Each Detective Squad should meet the challenge, but which one will come out on top?

#### Session Three: The Case of the Missing Valuables

Now each detective squad has one part of the mission under its belt, are you ready for the next one? Before being given the case you must complete the next squad challenge. Take your time and draw on all your resources to solve this mind twister! If successful your next case is to find a group of villains who have stolen some valuable jewels and paintings from the mansion of a very famous celebrity. It's now time to draw on your knowledge of shape, space and measures to solve this case. Once again you will need to record all the tricks that you learn along the way in order to complete all challenges. Your skill at looking ahead and not looking back will certainly be put to the test!

#### Session Four: Mission Impossible!?

You are almost there as we pick up from where we left off. As you continue to solve mathematical challenge after challenge the pace will quicken as you get closer to the end – the villains are just around the corner!! There is one final opportunity to gain bonus points as the detective squads vie to create the best geometric shape and unlock the last clues to the case. Which squad will get there first, and which will be crowned our 'Super-Squad'?

**Homework and Assessment:** We are looking for everyone to take part, to apply their mathematical thinking skills and work in teams to complete a variety of mathematical challenges. Extension work will be given after each session to give you the opportunity to research further what we touch on during each session – this will include mathematical problems and historical facts. Following the program a short report will be sent to parents.

#### About the Presenter:

Annette Subhani has been involved in the education of children for the past two decades. She is a parent, an educator as well as a trainer of numerous professional development programs for various industries. She believes is engaging children in lifelong learning through cooperation, action and the use of higher level thinking skills. Drawing on literature, the arts, music, the sciences, inspirational writings and broad approaches, she challenges children to relate insights and learning from across the curriculum to real-life situations and circumstances, to assist them in contributing to a global community.

