



G.A.T.E.WAYS invites gifted & talented Year 3 and 4 children

with a love of maths and problem solving to

'The Effective Detectives

Hit Town'

G.A.T.E.WAYS is an independent organisation offering challenging and enriching activities and experiences to develop and extend highly able children. Operating since 1994, G.A.T.E.WAYS runs a range of stimulating school programs as well as the Saturday *Brainwaves Club*.

At the "Effective Detective Agency" we train the best spies and detectives in town – and you are the latest recruit! When things go wrong at school or in your community, will you have the skills to help put things right? Can you help the local football team determine how many tickets they have sold for the grand final? Can you rescue the costumes for the school play before they are shipped away to a cyclone affected city? Can you find and relocate the orienteering signs before the start of tomorrow's competition? Requiring quick and accurate mathematical skills, this program relies on an understanding of concepts such as place value, fractions, shapes, basic operations, geometry, and graphing. Students will move quickly through each mystery in an attempt to be promoted from observer, to private eye, undercover agent and super sleuth. With weekly drills, training and competitions, there are even more opportunities to earn merits and awards to determine who will be the most 'Effective Detectives'!

Requirements:

- * a lined exercise book, pencils, rubber, sharpener, ruler, glue stick, scissors, grey lead pencil, (no calculators)
- * a snack (no nuts please)
- * a hat (Terms 1 and 4)
- * a small, current labelled photograph of yourself
- * a stamped, self-addressed DL envelope for your report

SESSION 1: "The Training Begins"

The 'Effective Detective Agency' is hard at work training their new recruits. Be prepared for some fast-paced drills, competitions and mathematical games. Then the challenge begins ... Using your newly honed geometry skills, unlock the combination to the secret club. Through graphing analysis, solve the mystery of the Milk Bar robbery!

SESSION 2: "The Race is On"

Detectives have started earning their badges and the competition is fierce. We will look at simple division, decimal division, and end with a never-ending division drill (bring lots of paper!!). Place value is explored, but not in the traditional way. Everything is a competition in this detective agency. After the final small group and whole class tables competition, the detectives emerge well equipped to find the missing beads and solve the football fiasco.

SESSION 3: "Muddled Madness"

Mixed up co-ordinates, missing costumes and disgruntled pizza eaters leave our detectives rushing from one mystery to another. Having mastered the skills of mapping and co-ordinates, can they correctly plot their way around the town? Will an understanding of equivalent fractions ease the friction with the pizza eaters? Get your thinking caps on and put your mathematical skills to work in unjumbling these mysteries.

SESSION 4: "Who will take the Prizes?"

The challenges culminate today with the final mysteries and a series of mathematical drills and quizzes. Using decimals and multiplication, can you help the cowboys escape? Can you combine money, division and fractions to fix the finances of the bungled market stall? Badges are presented, merit awards abound, and the detectives leave with a bundle of "tricks of the trade" (problem solving strategies and skills) for future mathematical challenges.

Homework requirements & assessment

Homework tasks will be linked to the activities from each week, with students required to plot their progress on a map, calculate their accumulating point score, and graph the results of their day's work.

ABOUT THE PRESENTER

Alison Brown is a registered Australian psychologist, an experienced teacher, a parent and author. She was a committee member and Vice President of the Victorian Association for Gifted and Talented Children over six years, has presented at a number of state, national and international conferences in the areas of technology, gifted education, and psychology, and has provided extensive consultation and training programs to schools in Australia, Switzerland, Germany and America. Having taught for ten years and worked as a school psychologist and in private practice, she has first-hand experience in recognizing and catering for the social, emotional, and academic needs of students. With a post-graduate degree in child and adolescent psychology, Alison established a private practice in Australia, in 2004, with a particular interest in the areas of parenting, counselling, and gifted children. She returns to Australia this year, after 6 years in New York and New Jersey, USA where she worked across a number of school districts as a consultant in gifted education, and as Adjunct Professor of Psychology at Seton Hall University. Alison was a trustee and VP on the board of the New Jersey Association for Gifted Children for four years, has recently published a number of books (both counselling and educational resources), and is currently completing a PhD through La Trobe University looking at the benefits of using narrative therapy with children.

Please note: this program is based on the G.A.T.E.WAYS Publications: CSI Mathematical

