

Social mathematics adds up to success

Redhill School in Johannesburg claimed six of the top 10 positions in the Middle Primary category of the [Wits Maths Competition](#). Learners from the school achieved excellent results and was named the Top Performing School in this category.

Mrs Jacolene Venter, Numeracy Co-ordinator at the school, says that they have developed several strategies to ensure that learners perform well in gateway subjects – maths and science.

Venter is responsible for curriculum development, implementation and overall strategy, both for extension and remediation, in the Junior School. In this role, he is supported by colleagues Mrs Kyla Talbot (Head of Department: Middle School Maths) and Mrs V van Rooy (Faculty Head: Mathematics). Venter spoke to Wits Communications about what contributed to Redhill School's success in the Wits Maths Competition.

In his own words:

"As a school we are incredibly proud of the results in this year's competition. We have been working on an overall strategy to strengthen both our classroom practice and learner training over the last five years and we are very excited that this strategy is paying off.

To prepare for the Wits Competition, we held training sessions for Grades 4 and 5. The learners work together, and we find the solutions in teams with an emphasis on providing proof, and discussing the strategy used to find the solution. The thinking involved is of more value than the correct answer.

In our school we do not write tests or exams in the Junior School (up to Gr. 5) nor for most of the Middle School. This has enabled us to move towards a solutions-driven approach with enquiry and multiple opportunities to show mastery of the skills and concepts required. We also include real-life contexts that lead to worded problems that the learners can relate to.

We participate in a number of competitions, both individual and team-based, with the hope that these competitions will allow our learners to stretch themselves and see Mathematics as a social activity rather than one solely focussed on the individual. Giving learners as many opportunities to grow as possible is a vital part of our philosophy as a school.

We are also very fortunate that we have an incredible team of teachers and parents that support and enhance these opportunities by encouraging grit and determination in the children.

Mathematical skills and knowledge can only benefit society if those that have achieved mastery can share, explain and debate their solutions of challenging real-life problems in accessible, kind and authentic ways with their peers. This is the greatest value of practising and learning Mathematics together."

The Wits Maths Competition is coordinated by the School of Mathematics and has been running for five years. The competition consists of two rounds. The first round is written at school and the final round at either Wits or regional venues. During covid schools were allowed to write the final round at school.

An independent ethics board consisting of Professor Andrew Obus from CUNY Baruch College, Professor Torin Greenwood from North Dakota State University and Dr Liam Baker from Stellenbosch University adjudicated suspicious cases as an extra measure to ensure fairness.

Middle Primary category winners

Name	School	Award
Celine Xu	Independent candidate	1st overall and top girl (Middle Primary)
Njabulo Luthuli	Redhill School	2nd overall (Middle Primary)
Alex Sun	Redhill School	3rd overall (Middle Primary)
Michael Tian	Redhill School	4th overall (Middle Primary)
Eason Ning	Redhill School	5th overall (Middle Primary)
Qihang Zhang	Redhill School	6th overall (Middle Primary)
Ryan Bester	Laerskool Hennopspark	7th overall (Middle Primary)
Jing Yi Chen	Redhill School	8th overall (Middle Primary)
Matthew Mcphail	Laerskool Hennopspark	9th overall (Middle Primary)
Maddison Wallace	Rustenburg Girls' Junior	10th overall (Middle Primary)
Samuel Smit	Advanced Learning Centre	Best proofs (Middle Primary)
Amahle Mabaso	Thembalikazulu Primary School	Notable Quintile 3 Learner (Middle Primary)
Kagiso Semanya	Chokwe Primary	Notable Quintile 2 Learner (Middle Primary)