

Meet Whartels!

Let's play Maths! – The  and ay!

Maths Whartels

Is an Eco-system for teaching, learning, exploring and most importantly
Playing with mathematics.

Based on research Maths Whartels was developed for pre-primary and primary school learners aimed at improving

Mathematics achievement

by focusing on:

- **cognitive aspects** (maths concepts, metacognition and information processing)
and
- **psychological facets** (executive functioning, study orientation in maths, maths anxiety, maths resilience, motivation, etc).

Maths Whartels uses

- **principles used in play therapy** (art, bibliotherapy, board games, puppets)
- **using both linear and theme methods** to cater for both **accelerated programmes for the gifted learner** and **remedial programmes for the learner who needs extra help in Maths.**



PLAY

LEARN

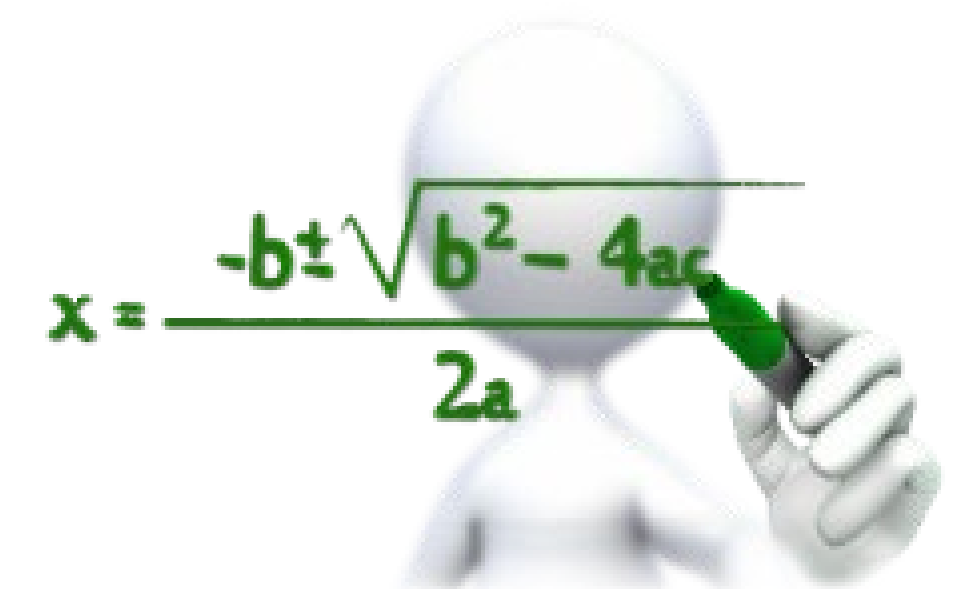
TEACH

EXPLORE

MATHS

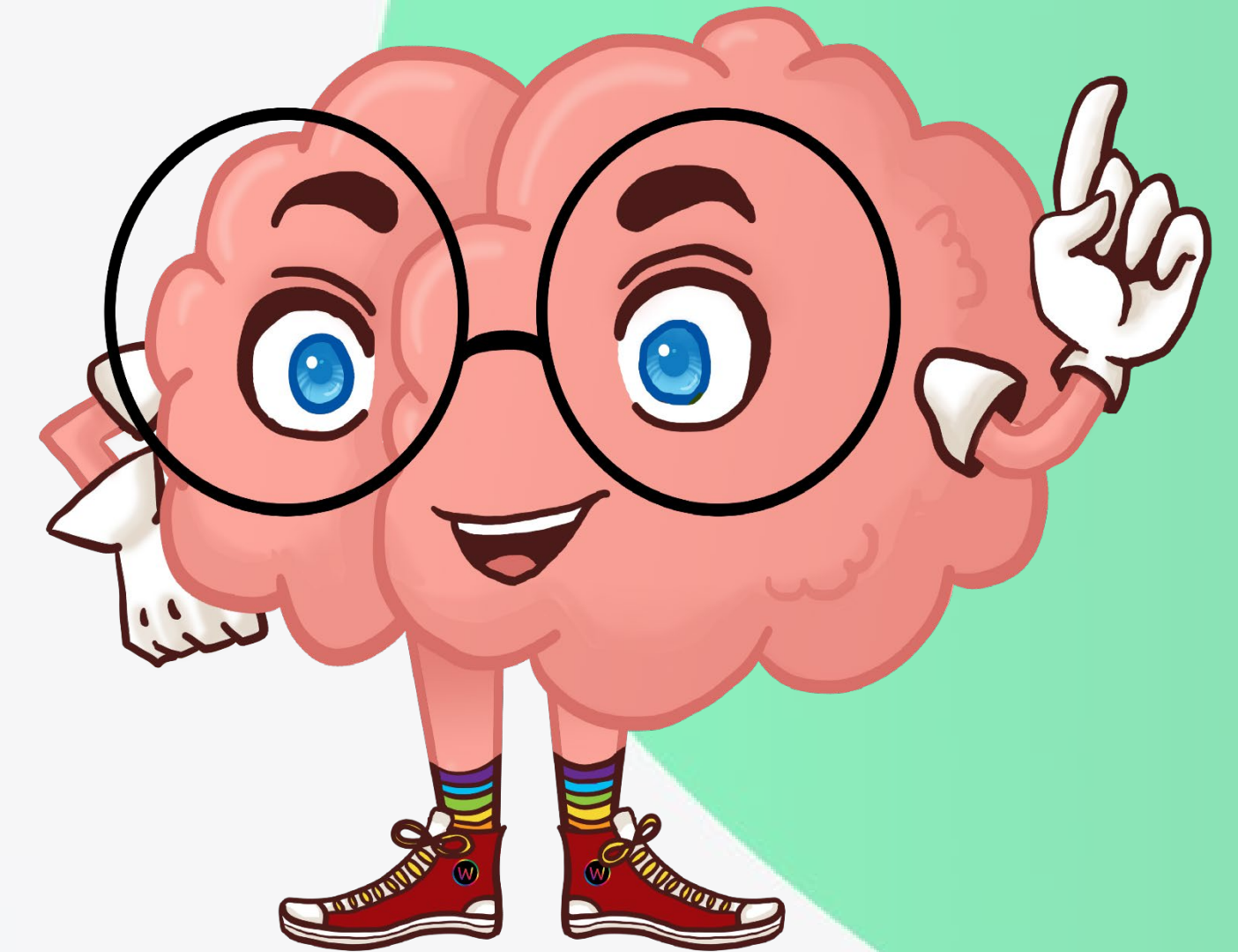
Mathematics

- Poor Maths achievement is a Global crisis
- More than 2/3 of pupils in South Africa write Maths literacy.
- The **subject Mathematics** is a gatekeeper / blockage to careers in Science
- The **WORD MATHEMATICS** brings emotions such as **Frustration, fear, anxiety, panic** to parents, learners and teachers.



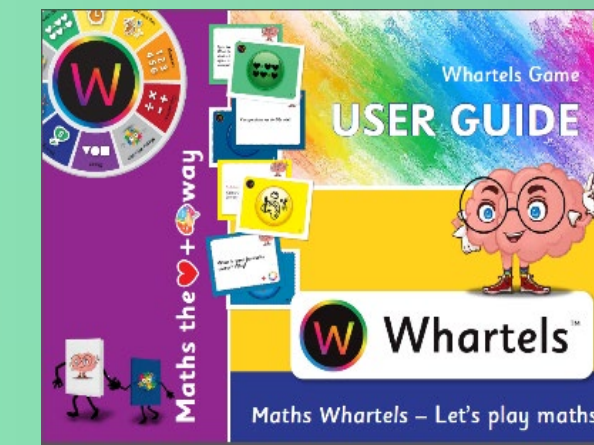
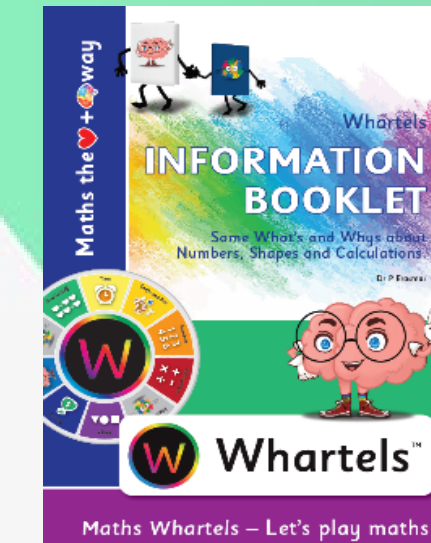
Maths Whartels focuses on developing:

- **Developing Emotional and Social Intelligence** *Study Orientation in Mathematics*
 - **Problem-solving behavior**
 - *Meta-cognitive thinking*
 - *Emotional Intelligence*
 - *Maths Resilience*
 - *Perceptual Development*
 - *Coping Strategies*
 - *Impulse Control*
- **Differentiation** – *Makes mathematics accessible to all learners.*
- **Comprehensive Teaching Strategy** *for the child who needs remedial assistance but also to accelerate learning for the gifted learner.*
- **Curriculum** – *It is not just linked to one curriculum only. Specific curriculum outcomes as formulated in e.g. Caps are indicated in the programme.*
- **Diagnostic Tool** – *Enable the teacher or therapist to identify problemareas in mathematics for each child.*
- **IEP** – *Teachers and parents can compile and individualized maths teaching programme for each child.*
- **Empowering Parents and Teachers** *by giving clear guidelines on how to children by explaining child development in general and the brain and Mathematics development in more detail. It also focuses on perceptual development and provides specifically designed apparatus that can be used to help children to master Maths concepts in fun way whilst playing.*



Product Range

- Maths Whartels Story Book
- Information Booklet
- Maths Whartels User Guide
- Maths Whartels Puppet Series
- Maths Whartels Board Game
- Maths Apparatus



“Children must hold math in their hands before they can hold it in their heads” - Unknown

About the creator



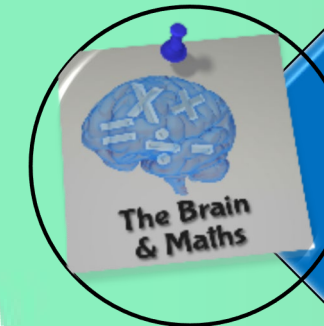
- Dr Erasmus is a Senior Lecturer, Registered Educational Psychologist and Remedial Therapist with a special research interest in Mathematics achievement. Her research interest on predictors of maths achievement in the South African context started in 2000 with her Masters studies to design a remedial strategy in Maths for Setswana speaking / second language learners. She has 30 years experience in designing maths interventions for learners who need remedial intervention but also for the gifted learner who needs an accelerated programme. Her PhD studies focused on the role of Emotional intelligence and Study Orientation in Maths in the maths achievement of adolescents. She also has a keen interest in Neuropsychology.
- The Maths Whartels concept was conceptualized and created from all the apparatus (puppets, maths apparatus, board game and story) that she created to use with the learners in her practice.
- She also started Therapuppets with a colleague that creates puppets that can be used in therapies.
- Continuous research is part of the Maths Whartels programme and this includes collaboration with a UK university to continue research in the use of the Maths Whartels program.
- The Maths Whartels program will also be available on an app, as well as the Maths Whartes story in AR and 2d animation.
- **WEBSITE – www.drpetroerasmus.co.za**

TRAINING AND CPD WORKSHOPS

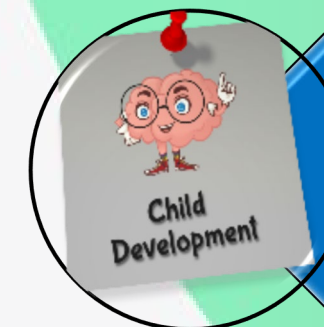
- Psychologists
- Therapists
- Teachers
- Parents



Rationale of the Whartels
Maths Programme



The Brain and Maths



Child Development



Perceptual Development



Predictors of Maths
Achievement



Maths Scope and
Sequence



Possible Problem Areas
in Maths



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