

# HOW TO START A MATHS CLUB

A GUIDE TO SETTING UP A MATHS CLUB IN YOUR  
COMMUNITY, NGO OR SCHOOL

Published under a creative commons (BY-NC-SA) licence. You may use, copy, distribute or modify this content provided it is for non-commercial purposes. Please acknowledge:  
[www.mathsclubs.co.za](http://www.mathsclubs.co.za)

This work was originally developed by the SA Numeracy Chair Project  
<https://www.ru.ac.za/sanc/> and has been adapted with their permission



# WHAT IS A MATHS CLUB?

**Maths Clubs provide fun, exciting and engaging maths activities for learners in Grades 1-6. The lesson plans and activities are designed to build strong number-sense skills and a love for mathematics.**

Clubs can provide learners with a space where they can ask their own questions, produce their own mathematics, talk mathematics, explain mathematics and enjoy mathematics!" (Graven, 2011)

## WHY MATHS CLUBS?

After school Mathematics Clubs are an opportunity for students to learn and enrich their mathematical experience in ways that are free from curriculum and assessment driven teaching practices

The clubs are conceptualised as supportive communities where sense making, active mathematical engagement and participation, and mathematical confidence building are emphasised. Individual, pair and small group interactions with mentors are the dominant practices with few whole class interactions.

The curriculum is a contextual guide for what is nationally expected of learners but individual learner numeracy levels guide content and activities.

The clubs have been set up in such a way that both the needs of the whole group and that of the individual learners in the club drive the club 'curriculum'. In other words, we work from where the learners are and attempt to develop their learning trajectory from that point.

These are some of the **features** of the clubs:

- **Voluntary** participation during out-of- school time
- **Participation** based, where participants are active and engaged
- Many interactions are **learner led** with many one- to-one interactions between mentors and learners.
- The mentor is as much a participant as the learners are
- Assessment is formative and integrated and is used to guide individual learning experiences for the participants
- Club rules are negotiated which may differ from in-school time rules. See page 2 for examples.

### WE HAVE FOUND CLUBS TO BE USEFUL FOR:

Getting boys and girls to mix with each other through collaborative work

Getting learners to talk to each other and the mentor about their maths thinking.

### A CLUB CAN FOCUS ON

Maths Recovery

Challenging beyond potential

Individualised attention

Strengthening mathematical dispositions, confidence and trajectories

Establishing 2<sup>nd</sup> sites of learning using the "Pay-it-forward" concept

### CLUBS WORK BEST WHEN...

...there are smaller groups of learners — perhaps between 10 and 15 and a mix of levels. Some schools offer clubs for remediation only, whilst others run clubs for extension.

### CLUB RULES

- We listen to each other's ideas
- No laughing when people make mistakes
- No hitting, kicking, biting, bullying
- No telling tales

### CLUB AIMS

- Help learners THINK about maths
- Create ENJOYMENT through maths

### CLUB ETHOS

These informal learning spaces allow the learners opportunities to actively engage with mathematics and sense making as well as for mathematical confidence building.

Learners are free to:

- Talk about mathematics
- Argue about mathematics
- Explain how something was worked out
- Ask questions
- Make mistakes as learning happens by making and discussing mistakes
- Speak their own language
- Cross things out, be untidy



One concept that works well in the clubs is the 'Pay-It-Forward' concept. Learners are taught a numeracy game using a simple cost effective resource they have been given or have access to in the club (e.g. a pair of dice, a pack of cards).

The idea is that the learners must teach/play this game with at least two other people in their community (siblings, cousins, parents, grandparents, friends etc.) and promise to 'Pay It Forward'. Many of these games are quite simple but critically involve the development of numeracy proficiency. 2nd sites of learning like this are often taken for granted in middle class families where card and dice games are part of children's lives. Club learners are also encouraged to work with others on the "Fun with Maths" supplement published in Grocott's in 2012.

The supplement is available from:

<http://www.ru.ac.za/sanc/numeracyresources/grocottssupplement/>

## WHAT DO YOU DO IN MATHS CLUBS?



Developing efficient strategies for working with numbers

Quick dice/card games/play with blocks and more

Problem solving

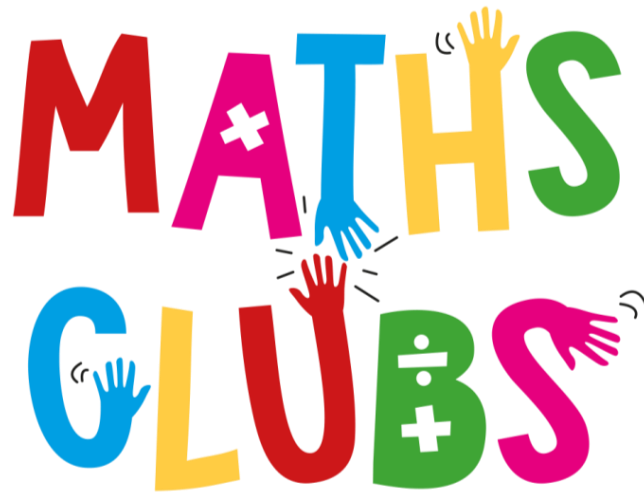
Puzzles

Using a manipulative etc

**ENQUIRE ABOUT OUR MATHS CLUBS STARTER BOXES FOR R500! THEY INCLUDE:**

**Playing cards, dice, white board, pens, cloths and all the starter resources, worksheets and games**

Interested in running a club in your community? The Pushing for Progression programme workbooks can help get you started. Ideally it would be helpful for your club facilitators to have training on the Pushing for Progression programme. Contact [anga@olico.org](mailto:anga@olico.org) to find out if there is training in your region and when the next schedule training will be.



## COLLABORATIVE PARTNERS:



Visit [www.mathsclubs.co.za](http://www.mathsclubs.co.za) to see more  
and to sign up to our newsletter!