



**science & innovation**

Department:  
Science and Innovation  
**REPUBLIC OF SOUTH AFRICA**



**SAASTA**  
South African Agency for Science  
and Technology Advancement

# **AFTER SCHOOL SCIENCE CLUB TOOLKIT**

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# Science Club Tool Kit

Welcome to a gateway for scientific exploration! Are you a budding science enthusiast who would like to do some awesome hands-on experiments with other budding enthusiasts? Then come and embark on a journey where curiosity knows no bounds, and innovation thrives. With our Science Club toolkit in hand, prepare to embark on an exhilarating voyage, and discover your potential.

This toolkit is your Launchpad into the thrilling world of scientific inquiry and will help you to get your science club going, and keep it going!! The toolkit equips your club with the tools and knowledge to transform every meeting and engagement into an unforgettable adventure. Embrace the thrill of experimentation, cultivate a culture of inquiry, and witness as your science club blossoms into a community of passionate explorers, ready to leave a lasting impact on the world.

## What is an After School Science Club?

An After School Science Club is an organised group of learners that participate in hands-on scientific activities, experiments, and projects outside of regular school hours. Learners are encouraged to establish a science club on their own and become independent. A science club may be overseen by an educator, an adult mentor in the community or a distant-mentor who can provide advise remotely. A club usually offers a structured programme or set of activities that align with the learner's grade level and promote critical thinking, problem-solving skills, teamwork, and a deeper understanding of scientific principles.

The science club aims to foster interest in Science, Technology, Engineering, and Mathematics (STEM) and provide a fun, interactive learning experience in various scientific fields. These clubs are typically hosted on school premises. All learners, whether they are in primary school (Grades 4 – 7) or secondary school (Grades 8 – 12) can become members of the science club.

## Why should I become a Science Club member?

The benefits of being a member of a science club are that you become part of a dynamic and active community that wants to learn and explore more on science. This can be achieved by doing fun activities that includes experiments, research-based projects, environment-friendly projects such as recycling and school gardening, games, debates, coding and robotics, science Olympiads, Competitions and Fairs, and participation in national events such as the National Science Month. You have an opportunity to learn things that you never knew before.

## How to start a Science Club?

The science club is learner-based and learner-focused. The following steps guides you on how to start a science club:

1. Ask for approval from the school principal (or management) to start a club.
2. Identify a teacher (or community member) as a mentor for the club.

3. Invite other learners to become part of the club committee.
4. Identify other community members including parents and STEMI practitioners and professionals who could contribute to the club.
5. Identify a suitable meeting location such as a classroom or any physical space.
6. Decide on an awesome and appropriate name for the club.
7. Decide whether the club will have specific theme/s or focus/es i.e. social (don't start with) sciences, life sciences, technology, physical sciences, etc.
8. Setup channels of communications for club members, mentors and other stakeholders (e.g. a broadcast WhatsApp group).
9. Identify activities and develop a plan with scheduled days and times for meetings and activities.
10. Identify or elect (or seek volunteers) for a club committee.
11. Draft a constitution (operation guidelines) for the science club or the club can adopt, or amend the rules and regulations to suit the club. Find the link below on the template for the rules and regulations of the science club.  
(The link to be provided to access the document attached on science club activities.)

## Formulation of the club committee

Each member of the science club has a role to play even if you are not members of the club committee. Each club should have a club committee made up of minimum four members: the chairperson, deputy chairperson, secretary and the communication officer.

### Club Leader (Chairperson)

The responsibility as a chair is to oversee the overall functioning of the club and ensure that the club runs smoothly by providing leadership and direction to the club members. The leader (chairperson) should ensure regular communication with club members, mentors and other relevant stakeholders. She/he need to make sure that meetings are held and activities are rolled out.

### Deputy Club Leader (Deputy Chairperson)

The deputy leader (chairperson) is an advisor (deputise) to the leader (chairperson) and assists the leader (chairperson) to fulfil his/her role. In the absence of the leader (chairperson), the deputy leader (chairperson) assumes the role of the leader (chairperson).

### Secretary

The secretary is the person responsible for keeping the office administration and operations running smoothly. The roles and responsibilities includes keeping records and documents of all meetings and activities. The secretary should ensure that communication within the members and the stakeholders is maintained using identified and agreed upon channels. (also a convenor)

### Communication officer

The communication officer is responsible for communication with club members, mentors and stakeholders. The communication officer acts as a point of contact between the club and external stakeholders, such as school administration, parents, other clubs or organisations, and potential guest speakers or volunteers. She/he facilitate communication and ensure that information is effectively disseminated.

## What is the role of club members?

The club members should familiarise themselves with the constitution (operation guidelines) of the club, schedule of activities, and any expectations that the club committee may deem necessary for the club.

Roles and responsibilities of club members include the following:

- **Active participation:** Club members should actively engage in and contribute to discussions during meetings and activities.
- **Respectful behaviour:** Club members should maintain a respectful and inclusive environment within the club. They should treat fellow members, club leaders, invited guests and volunteers with respect, kindness, and courtesy.
- **Preparation and commitment:** Members should come prepared to club meetings and activities, by reviewing assigned readings and materials, completing any required pre-work, and bringing necessary equipment or supplies. They should attend club meetings regularly and participate in planned activities and events.
- **Collaboration and teamwork:** Club members often work on projects or experiments together. They should be willing to collaborate with their peers, contribute ideas, and work as a team to achieve shared objectives. Effective communication and cooperation are important in fostering a positive and productive club environment.
- **Safety awareness:** Science experiments and activities may involve certain risks, so club members should prioritise safety. They should follow instructions carefully, use appropriate safety measures, and report any potential hazards or accidents to club leaders.
- **Continuous learning and improvement:** Club members should be open to learning from peers, and open to any form of feedback from other club members. Club members should actively seek opportunities for further learning and share their innovative ideas and knowledge with others.
- Researcher...

## Frequency of club meetings and activities

Science clubs can meet **any day of the week**, after the formal school academic programme has finished, this could include Saturdays.

The duration of club gatherings is dependent on the type and objectives of the meetings and activities.

Clubs can meet as **often as they wish**, and **avoid long breaks** between meetings and activities.

## Science club activities

Science club activities has to be fun and exciting and each member must have an activity to participate. Activities may include experiments, projects, and excursions. The **link below gives examples of some of the activities** that can be done. **(The link to be provided to access the document attached on science club activities.)**

## Frequently asked questions

You may have questions regarding the science club, and to assist you with answers, follow the **link to see most frequently asked questions** and the respond to those questions. **The link to be provided to access the document attached on science club activities.)**

## Contacts details