National Science Week

Transforming lives through evidence-based science

SCHOOLS PARTICIPATION GUIDELINES

www.saasta.ac.za

science & innovation
Department
Science and Innovation
REPUBLIC OF SOUTH AFRICA

NRF National Research Foundation | SAASTA South African Agency for Science and Technology Advancement

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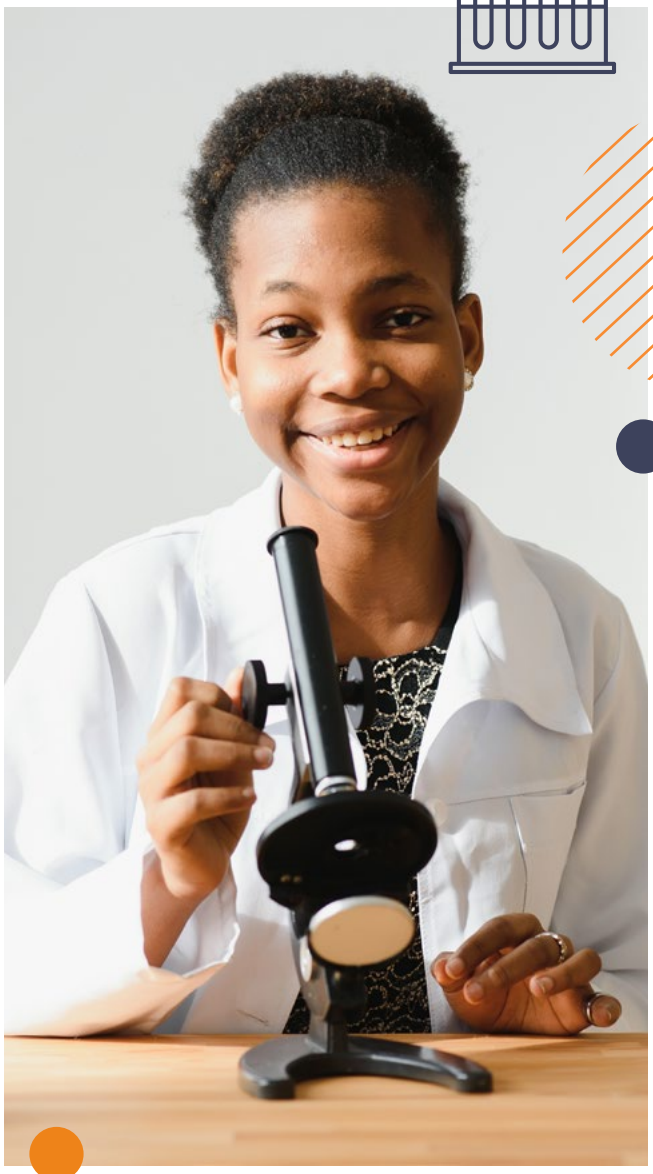
PURPOSE OF THIS BOOKLET

This document provides schools with:

- objectives of NSW and its 2023 theme;
- information on how schools can participate in the NSW;
- possible activities with guidelines;
- educational material to be distributed to registered schools; and
- registration and reporting procedures.



DESCRIPTION OF NSW

National Science Week (NSW) is an annual countrywide celebration of science, technology, engineering, mathematics and innovation (STEMI) led by the Department of Science and Innovation (DSI), where various stakeholders, role players and interest groups collectively conduct activities that promote general awareness of the value of STEMI to people's daily lives.

OBJECTIVES OF NSW

National Science Week in South Africa is a week of science celebration that has the following objectives:

- to popularise science to the broader South African society,
- to showcase local innovations in science and technology, and the leadership role of the DSI and other government departments in enabling research, development and innovation,
- to make STEMI appealing to learners, so that they consider science, engineering and technology (SET) as career options, and
- to familiarise targeted participants with the science linked to areas in which South Africa has knowledge and/or geographic advantage so as to contribute in making them informed and critically engaged citizens.

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NSW 2023 THEME

"Transforming lives through evidence-based science".

The theme will expose the publics to the evidence-based approach of problem-solving and decision-making responding to the situations by using the available information that has been researched or experienced. It will inform the development of NSW activities across the diverse sectors and allow a robust engagement among the publics. It will entrench the concept of "science" as, "a systematic study of the structure and behavior of the physical and natural world through observation, experimentation, and the testing of theories against the evidence obtained". The observations will be on Energy and Agriculture as the two branches of science.

Sub-themes: Energy and Agriculture

Energy: Building sustainable electricity together: power of community.

- The society will participate and share their experiences and opportunities that are associated with energy ("electricity and loadshedding").
- Schools and youths will be exposed to different career opportunities and skills in the energy industry which they can follow starting from subject choices to tertiary fields of study.

Agriculture: Advancing millets for a healthy diet.

- 2023 is "The International Year of Millets (IYoM)". Contribution of NSW will be to provide platforms for general awareness of the contribution of millet to food security, nutrition and production of millet and grain products.
- Youths will get opportunities to go farming and learners to take Agricultural Sciences subjects with a purpose of solving food security challenges.

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LIST OF POSSIBLE ACTIVITIES

TOOLS	ENERGY	MILLET (Agric)
Performance Art: Drama, Paint, music, poetry, essay writing	• to demonstrate sustainable form of energy supply to their communities • Improving the electricity crisis • Solutions to Loadshedding	• Raise awareness about the importance of healthy eating and food security • Evidence scientific solutions to hunger • Use of traditional foods to address nutritional needs / food shortage
Science clubs **Register**	• Exhibitions on energy-related projects	• developing and/or improving school gardens • exhibitions on different millets and grain products
Challenge	• Electricity saving and generation at school, and homes	• Schools and backyard gardens challenges
Debates	• Are the renewable energy sources the solution to South African energy crisis?	• evidence-based scientific solution vs. the indigenous/ traditional methods to eradicate hunger
Quiz	• Quiz based on the materials provided	• Quiz based on the materials provided
Career Awareness (using DSI materials)	• Selected careers in energy and engineering	• Selected careers in agriculture / nutrition
Educational excursions	• Schools can plan the visits to a science facility(ies) to experience more about the NSW and the thematic focus areas	

EDUCATIONAL MATERIAL TO THE REGISTERED SCHOOLS

1. 5 Copies of DSI SET Career Books + 10 Posters + self-help booklets
2. Template for motivational speech by a Role Model (Printed & Digital)
3. Guidelines for each activity tabulated above
4. Climate Change exhibition (Printed)
5. NSW Theme: Documentary (digital)

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HOW TO PARTICIPATE

For school to participate in the NSW 2023, please click the link below and complete the participation form: https://www.saasta.ac.za/nsw-2023-school-participation-register/

How can school participate in NSW 2023

Self-Help Guide for teachers (or responsible adult) / youth volunteer/ learners / science clubs

- make use of the provided resource pack for information.
- select one of more activities, to be conducted by the school during the Focus Week or as close to that time as possible (after school-hours and weekends are allowed).
- teachers can lead or support the learners of an active science club.
- a well-established and active science club, may also take the lead, with basic support given by the science club champion (teacher-in-charge).
- select which time slots will be available.
- assign tasks (selected activities) to at least one teacher / adult to organize.
- schools / science clubs are encouraged to invite a local scientist / science professional / engineer / researcher / post graduate student to deliver a motivational speech.
- put together a programme for NSW for the school.

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REPORTING PROCEDURE

Schools that participate in any of the NSW activities are required to complete the online school report form that can be accessed using this link: https://www.saasta.ac.za/nsw-2023-school-participation-register/

What is expected from a participating school?

- Study this document;
- Develop a programme for NSW for their school;
- Submit the NSW School Programme plan to SAASTA (via email / online);
- Execute the NSW School Programme;
- Record activities by taking up to 5 pictures; and
- Submit a report to SAASTA – one page template (attendance and activities) with the 5 pictures electronically, within 10 days of completing the NSW programme at school.

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Important note

All the schools that conduct the NSW activity(ies) and submit the participation report to SAASTA by 31 August 2023, will receive a Certificate of Participation

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