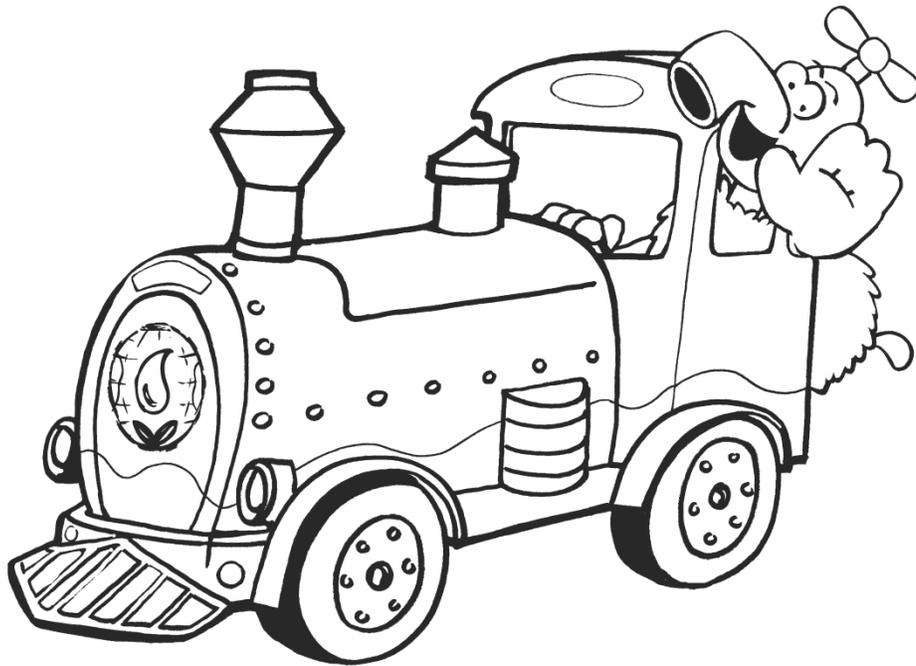


VEREENIGING PURIFICATION STATION

SCHOOL PROGRAMMES
FOR GRADES R - 12



Water  Wise

RAND WATER

WHAT DO WE OFFER?

Come with the Water Wise Education Team on a wonderful journey of fun and learning as you explore the world of water at the Water Wise Room in Vereeniging. This room is situated on the Vereeniging Purification Station and it offers a range of interactive Water Wise activities. Programmes offered are designed to meet curriculum requirements, especially with the implementation of CAPS.

GRADE R PROGRAMMES

Healthy Living - Healthy Water (2 hours) - Life Skills

A programme that focuses on hand washing and good toilet habits through an interactive puppet show, drama and a hand washing activity.

Shapes and Colours Around Us (2 hours) - Life Skills

A programme that looks at naming colours and shapes in the environment by playing games and puzzles, and going on a "Shape Walk".

The Sounds of Water (2 hours) - Life Skills

Come and let the little ones learn how to be Water Wise through sound. Let us interact with your learners through music, storytelling and interactive sound activities.

Our 5 Senses (2 hours) - Life Skills

This programme includes a brief introduction of our senses, a "blind fold game" and a tour of the garden using all 5 senses.

Water is Needed for a Healthy Environment (2 hours) - Life Skills

The learners will learn about the importance of life in water and how to look after water by not polluting and wasting it. This will also include a basic quantity activity where learners will be measuring how much water they use when they flush the toilet, wash hands under a tap, etc.

Animals in Nature (2 hours) - Life Skills

On a guided walk in the garden the learners will learn about animals and birds, and how they survive in nature. This programme will include the food they eat and the importance of water for their survival.



GRADE 1 PROGRAMMES

Healthy Living - Healthy Habits (2 hours) - Life Skills

A programme that focuses on hand washing and good toilet habits through an interactive puppet show, drama and a hand washing activity.

Water and my Body (2 hours) - Life Skills

Let your learners investigate different ways to clean water through hands-on activities. Let us help them understand the importance of washing hands, fruits and vegetables before eating.

Water in Our Lives (2 hours) - Life Skills

Through a puppet show, a game and some interactive activities learners will look at how water is used in our lives, how it is wasted, and ways of using it wisely. Safe and unsafe drinking water is covered as well as the storing of clean water.

GRADE 2 PROGRAMMES

Healthy Living (3 hours) - Life Skills

A programme that focuses on hand washing and good toilet habits through an interactive puppet show, drama and a hand washing activity. It also includes an activity on simple ways of cleaning water.

Water Creatures (2.5 hours) - Life Skills

A programme that includes activities on sea and fresh water creatures. Learners will do some pond dipping to catch some water life and they will learn about the life cycle of a frog.

Animal Homes (3 hours) - Life Skills

There are a lot of homes in nature. On a nature walk learners will find and identify different animal homes and the materials used by animals to construct their homes. The programme will also include comparing and matching animals to their homes.

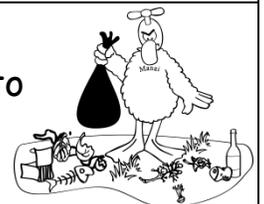
GRADE 3 PROGRAMMES

Life Cycles and Insects (3 hours) - Life Skills

Learners will learn about the different life cycles of water animals living in a wetland and identify different kinds of insects on a nature walk.

Pollution Wise (3 hours) - Life Skills

Want to teach your learners about pollution? Let us edutain them to become Pollution Wise through hands on activities.



GRADE 4 PROGRAMMES

Water Wise Games (3 hours) - Life Skills

Learn about the different aspects of water and reach your Physical Education Curriculum goals in our fun and interactive programme incorporating different games.

Healthy Environment & Personal Health (3 hours) - Life Skills

Water is life and it is necessary for health and hygiene. This programme explores the vital link between clean water and health. The dangers of an unhealthy environment to personal health and the importance of the conservation of the environment are covered.

Water in South Africa (3 hours) - Social Sciences

A fun, interactive, in-depth look at water: how we get it and how we use it and abuse it. This programme includes fun, interactive learning activities that cover the water cycle; water uses; the collection, transport and storage of water; an introduction to water pollution; and the importance of using water wisely.

Water through the Ages (3 hours) - Social Sciences

This programme includes activities that focus on water and the use of water through history, especially in a South African context.

GRADE 5 PROGRAMMES

Physical Features of South Africa (3 hours) - Social Sciences

An interactive look at water in South Africa in terms of our topography, climate, oceans, dams and rivers.

WATER: An Important Basic Need (3 hours) - Life Skills

Let us help your learners understand the importance of water, how to protect the quality of our water and how to use water wisely.

GRADE 6 PROGRAMMES



Water Resources (3 hours) - Natural Sciences & Technology

In this programme learners will learn about various water resources and the importance of clean water. The programme covers the role that wetlands play as natural water purifiers and learners will construct their own wetland model. The programme also includes the technology that is used to purify water through a water purification experiment.

Cleaning Water (3 hours) - Natural Sciences & Technology

A programme on the importance of clean water in our world and how water is cleaned. This programme looks at water pollution, natural processes (the water cycle and wetlands) and human-made purification processes. Learners will get a chance to carry out their own purification experiment.

Water Hygiene (3 hours) - Life Skills

Water is life and it is necessary for health and hygiene. This programme explores the vital link between clean water and health.

GRADE 7 PROGRAMMES

Habitats in the Ecosystem (3 hours) - Natural Sciences

The non-living factors have an influence on the living factors of an ecosystem. This programme will give learners an opportunity to go on a nature walk in a garden and find out how various ecosystems function.

Biodiversity (3 hours) - Natural Sciences

Learners will learn about biodiversity in the sensory garden. They will undertake practical activities that involve the classification of plants and animals using dichotomous keys.

FLOODS: Where, When, How and Why? (3 hours) - Social Sciences

Bring you learners to come and learn more about floods through our interactive presentation. Let them investigate a case study of a local flood.

Use and Management of Water in South Africa (3 hours) - Social Sciences

This programme covers the use & over use of water resources and how water is managed in South Africa.

Career Fields in Water (4 hours) - Life Orientation

This programme looks at careers in the water sector and covers the following:

- Interests and abilities related to a career
- School subjects needed for a career
- Work environment and activities in each career
- Opportunities within each career
- Challenges within each career
- Level of schooling and requirements for each career
- Duration of study for each career
- Services and sources for a career and study information.



Water Pollution and your Health (3 hours) - Life Orientation

Let's look at local environmental health problems relating to water and what we can do to help be the solution to the problem.

GRADE 8 PROGRAMMES

Micro Organisms (4 Hours) - Natural Sciences

Come and see what organisms are found in river water before Rand Water cleans it and learn how micro-organisms are controlled through the water purification process.

The Electrolysis of Water can be included in the above programme as an introduction to electrolysis.

Acid Mine Drainage (4 Hours) - Technology

Investigate the impact on the environment as a result of Acid Mine Drainage.

GRADE 9 PROGRAMMES

Resource Use and Sustainability (3 hours) -Social Sciences

This programme will cover the impact of resource use and the sustainable use of resources.

Spheres of the Earth (4 hours) - Natural Sciences

Earth can be understood as a complex system where all the parts (called spheres) interact with each other. Let us teach your learners more about the hydrosphere and how the spheres work as a system. The programme also looks at a case study of mining and how mining has an impact on these spheres. Explore the Greenhouse Effect as part of this programme.

GRADE 10 PROGRAMMES

Climate Wise (3-4 hours) - Geography

This programme addresses climate change in all its complexity: its causes, consequences, impact on South Africa and the possible actions to reduce the impact.

Water in Our World (3-4 hours) - Geography

This programme looks at water as a natural resource, its importance in social and economic development, the challenges to water supply and how water can be conserved. The following is investigated:

- The state of river catchments in South Africa
- The quality of river water

- How is tap water cleaned?
- How is clean water distributed?
- An analysis of water consumption.

Welcome to the HYDROSPHERE (3 hours) - Physical Science

Come and learn more about the Hydrosphere and the interactions inside it. Learn about the quality of water and the processes used by Rand Water to purify water.

Note to Teachers:

This is an in depth look into the Grade 10 Physical Science Portfolio Project.

GRADE 11 PROGRAMMES

Climate Change and the Availability of Water (3 hours) - Life Sciences

This programme will focus on how human actions have an impact on the environment and how changing our lifestyle can be a step towards slowing down climate change and reducing our "carbon footprint". This will cover a practical study of a water source, day to day utilisation of water and how our actions can impact on the availability and quality of water.

The Atmosphere and Climate Change (3 hours) - Life Orientation

This programme addresses climate change in all its complexity: its causes, consequences, impact on South Africa and possible actions to reduce the impact.

Environmental Responsibility (3-4 hours) - Life Orientation

A study of pollution and other human impacts on the atmosphere, lithosphere, hydrosphere and biosphere i.e. the climate, water and food supply, waste management and loss of biodiversity and how all of these are affected by water. Learn about biomimicry and its importance in developing environmentally responsible technology.

NOTE: THE PROGRAMMES OFFERED ARE NOT LIMITED TO SPECIFIC GRADES AND CAN BE ADAPTED TO SUIT TEACHERS NEEDS ON REQUEST.

NOTE: TEACHER PROGRAMMES ON ANY TOPIC ARE ALSO OFFERED

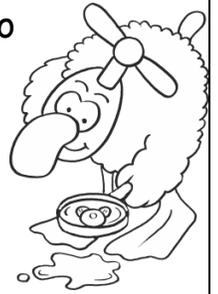
PLEASE NOTE: Only school staff may make bookings with Rand Water, and not tour companies.

WATER QUALITY TESTING FOR ALL PHASES

AT SCHOOLS

If your school has a water source nearby, you can invite the team to do water quality testing with your learners. Water quality testing equipment will be provided by Rand Water.

- **MiniSASS:** includes catching and identification of water life to assess the health of a river.
- **Water Quality Testing:** includes the testing of pH, turbidity, coliform bacteria, dissolved oxygen, temperature, nitrates and phosphates.



AT OUR LABORATORY (MONDAY-THURSDAY ONLY)

Water quality testing for school projects can be booked for 1-4 learners. The learner/s will need to take samples in the field and then can undertake the following tests in the laboratory: pH, turbidity, coliform bacteria, E.Coli, dissolved oxygen, nitrates, phosphates and conductivity. Please make an appointment for this service. The procedure of taking samples will be shared with you.

COST: R50.00 for 1-4 samples and R5.00 for every extra sample.

WATER WISE PROGRAMMES AT YOUR SCHOOL



Manzi, the tapduck, will edutain schools and nursery schools to be Water Wise through the following programmes offered at your school:

- * A fun puppet show and a visit by Manzi, aimed at Nursery and Foundation Phase learners. Fun games for Grades R-2 can be included with this programme.
- * The Water Wise Adventure, which is an exciting story about where Manzi comes from, aimed at Nursery and Foundation Phase learners.
- * The Water Wise TV Show, which is an interactive "TV show" with interviews, a game show and the "In Search of Blue" Talent Show, aimed at Intermediate and Senior Phase learners.

CONTACT DETAILS

Contact : Nyree Steenekamp
Address : Barrage Road, Vereeniging
Telephone : (016) 430 8661/8698 or 084 393 5559
Email : nsteen@randwater.co.za

