



science  
& technology

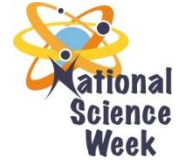
Department:  
Science and Technology  
REPUBLIC OF SOUTH AFRICA



SAASTA  
South African Agency for Science  
and Technology Advancement

## NATIONAL SCIENCE WEEK

29 July to 3 August 2019



<b>Organisation:</b>	Johannesburg City parks and Zoo	<b>Project Leader:</b>	Mrs S. Magolo	<b>Province/s:</b>	
<b>Connect with us</b>	<b>Website:</b>	www.jhbcityparks.com			
	<b>Facebook:</b>	Johannesburgcityparks & Zoo			
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### National Science Week events and activities:

DATE & TIME	VENUE	LOCATION	ACTIVITY	AUDIENCE	CONTACT DETAILS	BOOKINGS REQUIRED?
29/07/2019 10:00-13:00	Kaalfontein Park	Kaalfontein	1.Solutions to climate change: trees distribution to community members 2. Exhibition on what is climate change, impacts of climate change, mitigation measures and adaptation. 3.Exploring Global Warming: This demonstration uses water balloons to show how the earth's oceans are absorbing a lot of the heat being trapped on our warming world (effects of greenhouse gases).	Community members	Miss M. Moonyane 0718686916 mmoonyane@jhbcityparks.com	NO This event is invite-only

			<p>Learners and community members will work in groups of five. The balloons are to be filled up with air and tied up. The facilitator will explain to the learners and community members that the air –filled balloon represents the earth’s atmosphere and the flame represents the heat from the sun. The learners and community members are to pop the first balloon using the fire lighter. The second balloon will be Learners and community members will work in groups of five. The balloons are to be filled up with air and tied up. The facilitator will explain to the learners and community members that the air –filled balloon represents the earth’s atmosphere and the flame represents the heat from the sun. The learners and community members are to pop the first balloon using the fire lighter. The second balloon will be filled with water; this balloon represents the earth’s oceans. The same procedure</p>			
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			<p>with the air-filled balloon will take place until the water balloon pops. The facilitator will explain to the learners and community members that this demonstration illustrates how earth's oceans are absorbing a great deal of the heat generated by climate change.</p> <p>4. Web of Life: A short talk based off of an exhibition that addresses climate change causes, effects and managing it. The community members will be placed in a circle and will have cards with words such as 'economy', 'food', 'weather', 'water' etc. The facilitator will have a string and pass one end to one community member holding a card with one of the above-mentioned words on it. The community member holding the string will then talk about how climate change will effect whatever is written on that card and also talk about the subsequent effects (if any) as a result of that card being</p>			
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			affected by climate change			
30/07/2019 09:30-12:30	Johannesburg Botanical Gardens Environmental Education Centre	Emmarentia: corner Thomas Bowler & Olifants Road	<p>1.Plant nutrient deficiencies: Learners will be presented with a number of specimens that are deficient of nutrients and will have to analyse each specimen and diagnose what the plant is lacking and how it can be administered. They will learn about some of the elements that are found on the periodic table and how they are essential for plant growth.</p> <p>2.Calculating your Carbon Footprint: Each individual learner and community member will calculate their ecological footprint according to their lifestyle and determine how many “earths” would be needed if everyone on earth lived their lifestyle. By doing this, learners and community members will begin to understand the individual impacts they personally have on the environment. They will then discuss ways that they can</p>	Learners	Miss M. Moonyane	NO This event is invite-only

			<p>lower their ecological footprint.</p> <p>3.Melting Ice North Pole In this activity, learners will watch an experiment about ice melting in the North Pole, which addresses the harsh effects of climate change on the North Pole such as the sea levels and various animals that are dependent on that environment.</p>			
31/07/2019 09:30-12:30	Jhb Zoo	Corner Jan Smuts & Upper Park Drive	<p>1. Learners will tour JHB Zoo and learn about careers found at the Zoo, they will interact with specialists at the Zoo, be able to ask question.</p> <p>2. Ocean Acidification Demonstration: Learners and community members will be engaged through an experiment using bromothymol blue</p>	NO This event is invite-only	Miss M. Moonyane 0718686916 mmoonyane@jhbcityparks.com	NO This event is invite-only

		<p>which is a pH indicator. The solution is a dye that will be added to water, and learners will blow through a straw into the water containing the blue.</p> <p>3. Bees Clock (how biodiversity is affected by climate change):</p> <p>In this activity, learners will learn how climate change affects seasons and biodiversity but specifically on how the role bees play in plant pollination is affected by climate change. They will use paper / cardboard, compass, markers, plants and pins to create three circles of different diameter. Learners will cut papers or cardboards of the same size using compass. At the circumference they will write with markers all the seasons of the year (bearing in mind that the seasons are being affected by climate change e.g. in summer there are more droughts). In each season they will use pins to clip the plants into the cardboard or paper and see if these plants will survive in</p>			
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			<p>these seasons and also will they bear more food</p> <p>4.Sudoku: Learners and community members will use their logical reasoning and critical thinking skills to solve the Sudoku maths game.</p> <p>5. Science Show: The science show will be an experimental demonstration of the properties of chemical elements of the periodic table and how these substances, when released into the air, could contribute to climate change.</p> <p>The show will also show how a change in the earth's magnetic field could be related to climate change.</p> <p>Fun and exciting experiments on magnetism</p>			
01/07/2019 11:00-13:00	Leratong Park	Leratong	<p>1.Solutions to climate change; Future technologies: Learners and community</p>	Community members	<p>Miss M. Moonyane 0718686916 mmoonyane@jhbcityparks.com</p>	

		<p>members will be split into groups of five. Each group will be educated about sustainable energy and how it can reduce climate change.</p> <p>Using the provided resources and components, the learners and community members will design and build a model hydrogen fuel cell car, a windmill generator and a tin solar panel.</p> <p>2.Solutions to climate change: trees distribution to community members</p> <p>3. Exhibition on what is climate change, impacts of climate change, mitigation measures and adaptation</p> <p>4.Calculate you carbon footprint</p> <p>Each community member will calculate their ecological footprint according to their lifestyle and determine how many “earths” would be needed if everyone on earth lived their lifestyle. By doing this, the community members will begin to understand the individual impacts they personally have on the environment. They will then discuss ways that they can</p>			
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			lower their ecological footprint			
02/07/2019 10:00-11:30	Julius Sebolai Primary School	Bramfisher Soweto	<p>1, Out of school youth will implement edutainment programmes (drama) on careers found in Johannesburg City Parks and Zoo as well as climate change. '</p> <p>2. Ten trees will be planted at the school as part of solutions to the impact of climate change and tree education awareness will also be implemented.</p> <p>3. Science Show: The science show will be an experimental demonstration of the properties of chemical elements of the periodic table and how these substances, when released into the air, could contribute to climate change. The show will also show how a change in the earth's magnetic field could be related to climate change. Fun and exciting experiments on magnetism</p>	Learners	Miss M. Moonyane 0718686916 mmoonyane@jhbcityparks.com	
29/07/2019- 03/07/2019	Dobsonville Mall,	Soweto, lanesia, Alexandra,	Exhibition on Biodiversity: How biodiversity is affected	Community members	Miss M. Moonyane 0718686916	

10:00-15:00	Tradewood Mall, Alex Plaza, Yarona Mall Kaalfontein, Randburg Taxi rank, End street park, Attewell Garden, Ivory Park extreme park, Sophia Town shopping centre	Kaalfontein, Randburg, Jhb central, Berea, Ivory Paek and Sophia town.	by climate change will be implemented at shopping malls, taxi ranks and parks		mmoonyane@jhbcityparks.com	
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