

**NESTLE ENVIRONMENTAL EDUCATION CENTRE, WALTER SISULU NBG  
 LEARNING PROGRAMMES FOR 2021**

<b>Theme</b>	<b>Learning Programme</b>	<b>Grades</b>
<b>1. A Sensory Introduction to Seasons</b>	An introduction to senses and interaction with plants around the garden. Learners will listen to stories, sing songs and participate in other activities around the garden	R
<b>2. A Sensory Exploration of the Garden and its Plants</b>	Learners learn about the different parts of plants and what a plant needs to grow. Through simple map work, they will be able to identify plants and animals in the garden.	1
<b>3. Animals that live in water</b>	Investigating the importance of water, the organisms that inhabit it, and what threatens them. Learners will also look at the life cycle of a frog. Sensory activities are included.	2
<b>4. Reduce, Reuse and Recycle</b>	Exploring the sustainable use of resources, including useful plants and recycling. Learners will also do a waste audit and identify the value and threats to our biodiversity.	3
<b>5. Water Ecosystem</b>	Learners explore living and non-living things; plant and animal habitat and energy transfer (food chain). Learners will be exposed to the water issues in SA through learning about the water cycle, availability of water and pollution thereof.	4
<b>6. Ecology</b>	Learners will be introduced to living and non-living factors in an ecosystem, hunt for living organisms and learn about energy transfer through food chains and food webs.	4
<b>7. Rocks</b>	A look at the different types of rocks and how they come to form; as well as the importance of soil and rocks in the environment	5
<b>8. Wetland Ecosystem</b>	Study the wetland ecosystem and explore concept of photosynthesis. Also visit other theme gardens such as succulent and water-wise gardens to explore the adaptations of plants and animals to different water conditions.	6
<b>9. Indigenous Knowledge</b>	Programme deals with the development of self & social responsibilities. Learners also will visit the People's Plants garden and explore myths about plants.	6
<b>10. Biodiversity- Reproduction &amp; Classification</b>	Classification, biodiversity and plant pollination and reproduction.	7
<b>11. Ecosystems and Inter-relationships</b>	Discover and compare the garden's ecosystems. An activity on photosynthesis and energy flow in an ecosystem food pyramid will be done.	8
<b>12. Global Warming</b>	Understanding climate change and its effects on biodiversity.	9

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<b>13. Investigating an Ecosystem</b> <i>(Linked to Grade 10 GDE Programme)</i>	Our natural savanna biome is ideal for this activity. Learners investigate the savanna biome and complete activities using the GDE provided worksheet as a guideline. Other biomes within the garden are also explored.	10 Life Science
<b>14. Biomes &amp; Climate Change</b>	An exploration of the different biomes on the garden and the plant and animal adaptations. Explore what climate change is and its effects on biodiversity loss.	11 Life Orientation
<b>15. Plant Evolution</b>	Learn about the history of plants, their classification and changes over time. Comparison of Bryophytes, Pteridophytes, Gymnosperms and Angiosperms, sexual and asexual reproduction, seeds, and the role of plants in ecosystems.	11 Life Science
<b>16. Ecotourism</b>	Explore the Walter Sisulu National Botanical Garden as a destination for tourists.	10-12 Tourism
<b>17. Agricultural Science</b>	Learn about South Africa's ecological influence on farming practices; plant reproduction and sustainability; practical propagation skills.	10-11 Agriculture