About N*Gen

N*Gen (pronounced “Engine”) is a next-generation science TV show for young learners in Africa. Season 1 comprises of 13 episodes of approximately 25 minutes each and covers various topics from the disciplines of science and technology.

N*Gen’s programming is not based on any national curriculum, or designed as a substitute for lessons but we believe it can serve as a useful resource to Primary School Teachers and their students. The show is designed as educational entertainment meant to encourage a culture of curiosity and discovery, model holistic ways of learning and promote positive gender norms.

N*Gen is currently broadcast in multiple English-speaking countries in Africa, as the US and Caribbean via The Africa Channel. It’s also available on the Discovery Education platform, which reaches students in over 90 countries worldwide.

Show Segments

**N*Gen Learning Bytes** - Mini-lessons (3-5min) on a variety of topics related to episode theme, delivered by vibrant and charismatic teachers.

**Africa Teacher Challenge** – teachers across the continent record and upload short lessons on topics of their choosing and expertise

**Brain Break** – Emphasizing the importance of social-emotional learning and mindfulness, we demonstrate simple exercises that relieve stress, improve concentration and confidence.

**Shake It Out with Tadhi** – Benefits of physical exercise on brain performance have been proven; Tadhi gets the viewers off the couch and makes them follow fun fitness and dance routines.

**Brain Booster**: Trivia, useful factoids and quizzes that recap each episode.

**Health Tip** (incl. COVID prevention messages): Relevant and practical tips on how to stay healthy and safe/resilient, especially during the pandemic.
Episode 1 - Bees

Lesson 1 - Insects
Lesson 2 - Communication/ Waggle Dance
Lesson 3 - Pollination
Lesson 4 - Bee Community Structure

Did you know that bees are essential for human survival? Did you know they communicate with each other by dancing? Did you know that some of the most advanced rocket ship engineering was inspired by bees? In the first episode of N*Gen we will teach you all about our friendly honey makers. You will also learn how to make your very own facemask (future fashion designer here you come!) and how to wash your hands properly. Additionally, you will loosen those bones and joints with many dance and exercise lessons. N*Gen is the perfect show to learn more about the world around you while keeping your mind and body active. Let’s go! Let’s know!

Episode 2 - Water

Lesson 1 - What is Water? Why is it important?
Lesson 2 - Water Cycle: Evaporation, Condensation
Lesson 3 - Water Cycle: Precipitation
*Incl. - Water scarcity and Desalination

We need water for so many of our daily activities: cooking, bathing, drinking, and everything else in between. As much as we need water, do we really know water well? Let’s get to know our lifeline a little better! In Episode 2 of N*Gen you will meet Mr. Droplet and learn about the indestructible power of water, and the many forms it can take on. In fact, water is basically a superhero on planet earth! Watch this episode to see why in some parts of our continent there is not enough water for everyone and how this problem can be solved by future scientists, like you! Let’s go! Let’s know!
Episode 3 - Senses

Lesson 1 - Human Senses
Lesson 2 - Importance of Senses
Lesson 3 - Echolocation (Animal Senses)
*Incl. - Innovation for the Visually Impaired

Our senses allow us to observe and understand the world around us. You probably are familiar with the sense of sight, taste, hearing, touch, and smell but did you know about the sense of echolocation? This sense is used by bats, dolphins, and rats who live in dark places where it’s hard to see. Scientists have used this unique 6th sense to design an echoing cane for the blind and visually impaired. Watch this episode to learn more about senses and get inspired to become a breakthrough scientist yourself! Let’s go! Let’s know!!

Episode 4 - Mountains

Lesson 1 - How Mountains are Formed, Different Types of Mountains
Lesson 2 - Mountain Gorillas, Conservation
Lesson 3 - Volcanoes (featuring “make your own volcano experiment”)
*Incl. - Africa is Splitting in Two!

What do planet Earth and a loaf of bread have in common? Why do continents move and how do mountains form? Why do people live on the slopes of active volcanoes that can erupt at any moment and destroy lives and homes? Learn all this and more in the upcoming episode of N*Gen. And while you’re watching, think about how the African continent is slowly pulling apart, and one day, it will split into two! Watch the episode and learn about the ever-evolving Earth! Let’s go! Let’s know!!
Episode 5 - Sound

Lesson 1 - Sound Wave
Lesson 2 - How Sound Travels
Lesson 3 - The Sound of Music (featuring Kora musician Joel Sebunjo)
*Incl. - How Deaf and Hearing Impaired “hear” and play music

What is a sound and how do we hear it? How do sounds travel in space? Would you like to learn how to track the eye of the storm? How about discovering how the deaf and hearing-impaired people enjoy and play music? Interested in teaching your friends and families new games that involve sound? Want to become a musician and make your own string instruments to play a concert for your family and friends? Watch this episode of N*Gen to have a sound adventure that will make your day a lot more musical! Let’s go! Let’s Know!

Episode 6 - Energy

Lesson 1 - Forms of Energy, Combustion/ Oxidation
Lesson 2 - Energy of the Human Body
Lesson 3 - Energy Transformation and Units
Lesson 4 - The Sun, primary energy source
*Incl. - Pollution and Clean Energy Sources

What does it mean that something has energy? What do a human body and a candle have in common? How do snakes see in the dark? Is it possible to make a drawing using the sun rays instead of a pencil? How can we stop using energy from sources that harm our planet? Can energy kill viruses? In this episode of N*Gen our energetic teachers from Lagos will teach you about the different forms of energy and how we can use them in everyday life. As usual, the show is full of fun tips and tasks to do at home. You will also be burning energy while watching the show with Tadhi’s fun fitness routine! Let’s Go! Let’s Know!
Episode 7 - Light

Lesson 1 - Light Source, Light Wave
Lesson 2 - Refraction, Shadows, Transparent, Translucent and Opaque Objects
Lesson 3 - Photosynthesis
*Incl. - How to make a Pin-hole camera and Hand Puppet Theatre

Would you like to be enLIGHTened about the complexity of light? How does light travel in waves but in a straight line? What is our main source of light? How do plants use sunlight to grow and why is the process of photosynthesis essential to human survival? How can light trick the eyes? Have fun doing a “magic trick” with a bent pencil, learning how to make a puppet show at home and how to construct an old-school camera out of simple materials. N*Gen is the perfect show to learn more about the world around you while keeping your mind and body active. Let’s Go! Let’s Know!

Episode 8 - Bones

Lesson 1 - Human Skeleton
Lesson 2 - Paleontology, Fossils around Africa (ft. Lucy, Turkana Boy, Simbakubwa)
Lesson 3 - National Museums of Kenya visit
*Incl. - Dinosaurs discovered in Africa

Take an exclusive behind-the-scenes tour of the National Museums of Kenya and see one of the largest fossil collections in the world! Learn how paleontologists study what life on Earth looked like millions of years ago, and have some fun at home making your own play-fossils. Meet Simbakubwa, the Big Lion, and the Girafatitan, the largest dinosaur found in Africa! We’ll not only talk about the ancient bone remains but also tell you about your very own human skeleton: how it develops, functions, and how to keep your bones strong and healthy. Let’s go, let’s Know!
Episode 9 - Brain

Lesson 1 - Brain Structure and Function
Lesson 2 - How We Learn, Neurons
Lesson 3 - Looking After Our Brains
*Incl. - Babies’ Brain, Early Childhood Development

How do we learn and remember things? How can one better prepare for a test? Does practice really make perfect? Why is physical activity important? Why are babies’ brains so interesting if they seem to be doing so little? How important are our first 1,000 days of life? What is the brain made of and how does it really work? N*Gen’s charismatic teachers and their special guest, Ms Brain, will answer all these questions and more! Let’s go, let’s know, brainiacs!

Episode 10 - Robotics

Lesson 1 - What Is a Robot, Robot Parts
Lesson 2 - What Can Robots Do?
Lesson 3 - How Robots Think, Programming and Code

What are robots made of and how do they work? Can robots be just like humans? Can robots think for themselves, and if not, how do we teach them? How different are the robots we see in real life to the ones we know from movies like Transformers? Ms Bot, a very special guest on the show, will be joining us to answer all these questions. We’ll also take you on a trip to a makerspace in Northern Uganda to show you how young women and men, girls and boys, make their very own robots with locally available materials. Let’s go, let’s know!
Episode 11 - Wetlands

Lesson 1 - What is a Wetland?
Lesson 2 - Animal Habitats and Adaptation (ft. Shoebill)
Lesson 3 - Importance of Wetlands
*Incl. - Papyrus uses in Ancient Times and Now

Wetlands are an important part of Earth’s ecosystem, found everywhere on our planet. But how much do we really know about wetlands, and the plants and animals that live there? Admire the incredible show nature puts on in the Okavango Delta. Join our young explorers Tuli and Ethan on their journey through the amazing landscapes of Uganda, discovering incredible creatures and unique habitats. Meet his majesty, the Shoebill. Learn about all the uses of the papyrus plant, now and in ancient times. Understand why conservation of these ecosystems is crucial to our survival. Let’s go inquire, explore, scramble, wade, and know wetlands!

Episode 12 - Space

Lesson 1 - Solar System, Distances in Space
Lesson 2 - Rotation of the Earth, Day and Night, Seasons
Lesson 3 - Gravity, Action and Reaction
*Incl. - Look at the Moon through a Telescope!

How big is our universe? What does the Moon really look like? Why do we have seasons and changes of day to night and night to day? What keeps us from falling off the Earth? How can we stop using energy from sources that harm our planet? Can energy kill viruses? In this episode of N*Gen, our energetic teachers from Lagos will answer all these questions and more. As usual, the show is full of fun tips and tasks to do at home, like how to make and launch your own rocketship! You will also be burning energy while watching the show with Tadhi’s fun fitness routine, as well as see how to deal with troubling feelings and wind down. Let’s Go! Let’s Know!
Why do we need to eat? Can humans eat anything? Why are insects a healthy snack option? What are some of the most unusual foods eaten on the African continent? What is a balanced diet? What is food really made of and what happens when we eat it? Join N*Gen’s intrepid teachers on a one-of-a-kind trip down the human digestive system to find out! This ride is not for the faint-hearted (or rather, faint-stomached!), and includes an amusement park-style slide down the 7meter long intestine. Let’s go, let’s know!