

Earth & Space Sciences

79 videos

**************************************	A Rocky Planet Rocks and minerals have been around since before human beings existed. Since the origins of the human race, we have used them in many diverse ways - from construction to jewelry. But where do they com	Year 2015	Rating E	Duration 00:03:22
	Acid Rain Atmospheric pollutantsemitted mainly by motor vehicles and industrydangerously increase the natural acidity in rain. Acid precipitation has a number of harmful effects for plants, soil, and water	2013	Е	00:01:18
	Alternate Methods of Sewage Disposal Series: Wastewater Story Objective: To learn about different methods used for sewage disposal. Learning outcomes - students will be able to: 1. Recognise sewage2. Describe different methods used for sewage disposal3. Describ	2013	Е	00:04:38
	Astronomy: Probing the First Stars and Galaxies Visible light, which can be seen with our eyes, comprises a small sliver of the electromagnetic spectrum. The rest of the spectrum, from short wavelength gamma rays to long-wavelength radio waves, req	2013	Е	00:13:48
	Biophysical Environment: Ecosystems and Interactions In this program we look at the interactions between the atmosphere, hydrosphere, lithosphere and biosphere at three scales: - Global: latitude and vegetation patternsRegional: catchment Local: ma	1998	Е	00:22:31
	Carbon Cycles and Cycles Our animated atoms have been prevailed upon to make another appearance. At the "Club Chlorophyll", carbon atoms set off on their various carbon cycles. This animated and fun programme looks at:- Glucos	2001	Е	00:17:47
	Coal, Petroleum and Natural Gas Series: Natural Resources Objective: To learn about natural resources, coal, the destructive distillation of coal, the importance of natural gas, the origin of petroleum and about petroleum refining.Learning outcomes - student	2014	Е	00:19:13
	Comets Series: Space This video explains what a comet is, how they appear from earth and space. The video also describes how comets are formed and how they behave in outer space, and how the differ from other key astronom	2015	Е	00:03:32
	Composition of the Atmosphere Objective: To learn the composition of the atmosphere and to know the importance of various components of the atmosphere. Learning Outcomes: 1. Identify the various components of the atmosphere. 2. Ex	2013	Е	00:05:23
	Consequences of the Earth's Rotation Series: Space In this video, students will learn about the consequences of the Earth's rotation and how it impacts time zones.	2016	Е	00:03:36

	Conserving Water, Conserving Life Series: Water as a Resource	2014	E	00:02:36
	This unit introduces concepts such as water as a limited resource and water footprints; explaining to students what the impact on the environment of the production of goods has.			
	Cycles and Seasons: Tides, Seasons and Phases of the Moon	1998	Е	00:19:50
	Using drama skits and animated computer graphics, this program explores the cycles and seasons that dictate life on earth, and answers the following questions: Why do we get day and night? What are se			
6	Dinosaurs: How We Know What We Know!	1990	Е	00:19:48
	In this fascinating film innovative scientific methods are used to answer basic questions about dinosaurs What did dinosaurs look like?- What did they eat?- How big and how strong were they?- How di			
100	Diving into the Water Cycle Series: Miniclips	2018	Е	00:03:13
	The water that we drink today is the same water that the dinosaurs swam in and that people of ancient civilisations drank – and it's all because of the wonderful water cycle! This Miniclip illustrates			
	Earth Systems	2015	E	00:03:35
Now	The Earth is composed of systems and layers that interact with each other, fostering life and making our planet what it is today. These systems include the biosphere, the geosphere, the hydrosphere an			
10. 15	Earth's Crust Series: Bill Nye the Science Guy	1995	Е	00:26:55
	Bill Nye goes to the depths of the earth (literally) to explain how the Earth's surface and its inner mantle differ.			
	Earth's Revolution and Its Effects Series: Space	2017	Е	00:04:28
	This video explores the Earth's relationship with the Sun, and how its motion and annual rotation affect seasonal change on Earth.			
	Earth's Seasons Series: Bill Nye the Science Guy	1995	Е	00:26:06
	Bill Nye the Science Guy goes full tilt to give the reasons for the seasons. His worldly perspective shows why when it's winter in America, it's summer in Australia.			
	Earthquakes Series: Bill Nye the Science Guy	1995	Е	00:27:02
	Thousands of earthquakes happen each year and Bill Nye the Science Guy trembles in his boots when he explains what causes them. Find out what makes big pieces of the Earth's crust (the plates) move an			
	Energy Conservation	2002	Е	00:24:35
	This programme takes the audience on a tour of an energy efficient house to show how the average home can cut energy use.			
	Exploring Our Solar System Series: Into Space	2016	Е	00:22:51

Come on a voyage through the solar system and discover the size, orbits, rotations, moons and other fascinating facts about the Sun and the eight planets orbiting it. This clip also describes some of...

	Fossils Series: Bill Nye the Science Guy	1997	E	00:26:40
	Discover the relationship between dinosaurs and birds, and find out that rhinoceroses once lived in Nebraska. Bill also tracks down dinosaur footprints with paleontologist Grace Irby and travels to th			
	Global Tectonics: Competing Theories	2006	Е	00:22:19
	Through dramatisation and animated graphics, this programme clearly explains current theories regarding the structure of the Earth, and how the continents came to be in their current positions. It exp			
	Igneous, Sedimentary and Metamorphic Rocks Series: Rocks	2014	Е	00:10:10
	Objective: To learn about igneous, sedimentary and metamorphic rocks, their types and formation. Learning outcomes - students will be able to: 1. Describe what igneous rocks are. 2. Explain the types			
	Irrigation	2013	Е	00:03:26
	Objective: To understand the process and different methods of irrigation. Learning outcomes - students will be able to: 1. Explain the process of irrigation2. Discuss the sprinkler and drip systems o			
	Jupiter Series: Space	2016	Е	00:03:22
	This clip focuses on the largest planet in our solar system, Jupiter. Here, you will learn about its atmospheric properties and what gives the planet its colourful appearance.			
	Living on The Planets: What We Need To Live	2000	E	00:20:00
	This program covers:* MARS - life, viking missions. * Making Mars habitable for plants and humans.* THE MOON - building a base on the Moon.* Producing oxygen and water, building materials.* Mining the			
-	Lunar Eclipse Series: Space	2014	Е	00:03:48
o o	This video helps students to understand how a lunar eclipse occurs. The umbra and penumbra are both discussed in relation to lunar eclipses.			
ada an antiquanting to	Mars Series: Space	2015	Е	00:02:56
	Explore Mars' fascinating temporal and atmospheric properties in this clip, which gives an insight into the Red Planet and its similarities to Earth.			
A STATE OF THE STA	Mars Landing 2012: The New Search for Life	2012	Е	00:45:50
	This one-hour special introduces the audience to a team of dedicated scientists who brought Curiosity to life. Brand new science and technology that had never been attempted made this mission a realit			
	Mercury Series: Space	2016	E	00:02:54
	This clip will explore Mercury and its characteristics and will also inform students about space missions to the planet.			
	Minerals and Ores	2013	E	00:03:39
	Objective: To learn about minerals and ores. Learning outcomes - students will be able to: 1. Define minerals with examples2. Differentiate between metallic and non-metallic minerals3. Identify ores4			
	Neptune Series: Space	2016	Е	00:04:26
	This video will allow students to understand the characteristics of Neptune, the eighth planet in the solar system.			

	Nitrogen Cycle	2013	E	00:04:47
	Objective: To understand the process of the nitrogen cycle. Learning outcomes - students will be able to: 1. Explain the nitrogen cycle2. Describe the various steps involved in the nitrogen cycle			
	Nuclear Energy: The Issues Series: Nuclear Energy Presents the arguments for and against the use of nuclear power to produce	2008	Е	00:38:19
	electricity, including whether it is the answer to global warming. Relevant background information is included.			
	Our Earth in Motion: Understanding Time, Tides and Seasons This program explains in detail how the Earth and the Moon move with respect to each other and the Sun, why we have day and night and different time zones, why we have the four seasons every year, the	2006	E	00:22:23
·	Our Planet: Earth Series: Space	2016	E	00:03:23
	How does temperature and atmosphere play such an important role on Earth? In this programme, students will learn about our planet, Earth, and its suitable conditions for life.			
	Oxygen Series: Air Around Us Objective: To learn about the presence of oxygen in air and the oxygen cycle.	2013	E	00:03:56
	Learning outcomes - students will be able to: 1. Demonstrate that oxygen occupies one-fifth of the volume of air2. Explai			
) = (• = =	Phases of the Moon Series: Miniclips The Moon. We see it almost every night in the sky – but how much do we know	2018	E	00:03:38
	about it? And why does it constantly change appearance? This incredible Miniclip animates all the phases of the Moon, includ Potable Water and Water Treatment Plants	2013	E	00:04:30
	Series: Wastewater Story Objective: To know about potable water and water treatment plants. Learning outcomes - students will be able to: 1. Define potable water. 2. Memorise various	2013	_	00.04.30
And the second	Rainwater Harvesting Series: Separation of Substances	2013	E	00:04:44
	Objective: To learn about rainwater harvesting. Learning outcomes - students will be able to: 1. Describe rain water harvesting. 2. Explain the two most efficient methods used for rain water harvesti			
	Renewable Energy	2002	E	00:28:51
	This programme profiles examples of technologies harnessing renewable energy - such as a wind farm, a bus running on ethanol, and a solar house - and uses these examples to examine the current state o			
	Renewable Energy: The Search for Endless Energy Energy is the foundation of modern life, but in using fossil fuels to satisfy our need	1999	E	00:24:37
	for energy we are changing our atmosphere and depending on a rapidly depleting resource. This film looks at the w			
Indicated by the state of the s	Renewable Fuels Traditionally we have relied heavily upon non-renewable energy resources, however we have reached a point globally where the environment cannot sustain such impact, nor do we have the resources to con	2008	E	00:23:33

	Rock Cycle Series: Rocks	2013	Е	00:04:31
	Objective: To learn about the rock cycle and its operation. Learning Outcomes: 1. Explain the rock cycle. 2. Discuss the operation of the rock cycle.			
÷	Saturn Series: Space	2015	Е	00:02:17
	This video will enable students to describe and learn about Saturn - the second largest planet in the Solar System.			
	Sewage and Wastewater Treatment Series: Wastewater Story	2014	Е	00:08:43
	Objective: To learn about wastewater and sewage and their sources and the process of treatment of water. Learning outcomes - students will be able to: 1. Predict how wastewater and sewage are formed 2			
	Sewage Solutions (Advanced Version)	1992	E	00:31:29
	This programme investigates the problem of human sewage waste and the biological and chemical methods involved in proper treatment.			
	Solar Eclipse Series: Space	2014	E	00:03:44
	During a solar eclipse, the shadow of the Moon falls on Earth. This video explains what a solar eclipse is and how it occurs.			
	Solar Power: An Alternative Energy Source Series: Show Me Science Advanced Series	2010	Е	00:13:30
	The automobile industry is going through revolutionary changes. The standard petroleum gasoline fuelled engine has some new competition from gas-electric hybrids, electric vehicles, hydrogen fuel cell			
	Starlight	2000	Е	00:18:07
•	Having done the grand tour of the universe, we now examine the light from stars and see how it can tell us about the stars within our galaxy. This program covers: - Brightness, distance by parallax, C			
. 1	Stars of the Universe Series: Into Space	2016	Е	00:13:21
	In this update of our classic programme, we explore important features of the universe through easy to follow, stunning visuals and graphics. Learn about our galaxy home, the Milky Way, and some of th			
	Sustainable World Series: Energy and Sustainability	2013	Е	00:03:23
224	We all share a planet that gives us water, air, food, raw materials But all of these things are not eternal or inexhaustible. They must be used in a sustainable way. Do you know what sustainability			
	Telescope Series: Space	2016	E	00:04:24
	In this video, students will learn about different types of telescopes and how they work.			
	The Carbon Cycle Series: The Cycles	2013	E	00:03:39
	The carbon cycle has played a critical role in the history of our planet. Found everywhere on earth, in the oceans and the atmosphere, carbon is also crucial to the life of animals, plants and bacteri			

	The Earth Moves This video explains how the movements and position of the Earth in space determine the day and night, the seasons and the very existence of life on our planet.	2016	E	00:04:30
	The Greenhouse Effect Objective: To understand the process of the greenhouse effect and know about global warming. Learning outcomes - students will be able to: 1. Explain the process of greenhouse effect2. Identify the c	2013	Е	00:05:42
	The House with No Bills: A Case Study on Renewable Energy Some years ago retired engineer Manfred Pruter and his wife Nita moved from Melbourne to a rural property in Central Victoria. By using solar, wind and numerous water tanks the couple have created the	2008	Е	00:19:17
	The Magic of Water Series: Water as a Resource This unit explains the water cycle through the endless journey of water around the planet. It makes students understand that water is always travelling and transforming itself; makes them aware of the	2014	Е	00:03:08
	The Moon Series: Space This clip will assist students in learning about conditions on the Moon, including the presence of gravity.	2015	E	00:04:27
	The Moon Series: Bill Nye the Science Guy Learning about Earth's natural satellite is an out-of-this-world experience as loony Bill Nye illuminates the orbit and phases of the moon. The program features an interview with Harrison Schmitt, the	1995	Е	00:28:09
6 0	The Moon and the Tides Series: Space What causes tides? In this video, students will learn the difference between a neap tide and a spring tide.	2015	E	00:05:35
	The Nitrogen Cycle Series: The Cycles The continuously moving nitrogen cycle is essential to life on earth. Found in the cells of all living things, it is also the most common gas in our atmosphere. This motion-graphics based clip looks a	2013	Е	00:04:03
	The Phases of the Moon Series: Space Objective: To learn about the phases of the Moon. Learning outcomes - students will be able to: 1. Explain the phases of the Moon.	2013	E	00:05:05
	The Phosphorus Cycle Series: The Cycles Phosphorus is an essential nutrient for all plant and animal life inhabiting the earth, including marine and fresh water environments. The key steps of the phosphorus cycle: weathering and erosion of	2013	Е	00:03:51
	The Rock Cycle Join environmental engineer Will Toliopoulos as he takes us into the field to explore the rock cycle. We begin with a tour of Earth's core, mantle and crust, and how they interact to form the three ma	2011	Е	00:21:04
• • • • • • • • • • • • • • • • • • • •	The Solar System Series: Space This video teaches students about the components of the solar system and its relationship to the Sun.	2015	E	00:05:03

	The Universe Series: Space	2016	E	00:03:15
	Stars, planets, and galaxies. These are all objects that make up the universe. In this clip, students will learn about the universe and its various components.			
	The Uses of Water Series: Water as a Resource	2014	E	00:02:00
<u>i</u>	This learning unit explains the relationship between water, health, education, and human development. Through the lives of three children on three different continents, students get to see other reali			
	The Water Cycle (Advanced) Series: The Cycles	2013	Е	00:04:19
	Water is one of our planet's most important substances. It sustains all living organisms and enables many crucial biological, chemical and physical processes to occur. This motion-graphics based clip			
STATE OF THE	The Water Cycle (Basic) Series: The Cycles	2013	Е	00:03:25
	When scientists search for life on other planets, the first thing they look for is the presence of water. On Earth, water exists naturally in solid, liquid and gas states, and is essential to all form			
	Uranus Series: Space	2016	Е	00:03:32
	This clip explores the seventh planet from the Sun, Uranus. Students will learn of its characteristics and colder temperature compared to other planets in the solar system.			
0	Venus Series: Space	2016	Е	00:03:05
_	This clip explores the properties of Venus. Students will learn about the planet's characteristics including its rotation and atmosphere.			
	Water and Biodiversity Series: Water as a Resource	2014	Е	00:02:06
	This learning unit explains what biodiversity is, allowing students to understand how the availability of water determines the diversity of life on Earth and the different ways in which water relates			
	Water Cycle Series: Bill Nye the Science Guy	1995	Е	00:25:53
4	Did you know that most of the water on the planet is the same water that's been here since the earth was formed? Using a whimsical model made of a tiny staircase, wind-up penguins, and a bicycle tire,			
	Water Pollution Series: Pollution of Air and Water	2013	Е	00:03:29
	Objective: To learn about water pollution. Learning outcomes - students will be able to: 1. Define water pollution2. Discuss the causes of water pollution3. Explain the types of water pollution4. Sta			
	Weather and Climate	2015	Е	00:04:18
	What causes rain, snow, or a hurricane? The weather. In this video, we will learn about weather and its elements, including how these elements combine to produce atmospheric phenomena. We will also ex			
	Where Does Energy Live? Series: Energy and Sustainability	2013	E	00:03:30
	Everything that surrounds us needs more or less energy to operate. But all the electricity, fuel for transportation, gas for cooking where do they come from? Learn about energy sources and discove			

2010

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00:14:13



Fossil fuels have long been the world's energy source, but it wasn't always that way. Ancient Eastern cultures developed the first known wind mills for drawing water and grinding grains into flour. Th...