DOWNLOAD PDF AIR (WHAT LIVING THINGS NEED)

Chapter 1 : Why do living things need air to survive?

Food (nutrients): Living things need energy for function. Energy is needed to grow, reproduce, move, and to work. Energy is needed to grow, reproduce, move, and to work. Think of what will happen if you stayed for three days without food.

Some of the things are living and others are non-living. A dog, swing set, car, tree, flowers, and a book are some of the things that make up the world. There are two different kinds of things in the world. One kind is called living things. Living things eat, breathe, grow, move, reproduce and have senses. The other kind is called nonliving things. Nonliving things do not eat, breathe, grow, move and reproduce. They do not have senses. An example of a living thing in the world is a dog. A dog is an animal, and dogs need food, water, space, and shelter. The dog is a living thing. A tree or flower is a plant, and trees and flowers need air, nutrients, water, and sunlight. A flower and tree are also living things. Plants are living things and they need air, nutrients, water, and sunlight. Other living things are animals, and they need food, water, space, and shelter. A dog eats food, breathes in air, and grows from a puppy to a dog. Reproduce means to make one of its own kind. A dog also has senses. Senses are seeing, hearing, smelling, tasting, and feeling. Other living things include people, cats, rabbits, bugs, lions, and many others. There are many different kinds of plants, too. Plants can include dandelions, grass, corn, tomatoes and much more. Non-living things include things that do not need food, eat, reproduce, or breathe. A car does not eat or grow. It does not move unless a person is driving it. It does not need air to breathe and it has no sense. It is a non-living thing. A swing set does not use food. A book does not move. The swing set and book do not grow and they do not need air to breathe. They are non-living things. Nonliving things do not need air, food, nutrients, water, sunlight, or shelter. Other non-living things in the world include pencils, rocks, footballs, toys, hats, and many others. One more example of a living thing is a bird. A bird eats seeds or worms. It breathes in air. It comes from an egg and grows. It moves by flying. It lays eggs and reproduces. It smells and sees because it has senses. A bird is a living thing. One more example of a non-living things is a ball. A ball does not eat anything. It does not need to breathe. It never moves unless a person throws or rolls it. The ball does not reproduce. It cannot hear or feel and it has no senses. A ball is a non-living thing. In summary, everything in the world is a living thing or a non-living thing. Living things can be plants which need air, water, nutrients, and sunlight. Living things can be animals which need food, water, space, and shelter. There are living things and nonliving things everywhere. The senses are seeing, hearing, smelling, tasting, and feeling. A dog and tree are living things. A book and a car are nonliving things.

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Chapter 2 : Air (Oxygen) Needs of Living Things - Kids Biology

Air is the most important thing that living things need. Try holding your breath for a while! Try holding your breath for a while! Most people can only hold their breath for 1 to 2 minutes.

Others think plants and certain animals are non-living. An everyday example is that students think various lifecycle stages of a butterfly are not alive the eggs and immobile pupae , whereas a caterpillar and butterfly can move and are therefore considered to be alive. The students focus on the activity that takes place within a location. Most students list only vertebrates , particularly mammals as animals. Some children think animals live only on land. It is common for year old students to have no conception of humans as animals. This view of living may be appropriate at this age but has some limitations and can lead to the alternative conceptions above. For example movement in plants is not apparent to students and consequently they may not consider plants living. Decisions about whether things are alive or non-living remain problematic as not all life processes stop at the same time. For example, human fingernails and hair continue to grow for weeks after death. Critical teaching ideas Most living things need food, water, light, temperatures within certain limits, and air. Living things have a variety of characteristics that are displayed to different degrees: There is a need to maintain a focus on the big ideas such as groups of classification and allow students to make connections between individual examples and the big ideas. Children tend to think fires are living because they consume wood, move, require air, reproduce sparks cause other fires and give off waste such as smoke. This is a complex idea and is better dealt with at higher levels where concepts can be unpacked in more sophisticated ways. Hence it is not necessary to try to change these conceptions at this stage, but to recognise that students may hold and maintain this view at some stage as learners. Students will articulate their classification system. Further discussion ideas could include a leaf that has just been picked, a fresh apple etc. Students could take digital photos and create a montage. A good case could be argued that the freshly picked tomato is alive because it is able to maintain its biological integrity for a considerable period of time after picking; i. This provides good content for an interpretive discussion requiring students to use reasoning to justify their arguments because the answer is not clear cut; different opinions are likely and the discussion will open up a range of questions and relevant issues. Skamp Challenge some existing ideas Other questions to explore could be whether a computer which is turned on is alive; whether a hibernating bear is alive; and whether a deciduous tree in winter is alive. Consider listing key questions that arise in relation to this issue or review these ideas over time with students.

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Chapter 3 : Living Things Breathe | Living Things | Non-living Things | Need Air to Breathe

There are several basic needs of living things that allow an organism to grow and thrive. Animals need food, water, air, and shelter. Similarly, plants need water, nutrients, air, and light.

The Basics Air â€" Oxygen Air is the most important thing that living things need. Try holding your breath for a while! Most people can only hold their breath for 1 to 2 minutes. The world record is an amazing 22 minutes, achieved by German free diver Tom Sietas. This can be compared to at most 7 days without water. Our need for air is absolutely extraordinary! Even professional divers use oxygen tasks to go underwater! Air composition Air is made up of a lot of different parts. The main other parts of air are greenhouse gases like carbon dioxide, methane, and water vapor. The same thing goes for argon. The two main components of air that are important to the body are oxygen and carbon dioxide. Can you guess which is which? There is no air in outer space! This is why astronauts always need suits and air tanks to do their job. Respiration Respiration is one of the most necessary processes of living organisms. Our bodies have a whole respiratory system to make sure we survive! During respiration, we first intake oxygen into our bloodstream. Then we release carbon dioxide back into the environment. The cells in our bodies all need oxygen to survive, which is why oxygen is so important to us. Carbon dioxide, differently, is harmful. This is why we the air we breathe in has more oxygen and less carbon dioxide than we breathe out. Different living organisms get air in different ways. Humans and most mammals use their lungs to breathe. Fish and plants also need oxygen, but they have adapted to their environments. Both groups go through respiration in different ways. Fish , for instance, have gills which they can use to get oxygen dissolved in water. Plants, contrarily, take in oxygen through tiny holes in their leaves called stomata. Stomata in plant leaves Photosynthesis Air is important to plants in another way: If humans and animals can eat foods high in glucose, plants have to make their own. Plants do this through a process known as photosynthesis. How photosynthesis works Photosynthesis is important both for plants and for the whole environment! This is why deforestation, or cutting down forests, is bad for the environment. By cutting down trees, we are reducing the amount of oxygen available for us in the air! Cutting down trees gives us more trees. But it is also very dangerous for the environment! Harming our environment Air Pollution The invention of many technologies has improved our lives in a lot of different ways. Yet, in the process, technology has also harmed our environment. One of the things that has been getting worse on Earth is air pollution. Huge amounts of toxic gases are released into the environment every day. These gases come from car engines and furnaces in electric and manufacturing plants. This makes it both hard to breathe and has consequences for a lot of other life forms! Air pollution has gotten very bad in the last couple of years. Parts of the world no longer see clear blue skies! Global Warming Another bad thing that happened from our overuse of technology is global warming. Burning petrol or fossil fuels releases a lot of carbon dioxide and water vapor into the air. The amount of methane is increased by large cattle farms. All these are greenhouse gases. Greenhouse gases trap sunlight inside the atmosphere and make the Earth hotter. The increase in greenhouse gases has led to what we now call global warming. Greenhouse gases have the same effect as the glass panels in normal greenhouses. They trap sunlight and heat and increase the temperature inside. Global warming has a lot of bad effects. One of them is rising sea levels. Warmer temperatures melt the ice at the North and South poles. This releases the water trapped in icebergs into our oceans. This makes the seas rise higher and threatens to flood the cities that are closer to the sea level! We are also experiencing more droughts and heat waves. A lot of animals , like polar bears, are being endangered by global warming. Now you are aware of these dangerous climate effects! There are a lot of ways you can help reduce air pollution and global warming. Using less cars and more public transport can also help decrease the amount of harmful gases in the air!

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Chapter 4 : Oxygen - Simple English Wikipedia, the free encyclopedia

Living things need air, food and water because they are essential to the chemical processes that provide organisms with energy and keep them alive.

What you will do: We know that plants and animals are living things, but where do they live? Where can you find living things? Draw a picture of an area you find living things. What non living things do you see in the same place? Which ones help the plants and animals living there? How do they help? What is going on? All living things need non living things to survive. Plants need soil and sometimes rocks and pebbles to give them a place to grow. The soil also holds the nutrients plants need to grow. Some animals live in the soil tooâ€”lots of different insects love burrowing into the dirt. Did you see any? Have you ever seen a worm wriggling in the dirt? Other insects like to live in the gaps under rocks. Some insects also like to live near our buildings. Have you seen any ants or spiders near your classroom? Lots of animals eat plants, so they rely on the soil to grow the plants that are their food. Both plants and animals also need water to live, including humans! Without water nothing at all can survive, but some plants and animals have special tricks to help them live with very little water. Make a list of all the different ecosystems you can think of. Start with a forest. What other places do plants and animals live with the help of non living things? Living and non living things Key Concepts:

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Chapter 5 : is air a living thing? | Yahoo Answers

*Air (Why Living Things Need) [Daniel Nunn] on calendrierdelascience.com *FREE* shipping on qualifying offers. This book explores the concept of air, and why living things - i.e., animals, humans and plants - need it.*

The Basics Needs of Living Things There are several basic needs of living things that allow an organism to grow and thrive. Animals need food , water , air , and shelter. Similarly, plants need water, nutrients, air, and light. Animals To survive animals need food, water, air, and shelter. Animals need food to have energy. This energy allows the animal to grow , move, do work and reproduce. Most animals only eat one type of food. Another essential for animals is water. Water allows nutrients and other chemicals to transport throughout the body. It also facilitates chemical reactions in cells. All animals need water to survive. The oxygen in the air is necessary for animals as well. Oxygen is necessary inside of animal cells. Very few micro-organisms can survive without oxygen. This owl has found shelter inside of a tree. Finally, animals need shelter. This shelter provides them safety and protection. It can be a place to rest, keep their food and raise their young. Plants Plants need light to survive. For plants to survive they need water, nutrients, air, and light. More specifically, plants need the carbon dioxide that is in the air. These basic necessities allow the plant to grow. Plants absorb water through the roots. Although they absorb some nutrients with their roots, they can produce other nutrients on their own. Plants receive air and light through their leaves. They need water, carbon dioxide, and sunlight to undergo photosynthesis.

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Chapter 6 : Why Living Things Need | Capstone Library

There are also air pockets in soils and water that help tiny living things survive in water and beneath the soils. For example, fishes absorb Oxygen from water with their gills. All animals are adapted with special organs and parts that help them absorb the oxygen they need from the air.

The amount, way, form or kind of these needs vary from organism to organism. For example, water is a basic need for survival. The amount of water a frog needs to survive is not the same as the amount of water a desert cactus plant needs to survive. They all need water, but because they are different living organisms, their water needs will be different, even though they both need water to live. There are five basic needs that all living things have. This is probably the most important need for all living organisms, because it is the source of all energy. It also provides heat for plants and animals Water: Water is the medium in which living cells and tissue work. Water is also a living environment for many plants and animals Air: Air is made up of several gases, but the two most important gases are Oxygen and Carbon dioxide. Without oxygen, animals will die, and without carbon dioxide, plants cannot survive. Living things need energy for function. Energy is needed to grow, reproduce, move, and to work. Think of what will happen if you stayed for three days without foodâ€¦ A Habitat with the Right Temperature: Too cold or too hot? Every living organism needs the ideal temperature to survive either on land or in water. They include soils, temperature, water, sunlight and physical barriers. Physical barriers may include landforms and water bodies. They often prevent a living organism from moving to another place when conditions get bad in their regular habitat. Now, we shall take a close look at what each need really means and why it is extremely important that they get their living needs.

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Chapter 7 : Living Things Science Experiment - How do living and non-living things interact? - Monster Scie

The four most important things that we all need to live. Food, Water, Shelter, Air. Living things like animals need food and a place to hide themselves so that they don't become prey for other animals.

Discovery of oxygen[change change source] Oxygen was initially discovered in by Carl Wilhelm Scheele. Then Joseph Priestley also discovered it two years later and spread the news before Scheele. This made many people think that Priestley discovered oxygen first. The word oxygen comes from Greek words: Oxygen comes to earth from all parts of the universe in meteorites. It is also found in minerals and plants that grow on the earth and other planets. Oxygen in nature[change change source] A drop of water. When one oxygen atom combines with two hydrogen atoms , they form a molecule of water also written as H2O. This water is required by all living things to live. Air also contains oxygen. Air is made of many gases that are mixed together. Oxygen is especially important because all animals use oxygen to get energy from their food. Combustion of wood in a match. Uses of oxygen[change change source] Oxygen is what makes burning possible. This is called combustion. When an object or something burns, oxygen combines with another substance and releases heat and light. For instance, when wood burns, the oxygen in air combines with the wood to create fire. This ability of oxygen has many uses. But it also makes pure oxygen very dangerous. If pure oxygen touches a flame or spark, it can make a hot fire and cause great damage. Combustion is used in many ways. When oxygen is mixed with acetylene , it can create a very hot flame. This is used in welding , of metals. Liquid oxygen can make a hot flame with other propellants for rocket engines. Oxygen can be used in smelting metal from ore. Oxygen is used in hospitals for killing bacteria. It is also used when a patient has had carbon monoxide poisoning. Oxygen is used in water treatment to purify the water to make it safe to drink. People with certain illness es are less sick when they breathe pure oxygen. Production of gas[change change source] Pure oxygen can be produced in several ways. In nature, plants produce oxygen by using sunlight, carbon dioxide another gas and water. This process is called photosynthesis. Most of the oxygen in the air is produced by photosynthesis. People mostly get pure oxygen from air by separating it from nitrogen. Oxygen can also be produced by electrolysis. In this process, electricity passes through water. As a result, the water molecules break and release oxygen and hydrogen gas.

Chapter 8 : Air - Simple English Wikipedia, the free encyclopedia

Yes, it is true that all living beings need air to survive since air is a mixture of many games, but oxygen is the most essential one which helps us to respire.

Chapter 9 : Needs of Living Things - Kids Biology

Living beings need few basic things for living and calendrierdelascience.com of these basic needs are air,water,food and shelter. In this education video, kids can easily learn all about these needs.