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GLOBAL WARMING UNMASKED

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of Omega-3

Your Life in
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The
Marshmallow
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COVER Polar bears are just one of the many animals in danger of extinction due to global warming. *Photo Credit: Paul Souders*

SURVIVAL OF THE FITTEST

BY: ABHINAV RAGHAVAN

1 Charles Darwin shared his birthday with our well-known 16th president Abraham Lincoln. Ironically, the latter was born in an a log-cabin and Darwin in a rich, grand Georgian house in Shrewsbury England.

2 Darwin waited 20 years to publish his seminal work “The Origin of Species by Means of Natural Selection” because he was concerned about the public acceptance of his forward ideas

3 He was a medical school dropout. His father was a famous physician who had hoped that his son would follow in his footsteps, but unfortunately, Darwin was nauseated at the very sight of blood!

4 Darwin not only studied exotic creatures, he also dined on them. He founded a Gourmet club, as a student at Cambridge. During his epic journey aboard the HMS Beagle, he even tried puma, armadillo and ostrich!

The phrase “survival of the fittest” was never coined by him, he merely adopted the phrase from the English philosopher Herbert Spencer.

ON THE BENEFITS OF OMEGA-3

BY: ALONZO ARAMBULO



Sources of Omega-3

Photo Credit: Omega 3 Sources

Fat. When people hear this word, regarding the edible kind, they are usually turned off. But why does fat have such a bad connotation?

Most animal fats, and fats found in processed foods, are indeed harmful to the body when taken in large quantities. These omega-6 fats can lead to things like weight gain and heart disease, but what if there was a good fat, a fat that had good effects on the body?

Enter omega-3s. According to the University of Maryland Medical Center, “omega-3 fatty acids...

- reduce inflammation
- may help lower risk of chronic diseases such as heart disease, cancer, and arthritis
- maintain cardiovascular health
- vital for prenatal and postnatal neurological development (how the brain is formed before and after birth)
- reduce tissue inflammation
- alleviate the symptoms of rheumatoid arthritis (the condition that makes your joints ache)

So, how do you take in more omega-3? Your body can't make them, so they need to be eaten. The American Heart Association (AHA) says that fish “is a good source of omega-3 fatty acids.” In fact, the AHA recommends eating fish at least twice a week. Omega-3s can also be found in foods like olive oil, certain vegetables, whole grains, and nuts, which is why nuts are said to be “food for the brain.” Getting a good amount of omega-3s in your diet is crucial for good health, so make sure to eat lots of omega-3s!

THE MARSHMALLOW TEST



BY: ANAMIKA BASU

We, as students, know that it is in our best interest to finish our homework now and watch Netflix later. But, many of us, here at BASIS Scottsdale, would still watch Netflix. But prioritizing television over school, we are giving over to impulse rather than reason.

Understanding self-control and willpower has been an intriguing topic in psychology for many years now. More than forty years ago, Dr. Walter Mischel, then a professor at Stanford University, investigated children's self-control in a simple but effective test now known as the Marshmallow Test.

Researchers presented preschoolers with a plate of marshmallows they were not allowed to eat, and then left them alone for a short amount of time. The children were given an option: if they waited until the researchers returned, they could

have two marshmallows, but if the preschoolers could not wait, they would ring a bell and only be given one marshmallow.

Although the test seems simple enough, the results portray an individual's ability to delay gratification. Preschoolers with good self-control sacrificed the instant pleasure of having a marshmallow now for the added benefit of having two marshmallows later, revealing two methods of cognition —the “hot” system, which relies on impulse and emotion, and the “cool” system, which relies on reflection and the incorporation of knowledge.

But the study didn't end there. Researchers revisited the participants during their adolescent and adult years, and they found that the participants who had sacrificed immediate pleasure as preschoolers were scoring higher on the SAT, handling stress better, and concentrating for longer amounts of time. Many of those who had given over to impulse as preschoolers, however, had retained their lack of willpower over decades.

CELL THERAPY

BY: AVI BADIREDDI

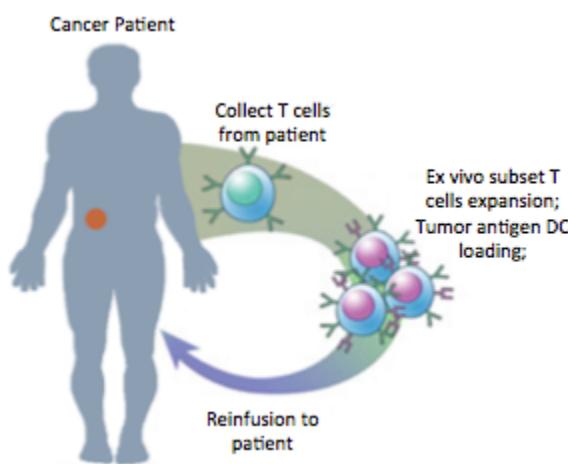
Everyone knows that the cell is the basic unit of life and is found in every living organism but, have you ever wondered how such a small unit of life can be so complex? Even today we still have much to learn about cells.

One of the biggest reasons scientists study cells is to test theories about the causes and treatments for many diseases such as cancer. Cell therapy involves injecting stem cells, cells that can differentiate into other types of cells to replace or heal a damaged tissue.

This form of therapy was first introduced by Paul Niehans in 1931. He injected material from calf embryos into a human body with cancer. He thought he could cure the cancer, but was unsuccessful in his experiment.

Today we still continue to do these types of experiments and try to make Paul Niehan's experiment successful.

The study of cells is limitless. Further research will provide us with some strong advances in the field of science and medicine.



Cell Therapy Picture
Photo Credit: Cell Bio Med Group

THE EARLIEST CANCER DISCOVERED

BY: TRISTAN CLARKE

A big issue plaguing the human race at this day and age is cancer and the questions it has brought with it. Is it curable, and if so how? Where did it come from? When did it come from? Scientists might have found out. Recently two new discoveries have brought insight into these questions. One possible proving our relations to the dinosaurs.

In a recent study performed in parts of Romania, a group of international scientists may have discovered a dinosaur with evidence of a benign tumor! In the Hateg Basin of Transylvania, a jaw of a hadrosaur was found with a case of ameloblastoma, a rare form of benign cancer typically found in the lower jaw or teeth. Hadrosaurs were a form of plant-eating, duck-billed dinosaurs, being one of the most common dinosaurs of the late cretaceous.

In the words of Bruce Rothschild "The discovery of an ameloblastoma in a duck-billed dinosaur documents that we have more in common with dinosaurs than previously realized" in other words, he is saying that we are actually much more closely related to the dinos that we had previously thought.

As it had a benign tumor, it would have caused no distress to the animal, it died young. Finding this, the scientists wanted to know if this tumor had anything to do with the animals early death. As it turned out the tumor did not kill the dinosaur, rather predators did, however, it is likely the tumor led to this animal being picked off early on.

Now we know that dinosaurs had cancer and tumors up to 85 million years ago but what do we know about humans? If dinos had this disease so early when did we get it? In a new expansion in human investigation, done by National Geographic, we might have found some hard evidence.

In a foot bone belonging to an early human, they have found evidence of osteosarcoma, an aggressive form of cancer, that destroys the cells that create bones. As the people of this age had no pollution, junk food or (mostly) no obesity, the main modern excuses for cancer, this case has proven that you can act however you want and that cancer is not caused by something we do, it is natural. If you have cancer it will take effect no matter the precautions.

Interestingly humans have not documented anatomically correct cancer until the early 18th century. One likely reason for this is because cancer tends to affect those 65 and older and human life expectancy has not been very high until recent years. This furthermore helps to disprove the theory that civilization caused cancer. It did not create it, it merely helped us to reveal it.

Through these recent scientific studies, we have learned much about the disease we call cancer. Previously we had no idea when the earliest cancer took form, let alone the first human cancer. Furthermore, we have been able to disprove the theory of civilization caused cancer. This will help scientists to figure out how we might be able to cure this complex disease and protect those to come.



The team X-rayed 10,000 bones looking for tumours.
© B. Rothschild

YUMMY COFFEE

BY: JERRY MIAO

"Java: New update required. Download now?" Another Java update? Well, what even is Java, and why is it everywhere? In the world of computer science, there are a multitude of programming languages, and Java is just one of many. Others include C, Python, and Ruby, just to name a few.



There are two main designations for programming languages as well: native (low-level) languages and virtual (high-level) languages. Native languages work by directly interacting with the computer hardware, and often has a broader range of capabilities than virtual languages.

However, while virtual languages may be more limited in their scope of operation, they are often more safe to use than native languages, meaning that if there are any errors in a computer program written in a virtual language, the computer hardware will not be affected. Now, why do we constantly need Java updates? Java is a virtual language running on what is called the Java Virtual Machine (or JVM for short), and operates in the Java Runtime Environment, which combines the JVM and other components for Java into a runtime software.

New features are constantly being added to these to ensure maximum efficiency in compilation and runtime!

Java has a plethora of uses in the modern world, including web apps, development tools, the Android OS, and even Minecraft! Interested in learning more about Java or just computer science in general? Our school offers AP Computer Science A, a course which teaches the ins and outs of the Java language, and AP Computer Science Principles, a course involving the more broad ideas and mechanisms behind computer science. Get out there and start coding! All it takes is practice.

A HOLE IN THE UNIVERSE

BY: RIZWAN MANNAN

At some point in time, we've all thought about the strange things of space. Popular ideas, like extraterrestrial aliens, appear everywhere from outlandish science novels to cheesy PBS shows--but let's try something less contrived. What exists at the center of our galaxy? Unfortunately, the center isn't as exciting as some door to another dimension. It's a black hole. From the name, one might assume it's a gap in the universe, a spot where nothing exists. However, the truth is the exact opposite. A black hole is actually an incredible amount of matter packed into an extremely small area. According to NASA, Black holes are created when a star dies. A star has many layers, and while the outer layers explode into a supernova, the core can collapse and become a black hole.



The science of black holes is not only scientifically fascinating but represents something far greater than just being the dead core of a star. It validates our universal laws of math and physics and shows a real life application of equations like Einstein's famous $e=mc^2$. The black hole was even initially contested because it could not be observed. However, to this day, confirmed presence of black holes represents an ultimate culmination of the research and knowledge of the scientific community.

A YEAR OF MARS IN HAWAII

BY: NISHAUN BADIREDDI

On August 28, 2015, a team of six NASA members entered a dome habitat located on a mountain in Maunaloa, Hawaii. They lived in the dome for a year and couldn't communicate with the outside world. This was a simulation for the Mars flight in 2020. This was known as the HISEAS project started by Hank Rogers, an entrepreneur and video game developer.

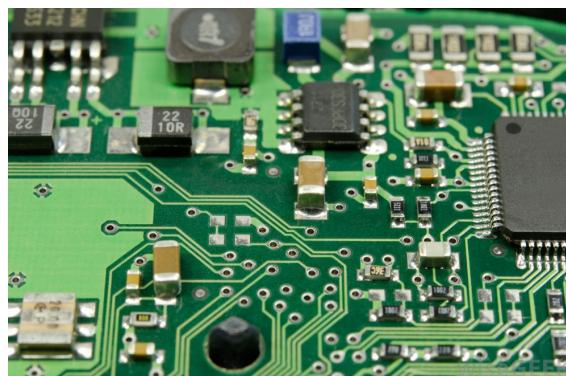
During the simulation, the members of the HISEAS were trained to live and adapt to a Mars environment. They couldn't call their friends and couldn't communicate with their families nor have visits from them. Every time they exited the dome, they had to wear their space suits and treat outside like space. They had to live in the dome without fresh air, fresh food, and privacy. They worked, cooked, and survived through the chilly days.

I think these six NASA members are lucky because they got the first taste of what Mars will be like. They lived in an environment with no fresh air and food, and survived the harsh conditions of "Mars". They also got to observe the differences in plant growth and soil chemistry. These six men and women took an important step in the Mars Enterprise.

No other person has taken such steps forward to visit the planet Mars.

MINUSCULE MACHINE MARVEL

BY: VIGNESH SIVAKUMAR



PCBs

Photo Credit: Open Electronics

Phones, laptops, watches, computers, and tablets: they surround us every day and provide the quickest and easiest actions to take place within the click or tap of a button! But, have you ever wondered what makes all that processing information even possible? It's all thanks to microprocessors and microchips. What's that you say? Simple. Microprocessors and Microchips are tiny printed circuit boards (PCBs) that allow electrical signals to pass and change paths for different computational events.

According to AT&S, the future in PCBs will lie in their latest technological advancement: semi-flexible PCBs. These PCBs will be rigid with the circuitry of the PCB itself, but the frame and polyimide backing will flex under different environments. Additionally, this new PCB is extremely thin, and at 0.15 mm, it's amazing how the circuit board can still perform several complex tasks without flaw. That's almost the thickness of a human hair and yet its construction is solid and durable!

PCBs, in fact, are currently responsible for almost every mechanical and technological advancement in the present day from the smartphones to even the pulse defibrillator in medical technology. A miracle in the modern age, the PCB is a technological wonder that allows the creation of ideas and electronic equipment that surround all of us. Who knows what the PCB will become in the near future? Thinner than paper? Stronger than metal? Technology will continue to advance and PCBs will tag right alongside.

CORNEAL REGENERATION

BY: RICHARD BAO

Last month, researchers in Melbourne made a revolutionary scientific breakthrough when they successfully grew cornea cells and transplanted them into the eyes of blind animals to restore their vision. This development presents a possible cure for blindness and may offer a superior alternative to more traditional treatments such as the use of donated tissues.

The cornea is an essential component of the eye, as it plays an important role in focusing vision. It can be identified as the clear, dome-shaped layer covering the front of the eye. However, it can degenerate with old age. Corneal disease is one of the leading causes of blindness, a disability that affects an estimated 39 million people worldwide (WHO).

The new technique involves the regeneration of new cornea cells from the patient's damaged cornea. The new cells are grown on a synthetic hydrogel film and subsequently placed in the patient's eye. The hydrogel layer eventually dissolves after two months, leaving a freshly grown cornea to replace the old one.

Unlike donated corneal cells, these regenerated ones are able to perfectly integrate into the host because the procedure is not complicated by the severe immune responses that are common in conventional organ transplants, which have a rejection rate of one in three.

Initial research demonstrating the effectiveness of corneal regeneration in animal test subjects has been so successful that scientists are now preparing for human trials. It might not be long before doctors began practicing with this amazing new treatment. Once perfected, corneal regeneration will be a huge step toward a future in which people no longer suffer from blindness.

THE NUCLEAR FUTURE

BY: DEVON HARRIS

The word "nuclear" is one that many nations have come to fear and love. The endlessness of its possible applications is daunting to many of the world's best and brightest. Is nuclear energy viable as a long term source of energy? The world's population is expanding at an exponential rate, and with it an ever-growing need for resources. Nuclear energy has been at the forefront of scientists' mind for many years, but the impracticality of implementation has been holding them back. With new support from the government and new subsidies, that's likely to change.

If we were able to perfectly extract the amount of energy contained in a single grain of salt, it could power a household for a month. However, the sheer amount of energy nuclear provides is not the only reason scientists are looking at it. Of all available energy sources, nuclear has the smallest impact on the environment. This is simply because it does not emit any air pollution whatsoever. The Navajo Generating Station in Arizona produces a staggering sixteen million tons of carbon dioxide gas, the leading cause of global warming, per year. If Arizona was to comply with the Clean Power Initiative, it would have to reduce its emissions by 52%, something that seems completely unrealistic.



Nuclear Plants
Photo
Credit: The Energy Collective

WATER CONSERVATION: DESPERATE MEASURES

BY: ARCHIT CHOPRA

As the demand of water is expected to outstrip the supply in less than ten years, it is time to discuss how the issue should be addressed. Consequently, the prices of water will rise in order to weed out the population that can't afford it, reducing the amount of water that people will have access to. New methods of conservation are being debated constantly, with the most discussed idea being the large scale harvesting of seawater using specialized cargo ships. The total infrastructure that would need to be put in place in order to support that would cost billions and wouldn't be as viable for communities further away from the shorelines. Perhaps the most viable resolution relies elsewhere; a rather unique approach is being campaigned for throughout the United States: the utilization of sewage in hopes of creating self-sustaining communities, assuming that the water demand per day stays constant.

The way that this method of water conservation deals with the sewage is through the usage of unique bacteria and plants that are able to utilize the waste as nutrients, removing the waste from the water and cycling it back into the plumbing system.

It should be noted that sewage is supposed to be treated before reentering nature (Massachusetts Water Resource Authority) yet a third of the overflow that is experienced by governments is untreated sewage (Climate Central). At first, that might seem trivial, as feces can be used as fertilizer for nature, but once the chemicals that are ingested by the human body are also present, that fertilizer turns into toxic waste that can end up making the surrounding wildlife ill. Conditions can't continue like this and as a result, a different approach to the sewage system must be reached, and out of the various viable options, the idea of reusing water through plant communities is one that must be analyzed.

When first approached with the proposed solution, many brush it off as being too radical of a proposition. According to experiments conducted on long island, water that underwent treatment through plant communities was Therefore, it is a feasible solution to create sewage systems that run water through nearby plants, creating an almost self sufficient community.

As with all propositions, it is necessary to compare the costs with the current system of sewage. Over 9400 sewage systems in the United States alone require a major overhaul (PBS). In comparison, the treatment of water through plant communities cost a significant amount less.

Many cities around the country such as San Francisco offer incentives for those who switch to a system similar to this. Not only is money being saved but also helping the environment and giving the future generations a reason to say "Thank you". So while the idea may seem a bit foreign, the feasibility and benefits outweigh the social stigma surrounding the issue; therefore, more attention should go towards it.



Extracting clean water
from sewage.
© National Geographic

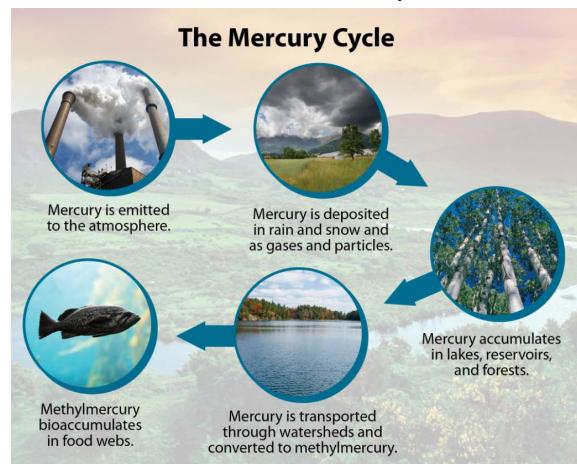
MERCURY AND THE ENVIRONMENT

BY: SUPARNA SURANDRAN

How does Mercury come down to our environment? The wind brings down Mercury into our regions and the thunderstorms bring it down to the earth.

Mercury is extremely hazardous to humans once exposed to high levels. High exposures to mercury vapor can lead to severe respiratory damage. The kidneys and many other organs can also be affected. Mercury is an element that cannot be easily absorbed into the skin, so if mercury ever came in contact with your skin, you have low chance of being poisoned.

How does mercury affect our environment? Many people who consume large amounts of different organisms living in freshwater may be harmed by mercury. Mercury is also toxic to the nervous system, your brains, spinal cord and many other parts of the nervous system. Scientists are beginning to understand that many pregnant women are being affected by mercury. When pregnant women eat fish, sword



U.S. Department of Agriculture

fish and other freshwater organisms it tends to affect the child inside them by causing birth defects in walking, vision, speech, hearing and early birth. Children are vulnerable to mercury exposure during the developmental years. They have been known to have heart function alterations, increased blood pressure, reactions to the skin and weak immune system. Prevention to exposure of mercury is better than the treatments, as certain treatments can cause you even more harm than mercury itself. Exposure to mercury could come from common household items like exposure to broken light bulbs, thermometers, and foods, especially fish from contaminated water.

THE PREHISTORIC: MOA

BY: ANTHONY BAO

Dinornis giganteus, the Giant Moa, is an extinct genus of ratite birds of the family moa, which roamed the jungles of New Zealand for 40,000 years before being driven to extinction in the 17th century by the Polynesian settlers known as the Maori. Its impressive body size fueled local Maori legends and folklore, and for hundreds of years, the Giant Moa was a symbol in Polynesian mythology. Weighing over 500lb and towering over 13 feet above the jungle floor, the Giant Moa was both formidable and an evolutionary marvel, the tallest bird to ever live. It was closely related to many other ratites of the time such as the Elephant Bird *Aepyornis* of Madagascar, perhaps the heaviest bird that ever lived, which went extinct in the 18th century.



Ultimately, the massive birds of New Zealand were vulnerable to the rats introduced by Polynesian settlers, egg collection, over-hunting, and habitat destruction. Today, very little remains of the Giant Moa, and the few museum specimens have sparked interest in de-extinction efforts, which are a growing possibility, although still a distant prospect.

THE GENE DRIVE

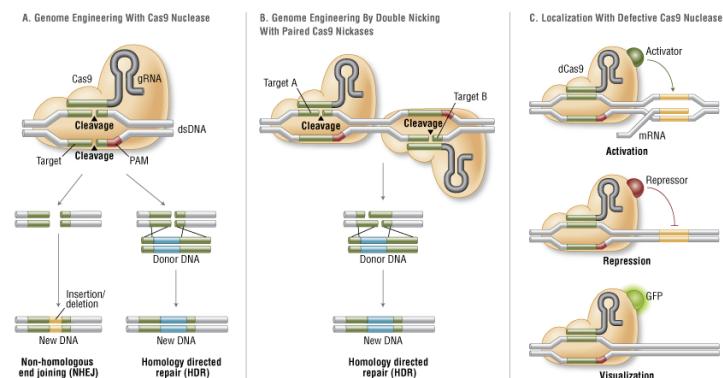
BY: PRATISHTHA SHARMA

This article is about a revolutionary new technology that will change how we perceive the natural world: CRISPR-Cas9 and gene drive. In living organisms some genes are beneficial and some malignant, what the CRISPR-Cas9 does is that it takes a specific gene in the DNA sequence and the Cas9 enzyme cuts it out. After that, the cell has to replace the nucleotides that make up the DNA with the ones delivered by the CRISPR package.

Evolution has granted certain genes a more than 50 percent chance to be inherited, gene drive modifies the DNA so that the manipulated, or any other, gene has almost 100% chance of being inherited. This approach is showing to be increasingly effective in gene manipulation and shows promising results for the future. This article was taken from the August 16, 2016 issue of National Geographic and was written by Michael Specter at photographs were taken by Greg Girard.

Although controversial, the possibilities for CRISPR-Cas9 are limitless. For example, as shown in the table to the right, we could eradicate malaria and other mosquito borne diseases by releasing edited mosquitoes with gene drive into the wild to destroy their capability to carry the disease without severely harming the ecosystem. The problem with organ donation is that our preferred mammal is a pig because they have similar sized organs, but the pigs DNA has retroviruses that would severely harm the human body, but with gene editing techniques we can eliminate those retroviruses and give organs to the thousands in need. Opponents of the technique say that it is immoral to change the very essence of a living being. Supporters say that we could make the world better by saving species from the brink of extinction by cloning and/or creating genetic diversity in certain species.

I think that gene editing is a moral thing because we have been changing genes since the neolithic revolution to selective breeding of plants and animals, now we just do it faster and more accurately. Also, the benefits of gene editing can be huge such as eradicating malaria and HIV, we will have a new power over other living things like never before. We could extend our own life spans by hundreds of years. But, there are also cons like the fact the terrorists could use this as a bioweapon and wreck havoc in cities. There may also be an untold number of unintended consequences and it would be almost impossible to turn back, we could unintendedly make super virus and unstoppable diseases, if we don't control this then we might have designer babies. Our future depends on our using this new



CRISPR-Cas9.

© Neb

ARE SPIDERS SPINNING THIER WAY INTO OUR LIVES?

BY: SERGEY BRAGIN

In recent years, an unlikely creature has captivated scientists in the biomedical industry-the spider. Its signature creation, the web, is perhaps the most intriguing biomaterial that has the potential to change the future of technology. Meticulously woven in intricate patterns, it allows the spider to move through its environment and capture prey. However, in 2014, researchers discovered that these silky strands actually do more than what is readily observable- they found that, when plucked with a guitar string-the web can transmit sound. Not only is the web capable of transmitting information, but, through artificial reproduction of the web, its physical properties were able to be studied. Surprisingly, it was found to have immense strength, as well as many other useful molecular qualities that are still being studied.

To test the capabilities of the web to transmit information, a study conducted at Oxford discovered the way that spiders manipulated the web and how the web reacted to changes in factors such as its tension, thickness, and layout. To test if vibrations in the web's strands transmitted different types of information, a series of high powered lasers were used to precisely measure the minuscule vibrations that propagate throughout the web when it was stimulated with fake prey. This data was then used to generate models that demonstrated the relationship between vibration and web parameters via mathematical equations. ,

As a result of this data, scientists found that the web is indeed capable of filtering certain frequencies through silk properties, which allow the spider to "visualize" everything on the web, ranging from everything including potential predators and prey to prospective mates. Because the web is tuned to the precision of a musical instrument, its properties have been theorized to be useful in many real world applications, such as creating earthquake-proof infrastructure, as well as highly sensitive materials in the aerospace industry.

How can we stop global warming?
Global warming really is a huge threat. Using renewable energy sources like solar, wind, biofuels we could reduce fuel emissions. Well it's not going to stop now unless we put our mind to stop it. Just be green and plant more trees. Think twice before you litter.



GLOBAL WARMING UNMASKED

BY: KOVIDA PERAM

Global warming and climate change is one of the most complex issues facing us today. It involves many dimensions – science, economics, society, politics, and moral and ethical questions – and is a global problem, felt on local scales, that will be around for decades and centuries to come.

Carbon dioxide, the heat-trapping greenhouse gas that has driven recent global warming, lingers in the atmosphere for hundreds of years. So, even if we stopped emitting all greenhouse gases today, global warming and climate change will continue to affect future generations.

Despite increasing awareness of global warming, our emissions of greenhouse gases continue on a relentless rise. In 2013, the daily level of Carbon dioxide in the atmosphere surpassed 400 parts per million for the first time in human history.



KIDZWORLD

Most climate scientists agree the main cause of the current global warming trend is human expansion of the "greenhouse effect"— warming that results when the atmosphere traps heat radiating from Earth toward space.

Gases that contribute to the greenhouse effect include: CO₂, N₂O, H₂O, CH₄

On Earth, human activities are changing the natural greenhouse. Over the last century the burning of fossil fuels like coal and oil has increased the concentration of atmospheric carbon dioxide (CO₂). This happens because the coal or oil burning process combines carbon with oxygen in the air to make CO₂. To a lesser extent, the clearing of land for agriculture, industry, and other human activities have increased concentrations of greenhouse gases. The consequences of climate change in U.S. Northeast. Heat waves, heavy downpours and rising sea level pose growing challenges to many aspects of life in the Northeast. Infrastructure, agriculture, fisheries and ecosystems will be increasingly compromised. Many states and cities are beginning to incorporate climate change into their planning.

- Northwest. Changes in the timing of streamflow reduce water supplies for competing demands. Sea level rise, erosion, inundation, risks to infrastructure and increasing ocean acidity pose major threats. Increasing wildfire, insect outbreaks and tree diseases are causing widespread tree die-off.
- Southeast. Rising sea level poses widespread and continuing threats to the region's economy and environment. Extreme heat will affect health, energy, agriculture and more. Decreased water availability will have economic and environmental impacts.
- Midwest. Extreme heat, heavy downpours and flooding will affect infrastructure, health, agriculture, forestry, transportation, air and water quality, and more. Climate change will also exacerbate a range of risks to the Great Lakes.
- Southwest. Increased heat, drought and insect outbreaks, all linked to climate change, have increased wildfires. Declining water supplies, reduced agricultural yields, health impacts in cities due to heat, and flooding and erosion in coastal areas are additional concerns.



YOUR LIFE IN NUMBERS

WRITTEN BY: VALERIE POLUKHTIN

- YOU WALK EQUIVALENT OF 5 TIMES AROUND THE EARTH
- 25 YEARS OR 1/3 YOUR LIFE IS SPENT SLEEPING
- YOU EAT 35 TONS OF FOOD
- YOU SHED, ON AVERAGE, 121 LITERS OF TEARS
- IF YOU NEVER CUT YOUR HAIR, IT WOULD GROW 590 MILES LONG
- YOU DRINK 14,600 GALLONS OF WATER
- YOU HAVE ABOUT 142,350 DREAMS WHEN YOU ARE SLEEPING
- YOU BURN 56, 940, 850 CALORIES
- YOU EAT 60, 403, 850 CALORIES IN YOU LIFE
- YOU SPEAK ABOUT 170, 820, 000 WORDS IN YOU LIFESPAN
- YOUR HEART BEATS ABOUT 3, 279, 744, 000 TIMES

Space Facts

WRITTEN BY: AILISH NAGPAL

Do you know much about our most famous dwarf planet? It is called Pluto, Here are some facts about Pluto.

- 1. Pluto has 5 moons (Charon, Styx, Nix, Kerberos, and Hydra)**
- 2. Pluto is not considered a planet anymore**
- 3. Pluto is the second closest dwarf planet to the sun**
- 4. Pluto was discovered in 1930**
- 5. Pluto is the 2nd largest dwarf planet**
- 6. There is no known extraterrestrial life on Pluto**

Fun Fact: Eris is the largest dwarf planet

