anugantavya



Daffodil International School

Quest for Knowledge

INTRODUCTION

DERIVED FROM SANSKRIT, THE LITERAL TRANSLATION OF 'ANUGANTAVYA'

IS 'TO BE LOOKED FOR OR DISCOVERED'. IN THIS MAGAZINE, WE ARE

TRYING TO EXHIBIT OUR HUNT FOR UNDISCOVERED TALENTS.

THE STUDENTS OF DAFFODIL INTERNATIONAL SCHOOL PROUDLY PRESENT TO

YOU THE 'SCIENCE AND COMMERCE' MAGAZINE COMPILED BY OUR

CREATIVE AND ENTHUSIASTIC MINDS.

EDITOR'S NOTE

It is extremely important that the future of humanity, the next generation, has the best possible future ahead. To ensure this, leaders, entrepreneurs and experts in their respective fields are doing the best they can to promote STEM fields: science, technology, engineering and mathematics. The substantial contributions made to increase awareness about the importance of STEM fields by people who care about the future of the planet are a boon to society.

By exposing students to STEM and giving them opportunities to explore STEM-related concepts, they will develop a passion for it and hopefully pursue a job in a STEM field. This is because the world needs fresh ideas and more creative minds to support the growth of technology, and to eventually overcome barriers previously thought impossible to break, we need the future generation of this planet to follow their own curiosity via the mind-blowing world of science.

We believe that it is imperative for every child growing up in this age to have a thorough understanding of science. The articles in this magazine written by several of our students from DIS contain fascinating information about a wide array of topics.

The intent behind this idea was to encourage students to research scientific discoveries to the public and write about it in hopes of spreading valuable knowledge to others.

Have fun reading!

Regards,
The Editorial Team

Anusha Bhatia - Grade 12 Pranav Marthi - Grade 12 Tejas Patil - Grade 12 Dhruv Mandavkar - Grade 11

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KALPANA CHAWLA

By Jiya Trivedi Grade 4

Born in the Karnal District in Haryana, Kalpana was interested in aeronautical engineering from an early age and did all she could to fulfil her dreams. Moving to the US helped her to get a Master's and Doctorate in the same field, where she worked in NASA for 7 years.

When Kalpana was a kid, she would look at the stars with her siblings. Right then she made up her mind to find the answers of time and space. While focused on achieving her dreams, Kalpana was also mindful that she was spending a lot of her time there. She was very determined in reaching her

goals.



During her journey to space, she flew in the space shuttle. Columbia, where she did lot of research. She mentioned that India looked

beautiful from Space. She was with her fellow astronaut colleagues when she was coming back to Earth. Her shuttle exploded in contact with the Earth's atmosphere and she lost her life. Her studies have become important for us to understand space better.

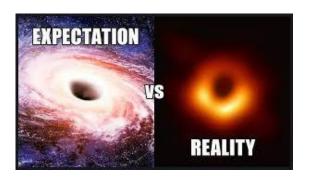
THE LIFE OF A STAR

By Ishan More Grade 7

The life of a star begins when there is a gravitational collapse of a nebula consisting mostly of hydrogen with minor amounts of other heavier elements. When the core of a star is dense enough, it starts continually turning hydrogen into helium through nuclear fusion, while also releasing energy at the same time. As a star grows or expands, it throws away parts of its mass and the core becomes a stellar remnant; a white dwarf, a neutron star, or a black hole.

Some fun facts-

- Blue stars are actually hot and red stars are cold
- Our sun is a dwarf star
- Most stars are between 1 billion to 10 billion years old.
- Stars in the Milky Way are made up of 71% hydrogen and 27% helium



MILKY WAY

By Srinitha C. Grade 4

We live in one of the arms of a large spiral galaxy called the Milky Way. The sun and its planets (including Earth) lie in this quiet part of the galaxy, about halfway out from the centre.

The milky way is shaped like a huge whirlpool that rotates once every 200 million years. It is made up of at least 200 billion stars, as well as dust and gas. It takes 100,000 years to cross from one side to the other. The centre of the galaxy is very hard to see because clouds of gas and dust block our view. Scientists think that it contains a supermassive black hole that swallows anything passing too close.

The milky way galaxy belongs to a cluster of at least 40 galaxies. The so-called local group has two large spiral galaxies, the Milky Way and Andromeda.



TIBETAN SINGING BOWLS

By Ayushi Agrawal Grade 9

From the country which has progressed by its own efforts, which has its very own unique culture which seems pretty fascinating, a country which has many famous animated movies like Mulan set in it, a country where people love to go for visiting princesses and their favourite Disney characters, comes a very interesting musical instrument which seems somewhat magical: the great Tibetan singing bowl.



It looks just like any normal bowl, but is heavier; made from a bronze alloy, and looks quite traditional. Its design consists of some Sanskrit scriptures on it.

A stick, called a mallet is used. When you hit the mallet on the bowl, a vibration occurs and it makes a sound. When you move the mallet around the rim of the bowl which causes more vibrations, it slips and remains in contact with the bowl, causing friction, which keeps the vibration going and makes the bowl 'sing'.

Most of the time you'll see that water is added to the bowl. Why? It is added to change the note of the sound by changing the frequency. Now, what is frequency? Frequency decides the pitch of a sound. Pitch is how deep or how shrill a sound is. The air vibrates more easily than water. So when water is added to the bowl, the bowl will vibrate the water and the note changes, it becomes deeper. The note of the bowl singing without the water is a little shriller.

Usually, you see that a red cushion is placed under the bowl. This is because the cushion is used to smoothen the sound. If the cushion is removed, then the amplitude increases and the waves break, which splashes the water into droplets in the bowl. Amplitude decides how loud or how quiet a sound is. If the sound waves are high, the sound is loud. If the sound waves are short, the sound is quiet.

It is said that Tibetan singing bowls are used for healing and meditation.

Random facts that will blow your mind!

- The weight of one tablespoon of a neutron star is approximately 6 billion tonnes.
- Roy Sullivan was struck by lightning 7 times and survived all of the strikes.
- Scotland has 421 words for 'snow'
- Only a quarter of the Sahara Desert is sandy
- The British Empire was the largest empire in world history, ruling over 23% of the world's population at its peak

POWER OF MUSIC

By Vedant Mamidwar Grade 9

Aristotle once said, "Music has the power of producing a certain effect on the moral character of the soul, and if it has the power to do this, it is clear that the young must be directed to music and must be educated in it."

He also said, "If one listens to the wrong kind of music he will become the wrong kind of person."

If types of music can have different effects on a person, then it is obvious that the wrong kind needs to be avoided. There are two effects of music that are positive and negative so what are they?

First of all, listening to music that you find pleasant to listen to helps you relax which in turn eliminates stress. Stress makes your heart rate and blood pressure increase so indirectly music does contribute to improving the health of your heart. Music reduces pain. In a study conducted 60 patients undergoing spine surgery were called and the aim was to observe the effects of music therapy on anxiety and physiological reactions to emotional and physical distress before the surgery. These patients were about to undergo major surgery and pain is one of the most feared factors that patients have. This concludes the fact that listening to music can relieve stress.

Many people may say that listening to music helps them with improving their memory or that it helps them do a task faster. It is true. Listening to music triggers dopamine.

Dopamine in the prefrontal cortex increases the activity of brain circuits relevant to a certain task and suppress circuits that distract you from the task. This, in turn, means that music improves task performance and memory.

However, music can have bad effects on our bodies. If you put the volume too high, the ears may get damaged. It may damage cells and membranes in the cochlea and damage the eardrum as well. This may be permanent and can affect young teenagers too.

Music can also be distracting especially when genres like pop (which have catchy melodies) and EDM (which have high tempos) are playing. This can interrupt your thought process, especially if it is an activity that requires focus. It decreases your performance however music that is slower such as classical can help you focus.

So these are some of the positive and negative effects of music. There are negative effects like any other activity we do but they definitely do not outnumber the positive effects. However, the negative can be controlled as long as it is taken care of while doing focusing on activities and not blasting the music out loud and still enjoying your favourite tunes.

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ART OF RELAXATION

By Poorna Marthi Grade 9

In life, there are many forms of stress that build upon the shoulders of people, they continuously struggle to keep standing. Failure drags them down and success barely lifts them up. People fall into depression extremely easily and are made fun of. Society has changed, and according to me, not for the better. It's a sad thing, really. Although, along with the problems come the solutions.



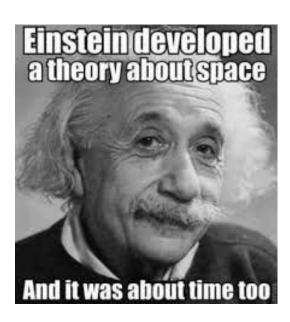
Relaxation can come in many forms like; sports, music, writing and art. It depends on the person and their likes. A lot of people nowadays turn to art for their relaxation, and it truly is one. Art is a way of expression. It can release all the emotions onto one blank page, turning the white into something only the artist can truly understand.

Many believe that to be an artist, you have to make the scenery or a sculpture that makes sense to all, but that's definitely not the case. Even a tiny black dot on a white paper is art. That black dot can signify the loneliness of a person, or the uniqueness of every individual, or can even go to topics like racism.

Art is a distraction. A distraction from your thoughts, a distraction from the cruelness of society, a distraction from your worries. It can take your mind off the bad stuff, and keep it on the blank paper in front of you, that can be anything you want it to be.

Once the pencil touches the paper, and it continuously moves, it is said to be in a 'state of flow'. This 'state of flow' can keep your mind blank, and remove any other thoughts, only focusing on your breathing and the movement of your hand. It enhances your senses, and you are more alert to your surroundings. It allows you to pay more attention to the details; like the white glow around the moon at night, or how the flower's petals fall to the ground gracefully. It is said to be a form of meditation.

As Thomas Merton once said, "Art enables us to find ourselves and lose ourselves at the same time".



DOG SCIENCE

By Shriya Vedula Grade 8

Since the beginning of the human race, people and civilizations have always taken a look around themselves wondering, 'how the world was created and how it works?". After pondering these deep queries for centuries, brilliant minds and civilizations had finally done extensive research and found answers.

Science is the built-up knowledge and answers about how the universe works. The earliest roots of science can be traced to Ancient Egypt and Mesopotamia around 3500 to 3000 BCE. Their contributions to mathematics, astronomy, and medicine were what built up the foundations for all the scientific reasoning that well-known scientists such as Dmitri Mendeleev and Gregor Mendel figured out.

Presently, science is a subject that continues to entrance and intrigue us people on a daily basis, as scientists discover new things about our world daily.

One such example is that seizure-detecting dogs can sense when seizures will occur in a patient up to 45 minutes before they even occur! These four-legged friends have been known to be able to save lives, warning their owners of the potential threat at hand and being the reason that the patient can receive proper medical treatment against it. Read on to find out how this baffling process works!

Domesticated dogs have been around for a long while — about 20,000 to 40,000 years. So, suffice to say, generations of breeding have made them acutely attuned to humans.

And it's these human-centred adaptations that allow us to find ways to communicate with them and train them so well. Combined with their more ancient senses like smell, they are capable of being highly attuned to

Scientists did not understand how these trained dogs could be able to sense the unpredictable effects of a highly dangerous disease (epilepsy) before it happens. Hence, they did a test with seven highly trained dogs. The scientists at the 'Handi'chein' organization in France for trained medical dogs collected the odours of people with epilepsy who had just suffered from seizure or exercised beforehand.



The dogs were then made to sniff these odours and if they identified the scents correctly, they would get a treat as a reward. Astonishingly, all the highly trained dogs had achieved this with a mind-blowing 100% accuracy. Scientists then came to the conclusion that this perplexing result could only be because of the fact that dogs have approximately 300,000,000 olfactory receptors! This explains their incredible sense of smell and how they can detect these diseases.

It is time that we pay more respect to all the animal and plant species around us because, in the end, we are all interdependent on one another, and if one species gets negatively affected, the whole chain will suffer.

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SCIENCE BEHIND INDIAN TRADITIONS

By Bhoomi Batham Grade 9

So we all have followed some or other "Indian traditions" in our day to day life but is there any science behind them? For sure, before they were done in the name of faith but now they are done while knowing the reason behind it. Let's see a few of them:

No meat on particular days

Days like Tuesday, Thursday or Saturday most of the Indians do not eat meat as it is known to be a spiritual day but the reason behind it is something not even close to it, so our human body only needs few amounts of nutrients, yet we love eating so we might overeat and this might result in diseases like colon cancer, kidney stones, etc.

Why tulsi should not be chewed?

It is believed that Tulsi is known to be the wife of Vishnu, therefore, chewing it shows that you are being disrespectful. It is also said that you may get cursed by the god,

Science has also proved that tulsi has significant amounts of mercury in it and could damage teeth.

Why have Tilgul on Sankranti?

Tilgul is made up of sesame seeds and jaggery, which when consumed, results in heating up your body and Sankranti is celebrated in the winter so this helps our body get warmth.

Why do we fast?

Fasting is done as a part of spiritual activities. Scientists have proven that fasting is good for your body on a regular basis as it removes most of the toxins which may be really harmful.

THE SCIENCE OF SUNYA

By Neshka Savera Grade 9

Have you wondered if there is science within philosophy? Sunya is a concept of doing nothing. Doing nothing, do you think has any scientific reasoning behind it? If you look at the brain, your brain is used to doing a lot of things. Working continuously the neurons are hyper-stimulated with information. The fact that this machine, called the brain can be brought to a state of doing nothing in itself is a science.

Today psychology is a science. The study of the mind is a science. This science of understanding the way the mind and the brain works has opened new frontiers in neuropharmacology. The concept of Sunya originates in one of the oldest Vedic philosophies. Having your mind brought to rest so that you are completely at peace is a task they say very difficult to achieve but not impossible. Practising special techniques of meditation. monks have achieved remarkable feats enable to control their breath, able to alter their heart rates, able to change neurological pathways.

So what is Sunya?

Sunya is the art of doing nothing.

Like when you ride particular sentence filled with words, if there is no space between those words the sentence is very difficult to read. Similarly, if you write certain sentences continuously on a page, is very difficult to read. You would have to break then down into paragraphs. When you play a music note you cannot have a continuous note, you need to have some silence in music. Same as when you speak, if you go on speaking without stopping the whole speech would be never understood.

The mind is used to working continuously. And today's fast-paced life actually has made the mind work faster. Sunya is a technique, that can bring about that emptiness or a pause when it is doing nothing. Science today has been studying and exploring the benefits of calming the mind, especially in diseases like autoimmune disorders, cancer, or depression, anxiety.

Definitely, this method finds its place in the chamber of science. And hence even though philosophical in its appearance. Sunya is one that needs more scientific interrogation so that we can see another dimension of our being within us.

We might be able to travel deep into our consciousness, subconsciousness. So that many more ideas about the world within us can be revealed. We know human beings have infinite potential but what lies inside, what drives humans is all yet to be explored. I hope in the future we are able to use technology and science to explore this world of no mindedness, which we call Sunya.

ANAESTHESIA

By Komal Apte Grade 9

Scientists have always been known to do seemingly useless things and miraculously come up with something extraordinary. I mean, the discovery of gravity, for example, was purely accidental. An apple just randomly fell on Isaac Newton's head. This article will discuss the discovery of one of the most useful things in the medical world-anaesthesia.

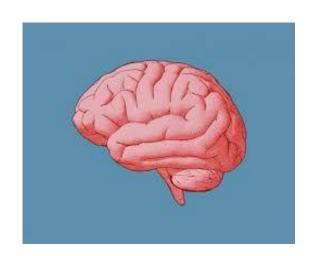
The year was 1772. A wonderful man named Joseph Priestly discovered laughing gas (nitrous oxide). The usage of it began to increase, and people started using it as a drug at parties. The night usually ended with people stumbling into their houses with their best friends throwing them onto their beds, but one night, a man noticed something a little out of the ordinary.

In 1844, Horace Wells, another guy on a night out with his friends, is walking with his half-conscious best friend, when a friend of his (who was high on the gas), got a deep gash in his leg. Oddly, he barely noticed, and only realised when someone told him there was blood at his feet. This, my friends, was the first step to an amazing discovery. To test out whether laughing gas can actually cancel out pain, he decided to test it out.

Using himself as his guinea pig, he knocked himself out and asked another dentist to remove a rotten tooth. It worked. The tooth had been pulled out painlessly. But, of course, it is not true unless it is proven to the world, so our genius Horace Wells, destined to succeed, decided to perform this experiment on a willing patient in the amphitheatre of the Massachusetts General Hospital.

Unfortunately. he had not taken a quick gulp of liquid luck, and today was his unlucky day. He had not yet quite understood the timing of the whole thing, and not knowing when to pull the tooth out, he had done it a little earlier than needed, and the patient screamed in pain. Turns out, he was not the brightest bulb in the box of the brightest bulbs.

Wells, who was savagely embarrassed, decided to leave the profession (as anyone would have done). Later, Wells committed suicide. Finally, in 1864, the American Dental Association formally recognized him for his discovery.



Did you know?

- The brain comprises 60% of fat and is one of the fattest organs in our human body.
- The brain receives 20% of the total blood and oxygen that is produced in our body.
- The blood vessels that are present in the brain are almost 100,000 miles length.
- There are 100 billion neurons present in the brain.

DEMENTIA -CHASING THE MEMORY CROOK

> By Aditi Atmasidha Grade 12

Dementia is a syndrome, broadly classifying a set of diseases that often disregards the ability of an individual to sustain as an independent being. In this disease, the ability to think, remember and carry out everyday activities deteriorates. The symptoms can range from forgetfulness to the loss of the ability to walk, with the major risk being the process of ageing.

So, perhaps if we target ageing, we might be able to work towards a cure right?

Unfortunately, it is not that simple. Irrespective of the vast research going on in this field, there is a lack of an assured course of treatment - and this makes it one of the most common diseases targeting the patients of the age group of the early forties. A gene named APOE-e4 is associated with higher chances of people developing Alzheimer's (a common form of Dementia). Researchers have found that this gene is associated with an increased number of protein clumps, called amyloid plaques, in the brain tissue of affected people. A buildup of amyloid plagues may lead to the death of nerve cells which aggravates the trigger of symptoms associated with Alzheimer's. But is there any way that can reduce one's chance of contracting this condition?

Although age is the strongest known risk factor for dementia, it is not an inevitable consequence of ageing. Even with the presence of the APOE-e4, the expression can be limited by providing the body with a healthy internal as well as external environment. Studies have shown that the risk of dementia can be reduced by regular exercise, controlling weight, eating a healthy diet, and maintaining healthy blood pressure, cholesterol and blood sugar levels.

As we live in a society where these diseases grow rampant, we should stay aware of the steps that we need to take to support a healthy lifestyle. Dementia is an ailment that requires a supportive society that can withstand the terrors caused by this robber. A society that understands the difference between mental disorder and neurological disorder а society that minimizes isolation and depression (conditions ideal for the onset of dementia).

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WHERE DO WE COME FROM?

By Akshat Srivastava

Grade 9

While reading a book, I recently stumbled across quite an interesting theory on Man's origin. According to this theory, Man's origin was the result of an event where the laws of Physics, Chemistry and Biology worked in harmony.

"The universe loves chaos" though a common saying, very few actually realize its meaning. The universe can be compared to a computer program. But instead of a million commands, it has rather only one: Disperse energy. The universe is constantly in an effort to spread energy.

Take this example:

You may often go to beaches. You might make a sand castle there. Now let the sand-castle be right where it is. You will see, after a few minutes, waves come in and sweep all the sand away. But never, never does it happen that waves come in and leave behind a perfect sandcastle.

The universe locates the packed energy and immediately disperses it using the waves. If the universe just wants to cause chaos then why create humans? We are after all an organized structure. And the answer is quite simple. Imagine here a deck of cards. Now throw them up in the air. All cards flutter here and there. You have caused chaos. But now, if I ask you to cause more chaos, it's going to be hard, isn't it? That is because the cards all already chaotic. You can't progress further unless... you arrange them back. That's the fundamental behind human's creation.

The universe creates small pockets of ordered energy to make the dispersion more efficient.

Everything from humans to the tiniest of snowflakes spread enormous amounts of energy. That is the reason why snowflakes have projections on them: to reflect an organized ray of light energy in all directions. Humans also go through this phenomenon. We eat, absorb the food, do activities and in turn give out heat energy. Even trees take in focused energy from the Sun, use it to grow and then emit infrared light.

You will be surprised to know that this theory was almost proved about 70 years ago. Famously known as the Miller-Urey experiment, in the 1950s, two graduates Stanley Miller and Harold Urey set out to find the answer to man's origin. Combining Darwin's theory of the Primordial Soup and Alexander Oparin's Steps of life, they had an idea that no one had ever thought of.

Their basic idea was to recreate the conditions of the Primordial Soup and see if they could achieve just the first step: Biomonomer formation. They created a small model of the water cycle with some element-rich water that was heated to mimic evaporation and some gases like hydrogen, methane and ammonia, which were expected to be abundant at that time, were infused. Then they attached a circuit to mimic lightning bolts. Once the model seemed to be working in perfect cycles, they left it for a week. After a week, they saw that the water inside had turned brown and murky.

When they examined the liquid, they were surprised to find that amino acids had formed out of nowhere! They came with the theory that the elements inside the water had worked with each other to form these amino acids. Other scientists did work on his sealed vials and revealed that it had produced more than 20 amino acids that occur naturally and are the base foundation for DNA. This proves that Man's origin could have been an event of the harmony of all the three sciences.

And if I ever pursue the sciences in-depth, I would love to research more on this and possibly finish their experiment as well.

NANOTECHNOLOGY

By Ema Gholkar Grade 8

Despite being a famous topic amongst Fictional characters Nanotechnology is a lot more. Generally, whenever Nanotechnology is involved in a conversation; people feel a bit lost mainly because many of us haven't been introduced to that stream yet. So read the following article to know more about this vast, unexplored subject and how the future of the world is nanotechnology.

Nanotechnology is a relatively new science which has already made a huge impact on modern technology. Nanotechnology is basically the study of extremely tiny structures which have helped us on a large-scale in fields like Health, Medicine, Environmental studies, Electronics etc.

Nanotechnology, as defined by size, is naturally very broad, including fields of science as diverse as surface science, organic chemistry, molecular biology, semiconductor physics, energy storage, microfabrication, molecular engineering, etc.

Cancer is a burning issue worldwide because it is affecting people at a very large scale and mortality rate of cancer diagnosed patients is very high. But unfortunately, Scientists have yet to develop the perfect solution for curing this disease at a large scale. Therefore in recent studies, scientists have tried to use nanotechnology in order to find a solution for Cancer.



This study proves that nanoparticles can be used to supply medicine, heat, light or any required treatment for only the affected cells. Thus, this reduces the damage caused to healthy cells and also permits direct treatment to only the affected area.

This also helps in early detection of the disease because the particles are Engineered in such a way that it only gets attracted towards the diseased cells. Once within the tumour, these nanoparticles release the medicine, allowing the inner drug to take effect and eventually cause a natural death of cells without leaving side effects.

Another method is radiation therapy, radiation therapy uses high energy radiation to shrink tumours and ultimately kill cancer cells. This is a kind of cancer treatment based on laser therapy using nanoparticles that get injected directly into the tumour which also destroys cancer from within.

But every innovation comes with negatives, since gold is the most widely used metal in Nanotechnology, a single milligram of gold nanoparticles will cost you \$80. Innovation on such a high price? This is mainly because developing and manufacturing these scientific masterpieces is very difficult and thus they can go a bit too heavy on your pockets. Scientists are still trying to develop a few new methods which can focus on a larger audience around the world so that this technology can be afforded by everyone thus reducing the world's greatest fear: Cancer.

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VIRTUAL REALITY

By Arnav Saxena

Grade 9

Living in the 21st century where technology is seen in action everywhere, the virtual reality is one of the advanced technologies. VR is the future which exists in present times. VR has many uses, for example, training, flight simulation, games, scientific purposes. The uses are endless, allowing the person to look around, with 3D imaging. With the help of this 3D imaging, game developers have taken the advantage. Many VR headsets are being used as a means of playing and getting the feel of the game but how many of you knew that there is a different use of VR? This is where things changed. Some VR headsets include HTC vibe, Oculus Rift etc.



History

Back in the 1960s was when the first VR head-mounted display was made. Its use was mostly to view panoramic images. After the use of camera images, computer imaging was used. This made VR improve to what it is today.

VR today

Use of VR instead of gaming is its use in scientific research. VR is used for training people to perform surgeries or even identify different parts of many things. It is also used for viewing the structure of atoms. This technology combined with motion can provide an experience which can never be forgotten, for example: used in Space research for feeling how staying in a rocket will be, help an astronaut to get trained before they are actually sent to space.

The science behind virtual reality

A VR headset works because of a physiological concept known as stereopsis.

What is stereopsis?

It can be called as depth perception. When a person looks at an object, each eye sees it from a different angle. The differences between the two images are integrated into a single one, creating a 3D effect.

This is the only thing which makes VR possible. A VR headset consists of 2 convex lenses which give a wider viewing angle, making the image 3D.

Virtual Reality is just one of the new technologies used. There are more to come...



Did you know?

- The First VR Headset came out in the 1960s. ...
- VR isn't all about Games and Entertainment. ...
- Jaron Lanier created a virtual reality device in the 1980s (EyePhone 1/HRX) and cost up to \$49,000 for the goggles and gloves.
- Virtual I/O created a \$1000 pair of virtual reality glasses called "iGlasses" in 1995.

SHOULD THE HABIT OF SAVING MONEY BE INCULCATED SINCE CHILDHOOD?

Essays of the winners of the essay competition

'I should save money' is a common thought that badgers adults every time they make an expense.

Making a budget is stressful, and following it is even more so. Each and every major and minor detail must receive your attention. The taxes and bills you pay; the food you eat; the clothes you wear; the groceries you buy are all a crucial part of your expenditure.

Not to mention, all the products you buy that are comparison goods (goods that come in a variety to choose from which you can compare including furniture, accessories, etc.) that also tend to break the bank. This huge responsibility especially affects young adults who are just starting to face the realities of adulthood and to whom 'money-saving' is alien. They tend to spend countless weeks in search of a stable job, create excruciating budgets that starve them of essential, required goods, and struggle for the first few years trying to work out a plan that supports a steady earning.

One immense problem that is considered a cause for this 'hassle' is that young adults first understand about saving money once they reach college. Before that period of time in their life, they are spoon-fed by their parents who had failed to realize that saving money should be inculcated from childhood itself.

Of course, people reciprocate to this statement explaining that children and teenagers should not be addled with such responsibilities and that once they become adults, they can learn the 'art' of saving money on their own.

Even so, little steps should be taken to make children at least understand the concepts of 'saving money'. Childhood is a period of time for learning new things and making mistakes. Hence, as a parent, start small for your child, introducing them to what 'money' is, and its cruciality, whilst giving time for them to think on their own as well. On reaching their teenage years, they might start to show a spirit of independence.

This is the point of time when you, as the parent, can assign a periodically given allowance along with an expenditure limit. Make sure they take note of each and every good they spend on, as well as making sure they keep an eye on their monthly grand total.

It is also a proven fact that children from relatively wealthier families tend to grow up unaware of the hardships that others have. This, combined with the contribution from other fellow wealthy peers gives the idea that they will always live a life of leisure and luxury. Take this as an example for your ward, explaining to him/her the hardships that people all around the world can go through. This can develop a sense of modesty in your child that will make them more alert on how much they spend. Along with following the points of advice mentioned above, give your child love, compassion and support, being with them every step of the way, however, also giving your ward the freedom to make one's own life choices.

Hence, I believe that to ensure a bright future for your child, saving money should be inculcated from childhood itself.

By: Shriya Vedula Grade 8 Yes, the habit of saving money should be inculcated from childhood as the child will get to know the importance of money and will spend it wisely in the future.

Money is one of the most important things in our lives. It helps with many things like education, social security, maintenance, buying common things, etc. Today there are all sorts of money from coins to credit cards to electronic bits on a computer.

Children from a young age should be told how to save money from their parents or guardians. They should know about banks and black money so when they grow up they put all their savings in the bank.

Saving money can help to get something big to have cash on hand in emergencies. When you put money in the bank for safekeeping the bank may actually pay you for it. This is called interest.

You can also help your family to save money. Here are some ideas on how to lower costs around the home:

- Turn off the light when you leave the room. Using less power saves money.
- Drink water instead of soft drinks. It is healthier too.
- Help your mom and dad find coupons in the newspaper or online
- Talk to your parents about saving money. Ask how you can help.

Children can also have bank accounts. In which they can save money. They put some money in the bank which then they will use in the future.

Knowing how to save money can be an important skill. Being greedy makes you tell yourself to buy expensive stuff. To stop this, every morning, you should talk to yourself looking in the mirror saying that 'I will not spend money today!' This helps a lot I'm telling this by other people's experiences.

By: Arya Rathore Grade 6 Yes, the habit of saving money should be inculcated from childhood.

Here are some reasons why the habit of saving money should be inculcated from childhood. The habits that children establish when they are young will largely affect how they live as adults, so if they save money from childhood they will benefit as adults. Even if parents are well set financially, children can't depend on parents for money their whole lives. If children don't learn how to save money, they will waste money which will result in loss or debt. Children also need to know the value of money because inflation of money will continue to happen. When children see their parents saving money, the skills will automatically filter into them.

I have had the experience of saving money myself. It is helpful because it helps children understand how to manage money when they have jobs. It also teaches them that money does not come easily.

Here are some reasons why the habit of saving money shouldn't be inculcated from childhood. Children's minds are too underdeveloped to understand the concept of finance. It may also make children think that they are poor. Additionally, if the children and parents have enough money, they shouldn't be too concerned about how much they are saving and how much they are spending.

In conclusion, even though there is a very strong counter-argument, the habit of saving money should be inculcated from childhood because the benefits of saving money from a young age outweigh the negatives of saving money from a young age.

By: Ishan More Grade 7

