# THE TIMES OF INDIA

TODAY'S

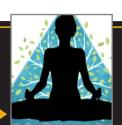
➤ Learn about the journey of light, explained by your teacher in an interesting way

DACE :



➤ Why yoga should become a part of our daily life? Yoga experts share valuable tips on different asanas

DACE



Juventus qualify for Champions League

PAGE 4



STUDENT EDITION

TUESDAY, MAY 25, 2021

**WEB EDITION** 

**CLICK HERE: PAGE 1 AND 2** 

# CBSE, UNICEF join hands to award YoungWarrior certificate

he Central Board of Secondary Education (CBSE) has started a movement called 'YoungWarrior' to combat Covid-19 in the country. Through the heads of all its institutions, the initiative aims to engage millions of young people to lead action against Covid-19. The CBSE, along with the ministry of youth affairs and sports, ministry of health and family welfare, YuWaah-UNICEF, and a multi-stakeholder consortium of over 950 partners, are activating the #YoungWarrior movement to engage five million young people to lead action against Covid-19, and impact 50 million people.

■ Any student and/or teacher between the age group of 10 and 30 years can join this movement, and can help society safeguard themselves, their families, their communities, and the country
■ This engagement will comprise a series of easy and real-life tasks, with the #YoungWarrior earning certificate for their actions. These actions include promoting access to verified health and essential services, vaccine registration, Covid-appropriate behaviours, myth busting etc



# HOW TO JOIN #YOUNGWARRIOR MOVEMENT?

To join the #YoungWarrior movement, follow these simple steps

On WhatsApp: Type YWA and send it to +91 96504 14141 OR simply give a missed call to 080-66019225

Once you join, you can motivate 10 or more young people (10-30 yrs) to join the movement

Pledge to take action against
Covid-19 by posting message with
the phrase 'I am a #youngwarrior'
on social media, tagging friends

After the completion of the tasks, you will be awarded a UNICEF certificate

# India did not take the vaccines seriously in 2020 unlike other nations. This crisis should help India learn its lessons, especially in the healthcare sector. It is ok to make mistakes as long as we accept it. When it (Covid-19) gets over, we must change. We all have changed to an extent. The change will be in personal sphere, the business sphere, and how



# Gautam Adani beats China's Zong Shanshan to become Asia's second richest man

dani Group's founder and chairman
Gautam Adani took the spot of Asia's
second richest man from China's
Zhong Shanshan, according to data
compiled by Bloomberg. Adani's wealth rose by
\$625 million to \$66.5 billion, as per data available
on the Bloomberg Billionaires' Index. At the same
time, Shanshan's wealth dropped by \$78 million to
\$63.6 billion. Adani's
wealth has soared
over \$32 billion in

2021 so far, the third- highest wealth surge this year after Bernard Arnault and Miriam Adelson.

Adani is just behind Reliance Industries'
Mukesh Ambani whose
total net worth stood at
around \$76 billion

The commodity trader turned industrial tycoon at present owns some of the biggest and most important infrastructure projects in the country, including the majority of its ports, and some of the busiest airports in the country, including the Mumbai International Airport

Adani Group companies have been on an acquisition spree, utilising the depressed asset valuations caused by the Covid-19 pandemic

# China becomes 2nd country to drive rover on Mars



hina's remotecontrolled Zhurong rover drove down the ramp of its landing capsule and onto the Martian surface, Beijing's space administration said on Saturday, making China the second country after the United States to successfully deploy a land vehicle on the Red Planet.

■ Zhurong touched down last week and underwent diagnostics tests for several days before joining the US rovers Curiosity and Perseverance, but separate explorations of Mars

explorations of Mars.

The rover, which sent its first round of images back to Earth earlier this week, is expected to be deployed for 90 days, during which it will

study Mars' surface and atmosphere

Zhurong, named after a Chinese mythical fire god, is a six-wheeled solar-powered rover, which resembles a blue butterfly, and has a mass of 240 kg. It also has an expected lifespan of at least 90 Martian days (about three months on

The US was the first country to land a robot on Mars. US space agency NASA landed its Viking-2 mission in 1976 in Utopia Planitia. This colossal basin, more than 3,000 km wide, was likely formed by an impact early in the planet's history. There is some evidence pointing to it having held an ocean long ago. In February, the US landed the **Perseverance** robot in a deep crater near Mars equator called Jezero

# Neena Gupta's tell-all autobiography to hit the shelves on June 14

eteran actress-director Neena Gupta's tell-all autobiography 'Sach Kahun Toh' will hit the stands on June 14, publisher Penguin Random House India has announced. From her time at the National School of Drama (NSD) to moving to Bombay (Mumbai) in the 80s, and her single parenthood, the book will share Gupta's life story in the most "unapologetically honest" manner.



The book addresses issues like casting couch, film industry politics, and also talks about what it takes for a young actor to survive without a godfather or guide

# Centre asks social media to remove content referring to 'Indian Covid variant'

The ministry of electronics and information technology has asked all social media platforms to immediately remove all content that refers to or implies 'Indian variant' of coronavirus. In an advisory to social media platforms, the MEIT said, this is in line with earlier advisories to curb fake news, misinformation concerning coronavirus on platforms.

■ The ministry said, it has come to its notice that a false statement is being circulated online, which implies that an "Indian variant" of coronavirus is spreading across the countries. "This is completely false. There is no such variant of Covid-19 scientifically called as such by the World Health Organisation (WHO). The WHO has not associated the term "Indian variant" with the B1617 variant of the coronavirus in any of its reports", the ministry said

■ This has already been clarified by the health ministry on May 12, and now social media platforms have been asked to remove all contents, which refers to an "Indian variant" of Covid.

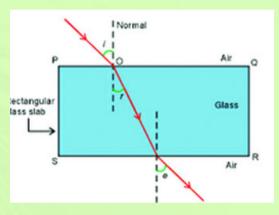


FROM ONE MEDIUM TO THE OTHER

-Robert Adams

Light hits everything. Some substances let it move at a constant speed, but others slow it down. When the speed of light changes, it bends, and hence objects might appear bent, closer, or larger than they really are.

- The change in direction of light when it passes from one medium to another obliquely is called REFRACTION of light.
- The phenomenon of bending of light around the corner of an obstacle is known as DIFFRACTION of light.
- Refraction of light takes place at the boundary between two media.



- The angle between incident ray and normal at the point of incidence is called ANGLE OF INCIDENCE (<i ).
- The angle between the refracted ray and the normal at the point of incidence is called the ANGLE OF REFRACTION (< r).
- In refraction of light, the angle of refraction is usually
- The angle of emergence (<e ) is the angle of the light coming out of a medium.
- The angle of emergence is equal to the angle of incidence  $(\langle i = \langle e \rangle)$ .
- A medium in which the speed of light is more is known as optically rarer medium.
- A medium in which the speed of light is less is known as optically denser medium.

**SUBJECT: PHYSICS** PIC: LIGHT REFRACTION & REFLECTION

- Speed of light in air is 3×108 m/s.
- Glass is optically

denser than air.

- When a ray of light goes from a rarer medium to a denser medium, it
- bends towards the normal. When a ray of light goes from a denser medium to a
- rarer medium, it bends away from the normal. • The perpendicular distance between the original path of incident ray and the emergent ray coming out of the glass slab is called LATERAL DISPLACEMENT of the emer-
- If the incident ray falls normally (perpendicularly) to the surface of a glass slab, then there is no bending of the ray of light and it goes straight.
- When a coin is under water then due to refraction of light, a virtual image of the coin is formed nearer to the water surface. As the virtual image of coin which we see is nearer to the water surface, the coin appears to rise. Other examples are, a pool of water appears to be less deep than it actually is, a stick partly immersed in water appears to be bent at the water surface.

### Laws of refraction of light

The incident ray, the refracted ray and the normal at the point of incidence all lie in the same plane for the two given transparent media.

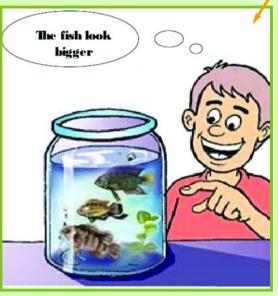
gent ray of light.

II law (Snell's law) The ratio of sine of angle of incidence to the sine of angle of refraction is constant for a given pair of media.

- $\sin i / \sin r = \text{constant}$ . Refractive index of the medium nm = Speed of light
- in air / Speed of light in medium = c/v $c = 3 \times 10^8 \text{ m/s}.$
- Refractive index = sin i / sin r
- When light is going from one medium (other than vacuum or air) to another medium, then the value of refractive index is called RELATIVE REFRACTIVE INDEX.
  - Relative refractive index of medium 2 with respect to medium  $1 = n_{21} =$ Speed of light in medium1/ Speed of light in medium2
  - Relative refractive index of medium 1 with respect to medium  $2 = n_{12} = Speed$ of light in medium2/ Speed of light in medium1.
  - The refractive index of light going

from medium1 to medium2 is equal to the reciprocal of refractive index for light going from medium2 to medium1.

- $n_{12} = 1/n_{21}$
- The power of a lens is a measure of the degree of convergence or divergence of light rays falling on it. Power of a lens P = 1/ focal length of the lens in
- Lens of shorter focal length has more power whereas a lens of long focal length has less power.
- The unit of power of a lens is DIOPTRE (D). One dioptre is the power of a lens whose focal length is 1 metre.



 The power of a convex lens is positive and that of a concave lens is negative.

When the refractive index of a medium relative to lens is one, a convex lens will behave as an ordinary

- 'The refractive index of diamond is 2.42'. The meaning of this statement is the ratio of speed of light in air to the speed of light in diamond is equal to 2.42.
- Kerosene has less mass density than that of water, but it is optically denser than water.
- A convex lens is used as a magnifying glass because when the object is kept within the focal length of the lens, it forms a virtual, erect and magnified image.

# **INTERESTING FACTS ON REFRACTION**

- Most refraction in the eye occurs when light rays travel through the curved, clear front surface of the eye. The eye's natural lens also bends the light rays. Even the eye's tear film has refractive ability.
- If you have an aquarium or fish bowl at home, you might notice the fish look bigger when you look through the side due to refraction.
- The lens of a telescope or microscope uses refraction of light to make things look closer than they are.
- The twinkling of stars happens as light refracts when it passes through the different layers of the atmosphere.
- When refraction happens in a cloud with hexagonal ice crystals, a unique effect called sun dog (an optical phenomenon that consists of a bright spot to one or both sides of the sun) is created. The halo is what creates the illusion of multiple suns.



T Suja Christobel, Delhi Public School, Electronic City, Bengaluru

# MY SCHOOL PROJECT

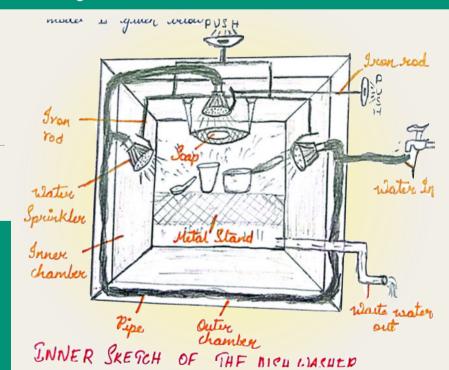
# Eco-friendly dishwasher

# **OBJECTIVE**

- My mother is a teacher and returns home around 5 pm. At home she doesn't stop to rest and gets busy with all the household work and sleeps around 11 pm. Not just my mother, but women in many households find themselves tied down with daily household chores.
- Looking at this, I thought of making a machine which could make household work easy, be affordable and at the same time be eco-friendly.

# THE SURVEY

I carried out a survey and found that a lot of time and effort goes into one household chore, i.e., washing dishes. So I decided to make an eco-friendly and affordable dishwasher. I made this by following one basic principle: Superfast jet of water can clean and wash anything and everything.



# THE MODEL

- This model is simple and can be operated man-
- ually. It does not even require electricity to run.
- Cleaning is done in three steps (see diagram)
- STEP 1: Keep the utensils on the metal stand and push down the round button on the top and hold for few seconds; then release.
  - STEP 2: Push the side button and hold for few more seconds which helps in cleaning the utensils with

soap solution; then release STEP 3: Then again push down the top run button and hold for few more seconds to complete the cleaning process NOTE: you can keep the LOCK PIN instead of pressing and holding the button. You can even cycle the pedals if the load is above 5 kg.

Once done, your vessels are shining and clean! The gadget not only makes the work easy but also ensures the vessels are 100 % clean and germ free.



# Be sharp at MUN

# What is MUN?

UN or Model United V Nations is an educational activity which allows students to get a glimpse of how things actually work in the UN and internationally.

After filling the form for the MUN, one gets an agenda and a council as well as a country to represent.

The common coun-

UNHRC (United **Nations Human Rights** Commission) UNSC (United **Nations Security** Council) WTO (World Trade Organisation) WHO (World Health

cils in MUN are

Organisation) In the form for MUN, one can select the council of choice and country as well. You can select three countries.



# How do you begin research?

tart with the location of the country if you have absolutely no idea about it. Then move on to its significance in the world and its position

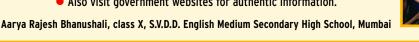
globally. Work your way through your agenda and your country's situation in that respect, your country's foreign policy and the trade policy. Additionally, knowing about the laws your country has implemented with respect to



issues being discussed and the status of implementation is also beneficial. Also, you have to prepare a general speech of 120 seconds.

# Some other points to watch out for:

- Know which countries are your allies.
- Learn all MUN terminologies. It'll be useful. Observe and learn to be diplomatic.
- Some sites to use for accurate info: BBC, Britannica.
- Also visit government websites for authentic information.





It's not just a place where you get to learn Einstein's Theory of Relativity. It's also a place where you can think beyond the classroom. Hence we say, **SCHOOL IS COOL!** 

# Colours bled, once again

little step at a time. I saw him shuffle through the alley, we reached the doorstep again and breathed a little hastily than usual. "knock - knock", we pounded on the door to let us in. I held his hand a little tighter as we entered our abode. It seemed to me he walked in commandingly still, but I felt him twitch in silence.

"Dad! Surprise!" We screamed in unison to let him know of, how we made our home into a new one, we spoke to him expectantly, "we rearranged the furniture" I said.

He took a few minutes to turn my way, and feigned a smile

We walked him to, where the towering vase used to be, and he found his sofa resting over there now. He sat gently and with a sigh, and ran his fingers through the intricate carvings, the chipped off and scarred areas of the wooden piece of seating. I was apprehensive and unsure of his feelings right now. Soon he smiled to his cheeks and looked up again. And I thought to myself "he must've felt what he wanted to, what he recalled and what he associated with that piece of wood". We walked on further and his hopes of feeling home, feeling safe, cast itself into distinct colours; a little different each time but coloured the same painting.

I wasn't bothered by this minimal change, but to him it seemed like a start unlike but from the same place again.

We walked around these walls and he touched the rims and boulders of all that reminded him of himself, for all these past years. He took a few minutes every time, to make sure; no



memory was washed away, ripped apart from that piece. He smiled hopefully and stopped then, when I realised I must have given him a recollection of his beautiful past now. We came by the window pane and he let the cold wind wash over his memories afresh and I turned to him with this epiphany; he looked at me for the last time then, and said in a tone of solitude and acceptance "only if I could

> Kritika Agrawal, class X, Ryan International School, Kandivali East

see how these colours bled into me now".

# RICHNESS IN

he cities appear to be far richer than villages, but how! We, living in the cities have one or utmost 2 pets, but villagers have many, from cows to goats and what not! We have pools but villages have entire rivers. We have LED lights, villages have stars. We have to buy food; they grow it for themselves. We look up to walls for protection, they have friends! We have televisions and theatres but they spend time with their loved ones. Last but not the least, we have houses but



they have huge bungalows, only to be surrounded by huge fields, when we starve for playing spaces! This proves that actual



RICHNESS in life is not what we believe, but something really deeper! Garvit Agarwal, class X, NL Dalmia High School

# **HOW TO APPRECIATE YOURSELF**

ur day-to-day life offers us many challenges, hardships, competitions and downfalls. While our failures are hard to miss, we spend too much of our time engaging them. Engaging fallures only makes us upset and question our own skill and perseverance. A better use for our energy would be to embrace our unscuccesful attempts while giving ourselves a pat on our back for all the hard work we put in.

Self-appreciation can help us perform better. At times, we give ourselves much less credit than we deserve. Self-appreciation makes us confident. When facing disappointment, its our own consolation that will give us comfort.

Encouraging yourself boosts vour self-esteem and motivates



you to do better. It allows you to remain optimistic even when the situation doesn't go as planned. In the long run, it helps you reflect on your mistakes, forgive yourself, and

become a better person. So start by simply smil-

ing and telling yourself -"You worked hard", "You were amazing" or "You did well today".

> Appreciating yourself is the key to remaining positive in the most difficult times. Avani Pandit, class X, Apeejay School, Nerul

### A RAINY DAY

The sky started to turn black Grey clouds started to The roaring thunder

scared the kids, And the Lightning flashed in the sky. Pitter patter, pitter pat-

Water droplets trickled

BENEFITS

1. Increases the

blood circulation

to head region.

2. Helps to

prevent

breathing problems

(Asthma, Bronchial

allergy, etc.)

3. Expands the

abdominal region, improving

digestion and

elimination.

down the sky And just like that, it started to rain It began with a little drizzling Not long before it start-

People running helterskelter Trying to find them-

selves a shelter Racing down the window Children returning from the school Playing in the mud, dirtying the clothes, No tension, no worries, Living a carefree life,

ed raining cats and dogs just enjoying the moment The peacock dancing in

posture looks like a camel and hence it is often

Complimentary asana - Sasankasana, Janu Sirsasana, Paschimottanasana.

showing its beauty Frogs and toads can be seen Hopping around from here to there Greenery can be seen everywhere The flora and fauna look full of life

Like they are blessed by

In Ustrasana the final body

Opening its tail and

ing hot tea With freshly cooked fritters at the side And thinking to our-

Looking at the rains for

Feeling cozy and drink-

the rains

long hours,

self..... "What a wonderful world!'

**PRECAUTIONS** 

RADHIKA CHOPRA, class IX, Fr. Agnel Multipurpose School, Vashi

# STOP COMPARING YOURSELF TO OTHERS

lot of kids today keep comparing themselves to others and end up in depression and become sad. Well, I am here to tell you that you are very wrong. Let me share a quote with y'all. It has a profound meaning if you read carefully. 'A butterfly can't see her wings but we can see how beautiful they are similarly...people don't see how amazing they are, others recognise their talents.' So,

as you see, every person is

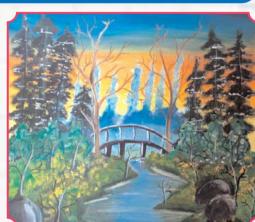


unique and amazing in their own way. God creates everyone differently. So, don't become sad that you are unable to do what others can do. Maybe there is something that you can do which others can't do. Focus on that. Focus on what makes you special. You are beautiful just the way you are. Do not change yourself for anyone. All the best!

Radhika Chopra, class IX, Fr. Agnel Multipurpose School, Vashi

# Painters' Gallery





SHETTY SHASHVITA, class VIII

HITAKSHI BODEKAR, class VIII

# Navodaya English High School and Junior College, Thane





TIMSA BAJPAI, class XI, Singapore International School

### person with recent abdominal surgery should avoid this posture. A person suffering from Hernia should avoid this posture. THEJASWINI, Yoga Instructor.

### SIT IN DANDASANA - Legs together, hands by the side of the body. Keep your spine straight, Step 05 Straighten the body while exhaling.

Step (01)
Inhale and exhale.
Fold the right leg, place it
below the right buttock.

Step 02 Inhale and exhale. Fold the left leg, place it below the left buttock.

While inhaling and exhaling, stand on the knees slow- (8) wards and hold ly. Slide and keep both the hands on the waist region with fingers pointing towards the body.

Step 04 Inhale & with the support of both hands bend backthe

posture.

Step 06 Inhale and exhale. Slowly release both hands and sit on the heels.

Step 07 Inhale and exhale. Release both the legs.

Step 08 Return to sthiti and relax in sithila dandasana.

National Public School, Bengaluru

Yoga should be practiced under the supervision of Yoga Guru. The views expressed in the above article are those of the author and the newspaper takes no responsibility for it.

# **HEART OF PURE GOLD**



hat's right, I am talking about the guy who is now The Captain America. Back when we were introduced to him, he was just a guy trying to help soldiers overcome their trauma and PTSD while trying to live life as a civilian. He got back into the fight to help Steve Rogers because it was the right thing to do. And then stuck by his side throughout. We also get to see Sam helping Bucky Barnes with his nightmares and befriending him.

Sam is a person who has a heart of pure gold. Doing the right thing is hard but it needs to be done; that is his motto. He inspires me to help all the people around me. Sam is a great friend, counsellor, brother and above all, a good man; all the more reason to choose him to carry the mantle of Captain America and represent all that can be.

Aarya Bhanushali, NSPIRING ICONS class X, S.V.D. D. **English Medium** 

TUESDAY, MAY 25, 2021





and leads the

2021 season with

most wins at 33.

Tsitsipas' player box at tournaments, is pleased with the consistency displayed by the Greek. "He's developing really well," Mouratoglou said of Tsitsipas, who is

coached by his father Apostolos. "He's al-

Mouratoglou believes the two-time Australian Open semi-finalist was getting closer to a maiden major title. "Rafa and Novak are still at the top. But I think their margin is getting smaller. Several young guys can beat them now. The margin is getting thinner," he added. REUTERS

were trailing 0-1, and it was then that Kane stepped up to give his side the equaliser. This is the fifth time in seven years that Kane went past the 20goal mark in Premier

### **HARRY KANE** WINS **GOLDEN BOOT, THE THIRD TIME** ottenham Hotspur captain and striker Harry Kane has won the Premier League Golden Boot for 1 the third time. Kane registered 23 goals in the 2020-21 season, finishing ahead of Liverpool's Mohamed Salah (22 goals). "Delighted to win these awards! Not possible without the team and staff throughout the season," tweeted Kane. On Sunday, Tottenham defeated Leicester City 4-2, and the failed to qualify for Champions League. Spurs 🧃 League. He has won the Golden Boot three times and he is now tied with Alan Shearer while the duo are only surpassed by Arsenal legend Thierry Henry. ANI

# QUIZ TIME!

1. Which of the following does not fit in the series? a) French Open 🔲 b) US Open 🖵 c) Australian Open 🔲 d) Cincinnati Masters 🖵

• Who won the FIFA Best L. Player Award 2020? a) Robert Lewandowski 🚨 b) Lionel Messi 🖵 c) Cristiano Ronaldo 🚨 d) Luka Mordic 🖵

 The National Ice Hockey U.J. Championship, 2020 was held in which city in India? a) Manali 🔲 b) Shimla 🖵

c) Leh 🔲 d) Kullu 🖵

 How many times has India t . emerged as a winner in the Malaysia Masters badminton tournament since it began in 2009? a) One b) Two c) Three d) four d

Q5. Which chess player won the Masters Chess Tournament 2021? a) Viswanathan Anand 🔲 b) Jorden van Foreest 🔲 c) Magnus Carlsen 🖵 d) Vladislav Artemiev 🖵

Q6. Which country won its maiden Under-19 ICC World Cup cricket tournament 2020 title? a) Afghanistan 🔲 b) Pakistan 🖵 c) Bangladesh 🔲 d) Sri Lanka 🖵

7. Scotland's Josh Taylor delivered a splendid performance to become Britain's



first undisputed world champion in the four-belt era. Which underdog did he beat?

a) Jose Ramirez b) Maurice Hooker c) Viktor Postol 🔲 d) Regis Prograis 🖵

Which Indian hockey player was named as the 2019 Women's Rising Star of the Year, by the International Hockey Federation (FIH)?

a) Rani Rampal 🔲 b) Lalremsiami 🖵 c) Navneet Kaur 🔲 d) Vandana Katariya 🖵

9 Joshna Chinappa and Saurav Ghosal are associated with which sports? a) Badminton 🔲 b) Squash 🖵

 Which famous cricketer from Australia received the Allan Border medal this year? a) Aaron Finch 🔲 b) Marnus Labuschagne 🖵

c) David Warner 🔲 d) Steven Smith 🖵

11. Greco-Roman is a term associated with which sports?

a) Golf  $\Box$  b) Wrestling  $\Box$ c) Boxing  $\Box$  d) Shooting  $\Box$ 

WERS: 1. d) Cincinnati Masters 2. a) Robert Lewandowski 3. c) Leh 4. c) Three 5. b) Jorden van Foreest 6. c) Bangladesh 7. a) Jose Ramirez

8. b) Lalremsiami 9. b) Squash 10. d) Steve Smith 11. b) Wrestling