

OCTOBER 2020 | ISSUE 06

# UIS NEWSLETTER

THE OFFICIAL NEWSLETTER OF GEMS UNITED INDIAN SCHOOL



## IN THIS EDITION:

Messages from the SLT

TAKE 5 - Mindfulness Programme

Interview with the Grade 10 CBSE Topper

UIS Mentoring Programme

Gandhi Jayanti Celebrations

SCOPE 2020 Champions

Interhouse JAM Competition

Mathematics Exhibition

Future Entrepreneurs Award

Food Sustainability & Security Webinar

Interhouse Islamic Quiz Competition



# Meet the Newsletter Team!



**Candace Sara Ciju**  
**Creative Director**



**Michelle Ana Mathew**  
**Senior Editor**



**Shaziya Abdul**  
**Senior Writer**



**Lakshmi Sanjay**  
**Senior Writer**

# Message from the Principal



**Dear Parent,**

As we get into the midstream of academic year 2020, our school community seems to get on top of the new normal and move on with confidence. A lot of this positivity comes from you dear parents who guide our students and support them to get on with life and learning.

We, at UIS are always expanding into new paradigms of learning. Our current passion and pursuit is to turn our students into high performance learners.

We have invested our time, energy and resources into this new framework and are all set to gradually climb the pinnacle of high-performance learning.

We cannot do this alone and in isolation. Our GEMS group is supporting us, and I am sure our most learned parents will be a part of this exciting journey.

I will be sharing our ideas and strategies with you and our dear students who will in turn demonstrate the genius in each of them!

Look out for more information on HPL as we move on!

Stay safe, stay Happy!

Warm Regards,  
**K. George Mathew**  
**Principal/CEO**

# Message from the Vice Principal



**Dear Valued Students and Parents,**

Greetings from GEMS United Indian School!

It gives me immense pleasure to share that we are now in our third month of learning-teaching post the summer break and we continue to provide quality education for all our students and a safe and risk-free learning experience for our increasing face-to-face learners. As always, I would like to extend my sincere appreciation to all our valued parents who are relentless in their support and patronage. Hats off to all our teachers who continue to work tirelessly for the progress of students under their care.

I'd like to appreciate efforts of the entire Administration Team led by the Manager School Operation (MSO) – Mr Dennis Anthony to keep our school campus and buses safe and risk-free.

As we conclude the Open House sessions for the month, here are few findings gleaned from parent and teacher feedback. These observations could be of immense value to our students. Students who engaged actively in their learning by collaborating and maintaining eye-contact with their teachers have demonstrated increased focus and retention of learning. Also, students who make notes/doodle or prepare mind-maps while lessons are on, have shown improved abilities to link events and make stronger connections with their learning. Capturing learning in graphical form has proven to be successful and we encourage all our learners to record their learning in such fun and creative ways.

Use of digital applications across school has improved significantly by the end of October as compared to end of July this year, which indicates students and teachers are actively and seamlessly using educational applications to support impactful teaching, learning and assessment. As mentioned by Principal Sir in the first newsletter post the pandemic, we are moving into a 'pan-academic' phase and digital literacy will be the key going forward, I am very pleased to share that we are in a very enviable position as far as tech support for learning is concerned. This is thanks to the heavy investment made by GEMS Education to provide every GEMS student a 'full-access Microsoft Suite' to enhance learning, collaboration and assessment.

As admissions for 2021-2022 are open, I urge our existing parents to take advantage of the GEMS Ambassador Program and recommend families to UIS. Once the referred parent taken admission, our existing parents will get a discount in the fees of their children in UIS. This program has been very successful and we've had the opportunity to provide our proactive parents with up to 25% discount in their fees. Please visit <https://www.gemsunitedindianschool-abudhabi.com/for-parents/ambassador-programme/> for more details.

Here's wishing all members of the UIS family a happy and healthy month ahead.

**Shaikh Murad Sarfraz**  
**Vice-Principal**  
**GEMS United Indian School**

# Message from the Senior Supervisors



**Dear Parent,**

GEMS United Indian School aspires to provide quality education by staying focused on the best practices that it follows thereby, enabling teaching fraternity and the school leadership team to support the vision of the school.

Understanding that nothing can be achieved without taking a deep dive and designing a concrete plan of action, the school has set clear goals, performance targets and a system to measure the progress of students.

UIS Students are moulded to take charge of their own learning and be accountable for their areas of improvement. To strengthen the curriculum, instruction and assessments, attention is paid to talent development and leadership skills. UIS strongly believes, that learning is not about memorizing facts, but is about being mindful and using imagination and creativity to learn about what works best for each student. To achieve this, teacher begin the lesson by putting up a prompt for your student to observe and think about. This prompt/stimulant could be an Image or Text. Students are given an opportunity to observe and make notes on what they think about the prompt.

UIS strives to groom every student to become critical thinkers and confident learners. The school provides opportunities for students to work on research-based projects, plan actions, frame strategies and share ideas.

UIS aims to provide its learners support and guidance in the mentorship program to support students maximise their potential. Student mentorship is given priority in developing an acute awareness on who they are and what they want to become and to support students in their academics, wellbeing and ways of working.

We recognize the magnitude of the responsibility that this program demands while working with youth and undertake to train mentors to interact appropriately with their mentees, according to the highest ethical standards at all times.

We look forward to working with mentor-mentee team in building collaborative approaches and creating a culture of proficient learning environment for students.

Warm Regards,

**Senior Supervisors**

**Mrs. Sunitha Nambiar & Mr. K. Joseph**

# **TAKE 5 - Mindfulness Programme**



## **Dear Students and Parents,**

As you know, in UIS, we always focus on the holistic development of our students. During this time of uncertainty, it is essential to focus on our mental health. Mindfulness is the best key to achieve this goal, not just for students, but also for our staff. Keeping this in mind, we have introduced the program

–

“TAKE 5 – An initiative for the wellbeing of UIS family”.

### **Why Mindfulness?**

Most of us are caught in a web of avoiding pain in this fast-paced life. But then that avoidance would lead to deeper distress. That's where the term 'mindfulness' becomes pivotal. When you ponder on the term 'mindfulness', 'Awareness' and 'Acceptance' are words that come to mind. Speaking of which, awareness is the knowledge and ability to focus attention on one's inner processes and experiences, such as the experience of the present moment. Acceptance is the ability to observe and accept, rather than judge or avoid those streams of thought. Thus, the purpose of mindfulness is to foster an outlook on one's consciousness and identity that which can bring greater peace.

### **How do we achieve mindfulness?**

As the name suggests, this program comprises of 5 sessions over 5 weeks, which commenced from the 11th of October. Each session includes a technique of practicing mindfulness and a philosophical video to inspire and motivate everyone. Teachers are trained by the Counsellors to assist the students in learning the technique by practicing it in class. The more we practice, the better the results are. The plan ensures practicing of the technique thrice in a week, which will be the new rhythm of UIS.

Your wellbeing is important to us. Let's support each other and make ourselves better individuals.

**Mrs. Zera Bai Rajan**  
**Student Counsellor**

# Interview with Ms. Candace Sara Ciju



**Mr. Pranav Rajesh Krishnan, Deputy Head Boy of GUIS interviews Ms. Candace Sara Ciju, the Grade 10 CBSE Topper**

**Pranav:** Today we have Candace Sara Ciju, who got 97.4% on her 10th Boards Exams, earning her the topper position of our school. She is also an awardee of the Sheikha Fatima Bint Mubarak Al Nahyan Award For Excellence. We're glad to have you here Candace!

**Candace:** Thank you so much for having me! It's an absolute honour!

**Pranav:** So Candace, what was your initial reaction on hearing your marks?

**Candace:** Heart pounding, I typed in my details to access my 10th Grade Mark sheet and as usual, the CBSE website wasn't loading. I actually received the good news from our beloved Girls Supervisor, Mrs. Sunitha Nambiar as the school had already received the Marklists of all the students. Words cannot describe the ecstatic moment and I truly felt indebted to the Almighty, my family and my school.

**Pranav:** What was your secret, your strengths, that helped you score well in the examination?

**Candace:** Once I take on an adventure, it is not in my nature to give up. To speak the truth, Grade 10 is stressful, but you can cross any bridge, if you are ready to work hard. After all, you reap what you sow!

**Pranav:** What was your overall schedule and what did you practice to ace the Boards?

**Candace:** My main preparation for Boards commenced approximately 3 months prior to the exams. I used to study from 4AM - 6AM and then I'd get ready to go to school. Once I returned, I would take a bath and then complete all my assignments. If time permits, I would study for about an hour or two. I am nowhere close to a studyholic and I would take 20-30 minute breaks to watch an episode of F.R.I.E.N.D.S!

**Pranav:** Great! Were there any obstacles you faced during your time preparing?

**Candace:** I had the great honour of serving as the Head Girl in the previous academic year as well. Being the Head Girl, I was occupied with Student Council work and so, I had to juggle between academics and extra curriculars. Initially, it was a little tricky to handle, but with time, I became a pro - juggler!

**Pranav:** Overall, what are your favourite subjects?

**Candace:** That one's easy to answer! My favourite subjects were Social Studies, Math, Biology and English.

**Pranav:** What was your greatest source of motivation during preparation?

**Candace:** Without a doubt, my greatest supporter was my mother. She supported me throughout my Grade 10 journey, showering me with study materials and love. She is my personal cheerleader and I'm forever grateful for her. With a mother like her, anybody can achieve academic success!

**Pranav:** What was your technique for retaining information for the examination?

**Candace:** The main technique I used is the method of 'Picturization.' When I read a paragraph in the textbook, I would imagine the concept in the form of a picture. During the exam, I would retrieve the right picture as per the question and frame the answer in my own sentences.

**Pranav:** To end off, what would you recommend to those preparing for their Boards this year?

**Candace:** Dear aspirants, don't over stress yourself. Stay light, healthy and tackle the exams with a fresh mind. If I can do it, so can you! I wish you all the very best and hope to see you pass with flying colours!

**Pranav:** Thank you, Candace, for your valuable time! That's all folks, wishing you all a wonderful day!

# UIS Mentoring Programme



GEMS UIS Mentoring Program aims to create and provide a powerful opportunity for students to improve their learning outcomes through teachers/mentors learning with and from each other, making skills and experiences inter-generational. As a part of this program, our students will be paired with a mentor who is an experienced change maker. The mentor will seek to encourage both the personal and professional development of a mentee through their vast experience and share his/her knowledge and expertise.

Through this Mentorship Program, mentors have a unique opportunity to help open doors to future academic and career possibilities and cultivate our student's sense of purpose. The mentor's will find their mentee's interest, goals, and strengths to encourage and engage them in both school based and community-based activities. Also, the mentor's will be communicating and familiarizing with their mentee's constantly with reference to academics, safeguarding and well-being.

A few from the innumerable benefits of being a mentee are listed below:

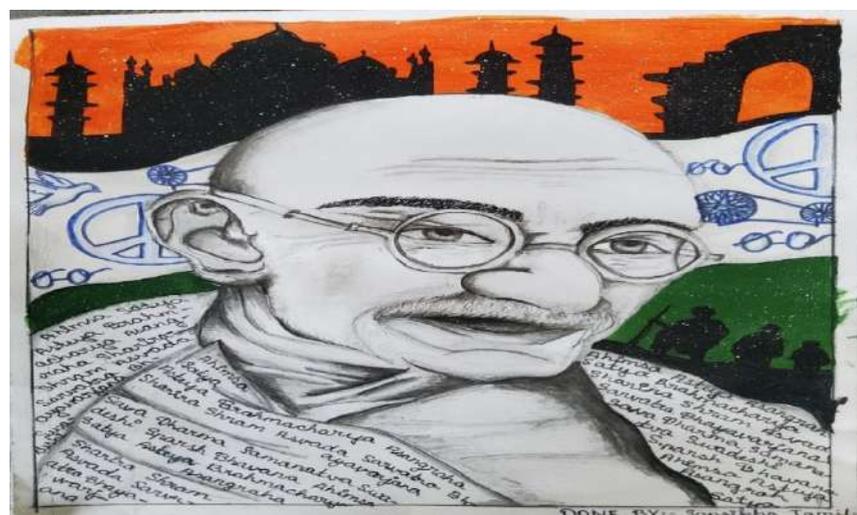
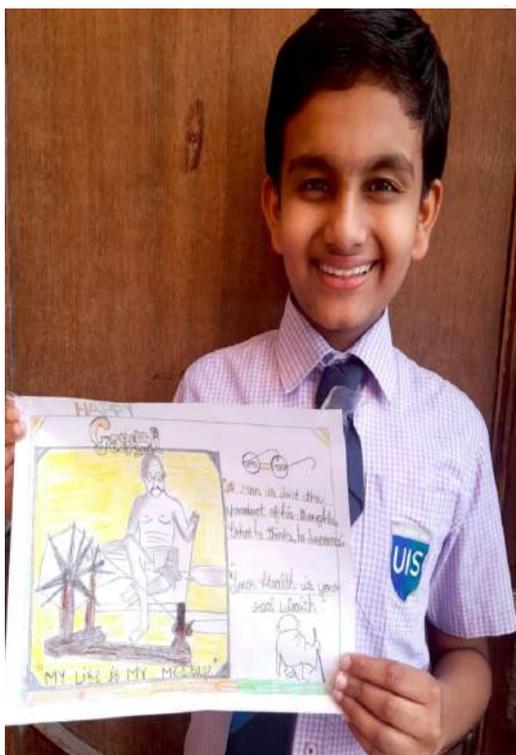
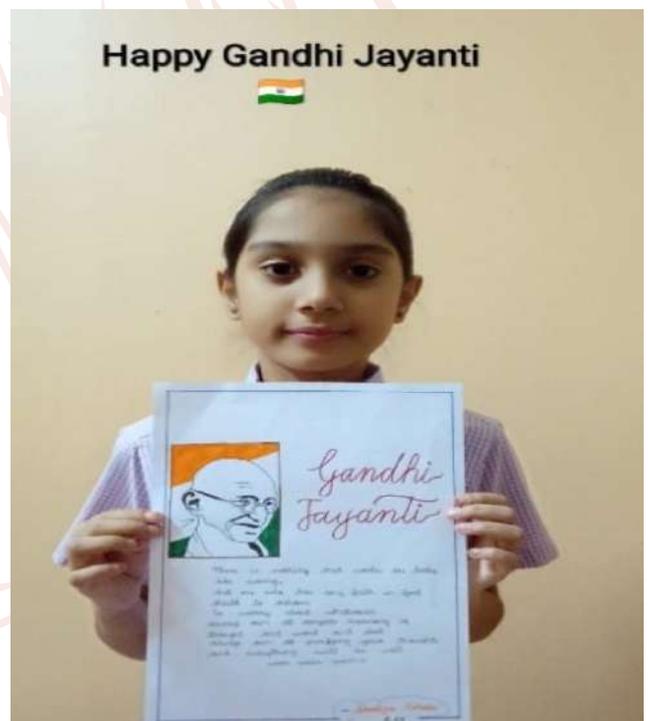
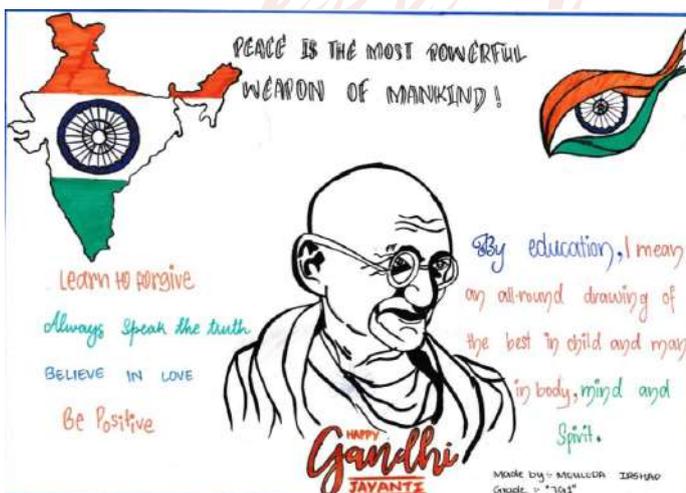
- Building resilience in the face of adversities
- Strengthen overall mental equilibrium
- Escalate self-esteem and self-efficacy
- Building resilience in the face of adversities
- Develop communication, study and personal skills
- Develop strategies for dealing with both personal and academic issues
- Gain valuable insight into the next stage of college career

Many people have handed the baton to us. Now it's time for us to purposefully work hard to hand the baton to our students.



# Gandhi Jayanti Celebrations

Gandhi Jayanti is celebrated on October 2 every year to mark the birth anniversary of Mahatma Gandhi. To celebrate this special day in the UAE and express our patriotism, the Social Studies Department of GEMS United Indian School, conducted an Essay Writing Competition and Poster Making for Grades 7 to 9 on 30th September 2020, to inculcate the value of leadership, simplicity and integrity in students. The contribution of Mahatma Gandhi to world politics and to world peace is immense. Reading all the essays, made one realize the importance of it on this auspicious day. Through the posters, students have given the message of Communal Harmony and Patriotism. These competitions developed a feeling of affiliation and unity among students. We hope they truly take Gandhi's words of wisdom as an inspiration and reflect it onto their daily lives.

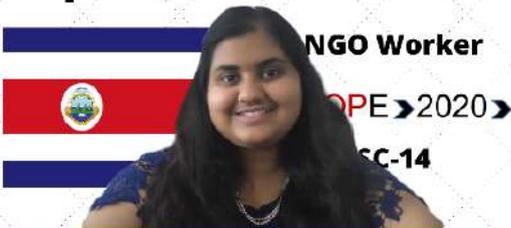


# SCOPE 2020 Champions!

GEMS UIS brought home a massive victory from the 'Students' Conference Of Parties EXPO' (SCOPE 2020), organized by the Kindergarten Starters, Dubai, on the 24th and 25th of October, 2020. This inter-school event provides a platform to stimulate creative thinking skills and expressions in different categories and empowered with high levels of climate change awareness, deep climate change research and collaborative global problem-solving skills on Sustainable Development goals.

**SCOPE Delegation: Best Delegation and Best Drafted Resolution bagged by Candace Sara Ciju, Pranav Rajesh Krishnan, Lakshmi Sanjay, Parth Dinil and Michelle Mathew**

## Republic of Costa Rica



## Republic of Costa Rica



## Republic of Costa Rica



## Republic of Costa Rica



## Republic of Costa Rica



STORY OF US  
Creative writing  
SENIORS



NANDHINI BALAJIKANNAN  
4<sup>th</sup> Position

STORY OF US  
Creative writing  
JUNIORS

SAJINI VARADHARAJAN  
4<sup>th</sup> Position

THERE IS NO PLANET B!  
Public speaking



SHRUTI AGANATHAN

**First Position in 'Easels of Earth' - SCOPE 2020**



SUSHMITA DAS

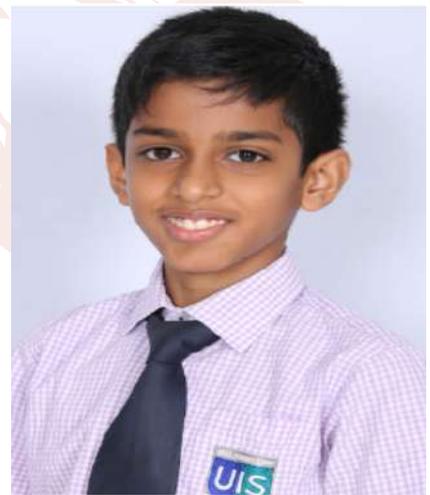


CHRIS JOSEPH DEEPAK

**Third Position in 'Easels of Earth' - SCOPE 2020**



SAINATH MANIKANDAN



DAN THOMAS DEEPAK

A graphic with a green background showing a rocky coastline. On the left is a portrait of a young boy in a dark suit and tie, framed in yellow. To the right is a quote in yellow text, followed by attribution and mention of media features in blue text.

**"ANYBODY CAN GET INVOLVED IN SAVING THE ENVIRONMENT. THERE IS NO AGE FOR IT. A KID AS OLD AS 8 YEARS OR EVEN A PERSON AS OLD AS 90 YEARS CAN GET INVOLVED. DO NOT LET ANYBODY LET YOU DOWN. ANYBODY CAN DO IT."**

**-PARTH DINIL(GRADE 9 STUDENT-GUIS)**

**(FEATURED IN UNICEF BLOG AND UNICEF CROATIA EXHIBITION)**

# Interhouse JAM Competition

**“Take care of your minutes and the hours will take care of themselves.”**

Just a Minute, is an innovative way of testing the speaker’s presence of mind, fluency of language, ability to connect their thoughts on the given topic and overall communication skills of the participants. An Inter House JAM session was conducted on 27th September 2020 at GEMS United Indian School as a part of the Inter House activities for grades 9 to12. The participants took up the challenge wholeheartedly and spoke on various given topics, showcasing their logical flow of thoughts, coherence of ideas, spontaneity and general knowledge in just a minute, which impressed the judges. There were 12 finalists.

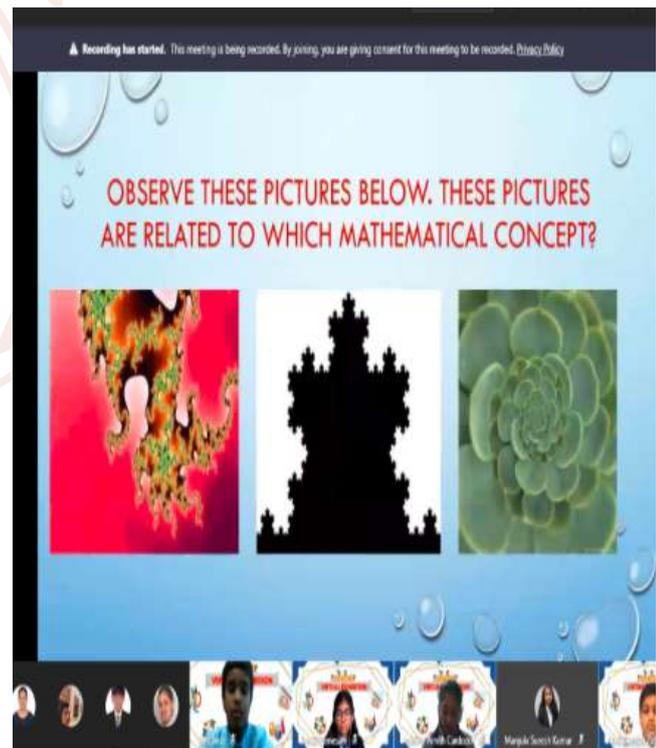
The first place was bagged by Candace Sara Ciju -Mars House, while the Second position was shared between Akshaya Ajith -Jupiter House and Michelle Ana -Neptune House. The third position was taken by Shreya Hazra - Saturn House. Principal George Mathew applauded the teachers for all their efforts taken to train and guide the students.



# Mathematics Exhibition

"Speak to me I will learn, teach me I will understand, guide me to do I will remember it forever."

Keeping this in mind, on 27th September 2020, Mathematics Exhibition was held at GEMS United Indian School, Abu Dhabi. This year being the first virtual exhibition, students enthusiastically participated in the Exhibition and made wonderful still and working models on various topics. Students of Grades 6 to 8 participated and each class researched and presented the projects made by them. There were about 15 projects from Grade 6, 25 projects from Grade 7 and 8 projects from Grade 8. The students were extremely enthusiastic and confident to explain their research work. Appreciation was observed when students spoke and explained their models in detail. Principal George Mathew was thoroughly impressed by the quality outcome and lauded the Department for the success of the event.



# Future Entrepreneurs Award - Agribot

UAE Vision 2021 National Agenda focuses on improving the quality of air, preserving water resources, increasing the contribution of clean energy and implementing green growth plans. We provide opportunities to students to attain hands on experience in the various field of STEAM

(Science/Technology/Engineering/Arts/Maths) including Robotics. Our school curriculum is designed to support through a focus on hands on practical learning through real life projects.

The 2nd edition of the “Future Entrepreneurs Award 2020” organized by the Abu Dhabi Chamber of Commerce and Industry witnessed the participation of a large number of young innovators with more than 3,000 participants; 100 of whom were shortlisted to take part in the Future Entrepreneur Exhibition for Creativity and Innovation. This is an integrated program organized by Abu Dhabi Chamber in partnership with Khalifa Fund for Enterprise Development, DED, and ADEK with 5 categories such as Best Bright Idea, Best Innovative, Best Investment- Product Idea, Best Technological Project, Best Marketing and Mobile App. The Chamber organized a virtual award ceremony to award the winners. Sainath Manikandan & Sai Sahana Manikandan won under the category “Best Investment – Product Idea” for his innovation Agribot. The purpose of AgriBot (Agriculture Robot) is to help the farmers in hot countries for agricultural purposes. It is designed to minimize the labor of farmers in addition to increasing the speed and accuracy of the work.



# Global Webinar on 'Food Sustainability and Security'

Building Awareness on the Sustainable Development Goals in schools is the need of the hour as more than half of the population of our planet is currently under the age of 30. On 14th of October, as part of the Arab Environment Day, the Eco Club of the Private International English School, Abu Dhabi organized a Global Webinar on 'Food sustainability and security'. GUIS attended the webinar, participated in the Comic strip designing competition and Panel discussion. We were fortunate enough to hear from the renowned Primatologist, the founder of Roots & Shoots, Dr. Jane Goodall. The program also enriched with keynote speeches of eminent members of Environment Agency Abu Dhabi, Roots and Shoots of UAE chapter followed by quiz and other entertainment programs.

**Panel 1 Discussion:** Group discussed about changing climate, growing global population, rising food prices, and environmental stressors and its impacts on food security. Also discussed on adaptation strategies and policy responses to global change.

**Panel 2 Discussion:** Panel discussion highlighted on the technologies such as robots, temperature and moisture sensors, aerial images, and GPS technology in agriculture and in hydroponic culture. In the panel they discussed on the advancement in the technologies which is maintained to support the richness of the oceanic food industry.



# Interhouse Islamic Quiz Competition

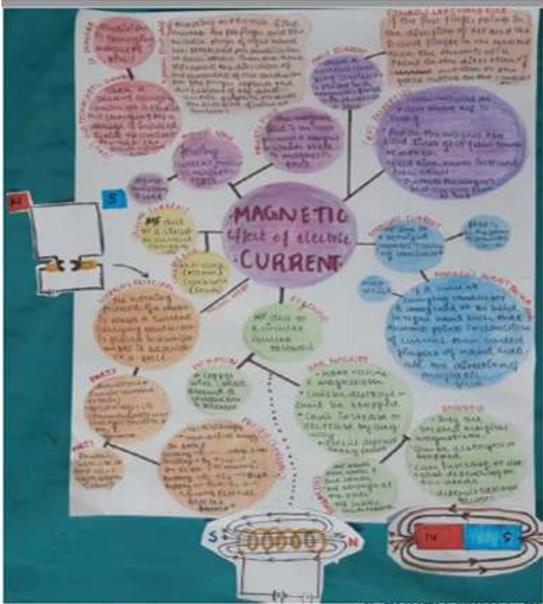
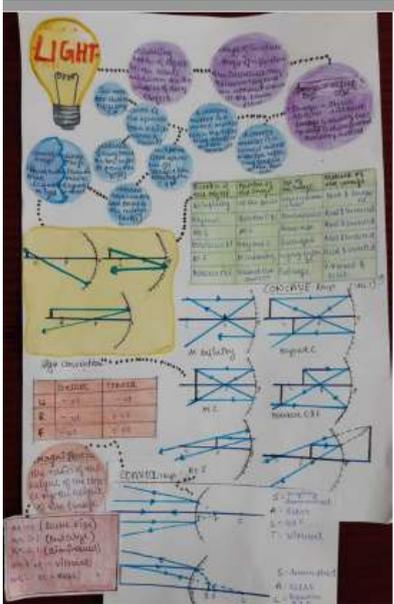
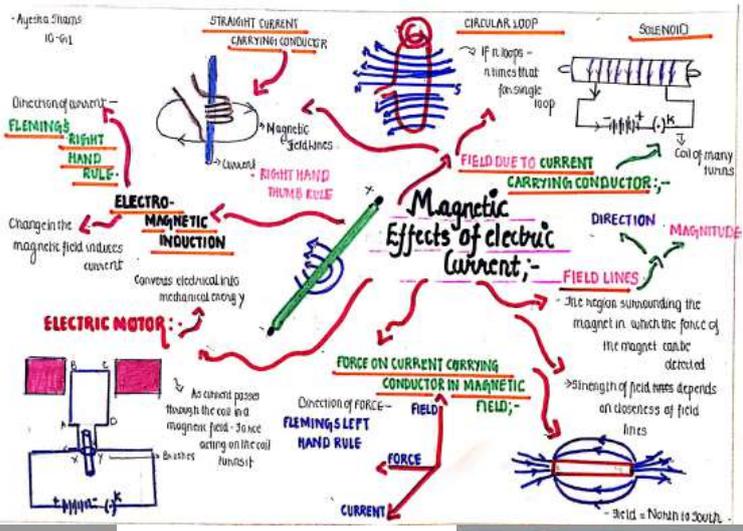
Inter-House competitions always bring forth an extraordinarily vibrant and valiant fervour among all the students and teachers. Our first virtual Inter House Islamic Quiz Competition was held on 30th September and 1st October 2020 for Grades 6 to 9. The objective was to encourage students to gain Islamic knowledge, understand it in its true sense and apply it in daily routines to enlighten their lives. The quiz was divided into several engaging, stimulating, and equally challenging rounds. The rounds were strenuous and demanding, but all the participants conquered all the challenges with commendable confidence. Jupiter House emerged as the winner, followed by Neptune and Saturn for Grades 6 and 7. In Grades 8 and 9, the first place was grabbed by Mars House followed by Neptune and Jupiter. It is through the dedicated work of the Islamic teacher and her team that the event was a great success.



# Grade 10

## PHYSICS

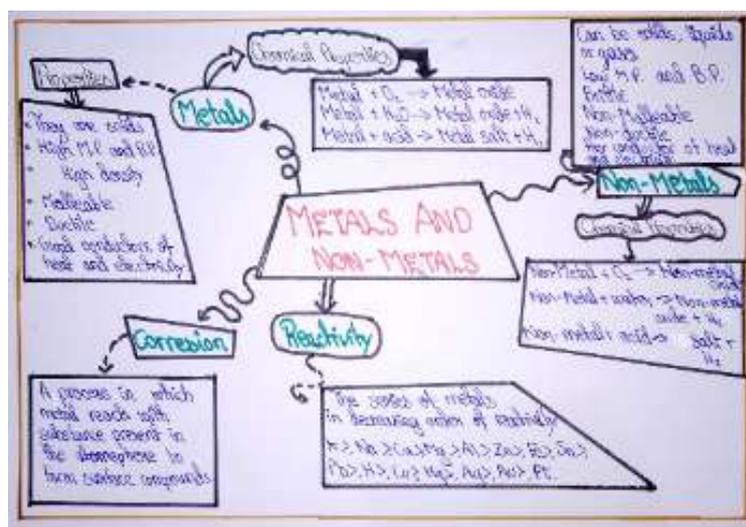
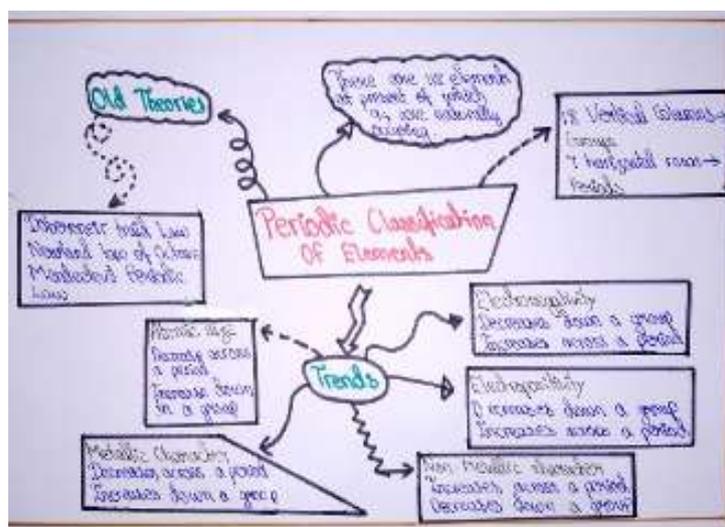
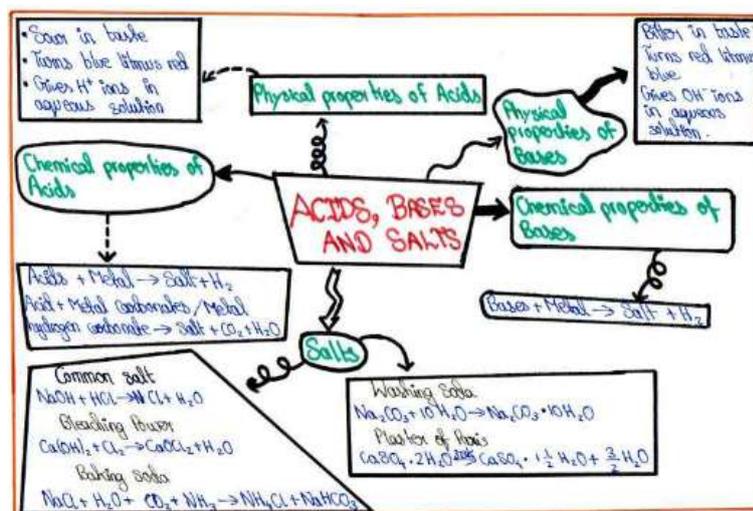
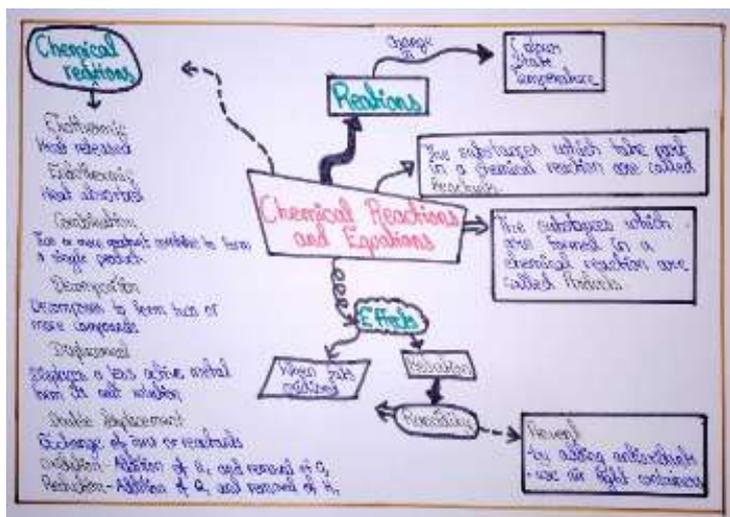
The students learned various concepts associated with the topics; Electricity, Magnetic Effects of Electricity, and Light through videos, discussions, real-life applications, and various other activities, after which they summarized their learning through mind-maps, flow charts, concept maps, etc.



# Grade 10

## CHEMISTRY

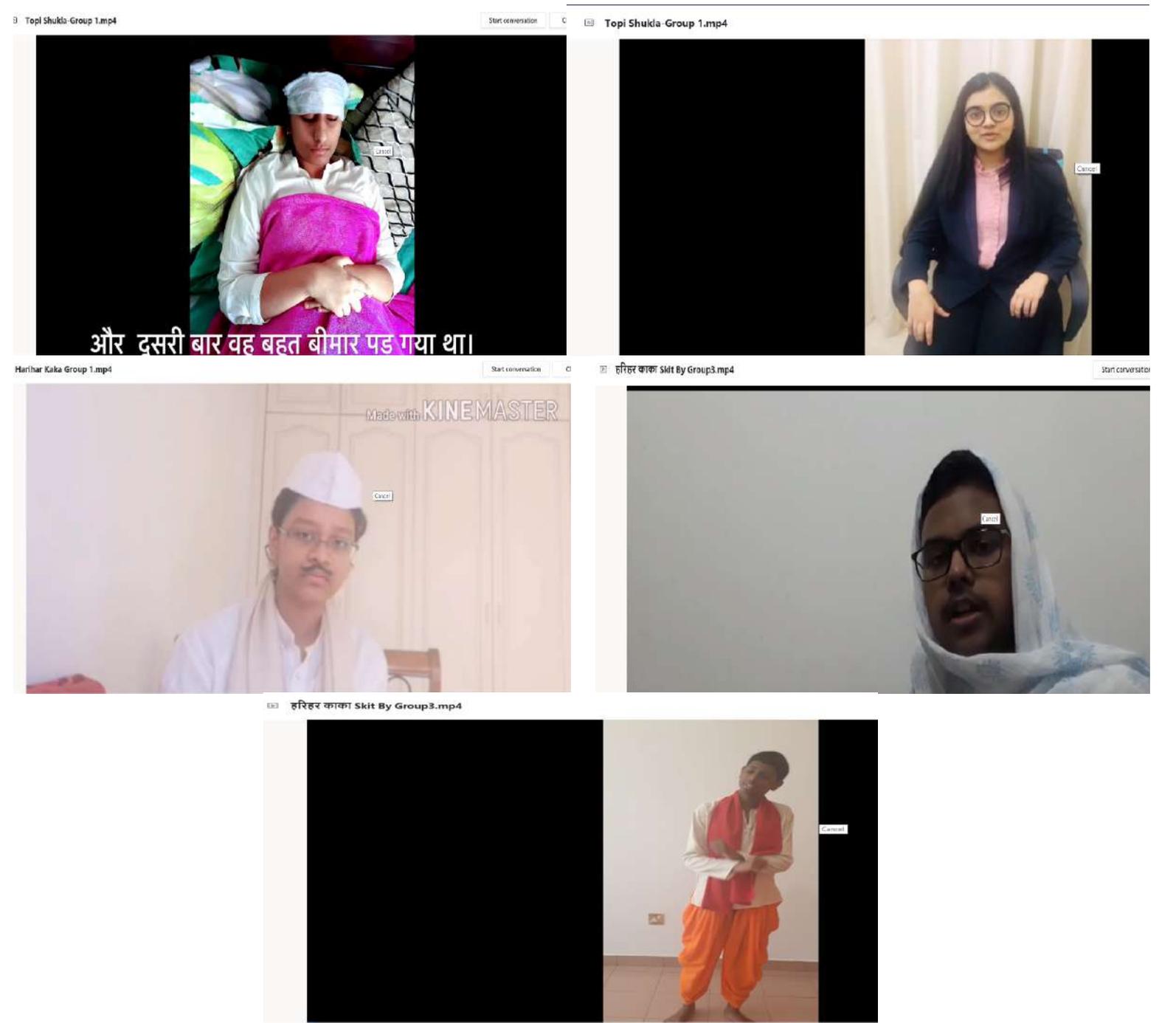
The students reflected their knowledge on the following topics; Chemical Reactions and Equations, Acids, Bases, and Salts, Periodic Classification of Elements, Metals, and Non-Metals.



# Grade 10

## HINDI

Independent learning के तहत बच्चों द्वारा 'टोपी शुक्ला' पाठ को स्वयं पढ़कर उसका online skit प्रस्तुत किया गया।



# Grade 10

## HINDI

छात्रों द्वारा 'टोपी शुक्ला' पाठ पर Mind map की रचना छात्रों द्वारा 'हरिहर काका' पाठ को नाटक रूप में लिखा गया।

# Grade 10

## MATH

The students verified the fundamental relation called Pythagoras Theorem in Euclidean Geometry among the three sides of a right-angle triangle by doing a hands-on activity.

**ENRICHMENT ACTIVITY**  
**TRIANGLES**  
**PYTHAGORAS THEOREM**

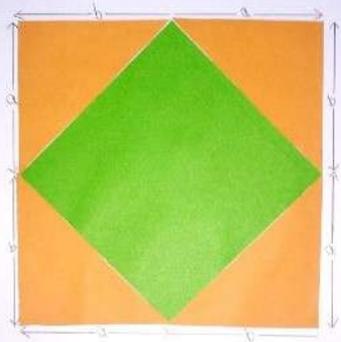
**Aim:** To verify Pythagoras Theorem.

**Pre-requisite knowledge:** 1) Area of triangle  
 2) Area of a square  
 3) Algebraic identity  $(a+b)^2 = a^2 + 2ab + b^2$

**Materials Required:** 1. White sheet of paper 2. Graphing box 3. A pair of scissors 4. Green and Red paper sheets 5. Glue stick.

**Steps for the activity:-**

- Step-1: From the red sheet, cut out a right angled  $\triangle ABC$ , right angled at C. Let sides AB, BC and CA be c, a and b units respectively.
- Step-2: Fix the corners of a triangle on a white sheet of paper.
- Step-3: From the green sheet, cut out a square of side 'c' units.
- Step-4: From the red sheet of paper, cut out 4 triangles of the same size as that  $\triangle ABC$ .
- Step-5: From the green sheet of paper, cut out another square of side 'c' units.
- Step-6: On white sheet, fix the corners of triangles and square as shown below.



**Observation:-**  
 From the procedure, we get a square of side  $(a+b)$  units.  
 Its area =  $(a+b)^2$  sq. units.

Area of bigger square = Area of green square + Area of 4 red triangles

$$(a+b)^2 = c^2 + 4 \times \left(\frac{1}{2} ab\right)$$

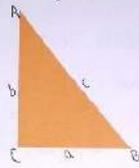
$$(a+b)^2 = c^2 + 2ab$$

$$a^2 + b^2 + 2ab = c^2 + 2ab$$

$$a^2 + b^2 = c^2$$

Hence, the Pythagoras theorem is verified.

Area of  $\triangle ABC = \frac{1}{2} \times a \times b = \frac{ab}{2}$  sq. units



Area of square =  $c^2$  sq. units



# Grade 10

## SOCIAL STUDIES

The students discussed their views on the heated question, 'Is democracy better than dictatorship?', using Padlet.

padlet  
mshwarp\_jua • 14 • 1m  
Is Democracy a better form of Government  
Made with a quick smile

**Shysie**  
1. Democracy is a better form of government as they hold the people as their top most priority  
2. They take time in decision-making which is a good thing as it will help them make an efficient choice  
3. People have the opportunity to vote for their own leaders  
4. they provide equality to the citizens and respect their decisions

**SAMIYA**  
*democracy is always a better form of government because democracy means -of the people , for the people and by the people. from its principals its clear that people have the right to choose and people have a major role in decision making , as we learnt democracy gives us an option to choose our leader whom we have faith in and he may or maynot make decision according to people*  
*making , as we learnt democracy gives us an option to choose our leader whom we have faith in and he may or maynot make decision according to people*

**Jessey gloria**  
1. supports human rights.  
2. for the people and by the people.  
3. respects opinions of an individual.  
4. fair

**Ruth**  
1. I favour democracy for many reasons. I believe the government has to be the for the betterment of the people, and democracy is one of the best ways to ensure.  
2. **Choosing our own leader** - We the people get to choose our own leaders, and if they are found to be extremely unsatisfactory, their government can be removed.  
3. **Representation** - Democracy, if carried out through fair means, also ensures that everyone's voice is heard.  
4. **Better decisions for all** - Even though decision-making in a democracy takes time, it improves its quality. This long process helps to find a solution to a problem that is beneficial to everyone.

**NIYA**  
DEMOCRACY IS A BETTER FORM OF GOVERNMENT:  
1. DEMOCRACY PROMOTES THE EQUALITY AMONG CITIZENS.  
2. IMPROVES THE QUALITY OF DECISION MAKING  
3. EACH INDIVIDUAL GETS TO EXPRESS THEIR OPINIONS

**Evlyn**  
When we hear the term dictatorship, we imagine the authoritarian dystopia where citizens are highly oppressed. When we hear the term monarchy, we imagine a hierarchical and a unfair succession of forced leadership. But is our thoughts mere expectations? What if I tell you the reality has a better outcome?  
  
This is why the dictatorship is better:  
- There is a better control over human development.  
- There is much better social stability in dictatorship.  
- There is no chaos that comes with unfair elections.  
- There maybe more room for innovation since there is only dictator appointed rules which can be altered anytime anywhere.  
  
This is why monarchical government is better:  
- In monarchy ethics and morale play a high role in decision making anytime anywhere.  
  
This is why monarchical government is better:  
- In monarchy ethics and morale play a high role in decision making which is important in this pragmatic world.  
- There is more trust established between people and the government.  
- Better for the country's economic development.

**Amena Taufeeque**  
Dictatorship or Monarchy can also be the better form of government  
  
This is because if the power in the hands of one or few can be utilized to it's utmost potential  
  
The power should be concentrated in the hands of those who are capable to handle the running of a country and they are open hands for the country  
  
There won't be any unfair practices that come along with campaigning or election polls, etc  
  
The decision making process is a lot faster too  
  
Monarchy like the UAE follows is also a good form of democracy  
  
If the dictator comes across something that the people do not approve of , that practice, law or rule can immediately be changed without the need of an approval or consent  
  
If the dictator comes across something that the people do not approve of , that practice, law or rule can immediately be changed without the need of an approval or consent  
  
The UAE is one of the most developed country and yet it is not a democracy  
  
This is an example of a developed non democratic country  
  
Hence if the power is in the concentration of right hands a non democratic country can be one of the most developed countries

**Jessica**  
Democracy is a better form of government as:  
1. Many people will be consulted before taking a decision so the decisions can be made with a deeper thought and consequences can be looked into. Different views and opinions can also be considered and a better quality decision can be made.  
2. There will be so many representatives with different backgrounds so if some of them raise their voice for upliftment of minorities which can help in improving their social status.  
3. People's voices are heard as people's votes will choose their leader.

**Jennifer**  
DEMOCRACY IS A BETTER FORM OF GOVERNMENT  
  
- Democracy promotes the equality among citizens .  
- It helps in resolving the social problems existing in the society by fair means .  
- Improves the quality of decision making  
- In a democratic form of government , even if one group of people make mistakes the other group is able to correct them .  
- It is more accountable from of government . In a democratic government , there are many levels of government , which helps the people to approach their problems to the govt .  
  
- D



# Grade 11

## MATH

Students put their brains to work, explored and verified the inequality of arithmetic and geometric means. They celebrated their ideas through a lab activity to conclude that the arithmetic mean of a list of non-negative real numbers is greater than its geometric mean.

MATH LAB ACTIVITY

CHAPTER: SEQUENCES & SERIES

CONCEPT: ARITHMETIC MEAN

**OBJECTIVE**

To demonstrate that the arithmetic mean of two different positive numbers is always greater than the geometric mean.

**MATERIAL REQUIRED**

Colour chart paper, ruler, scale, sharp pins, cellophane

**METHOD OF CONSTRUCTION**

1. From chart paper, cut off four rectangular pieces of dimension  $a \times b$  ( $a > b$ ).
2. Arrange the four rectangular pieces as shown in figure.

**DEMONSTRATION**

1. ABCD is a square of side  $(a+b)$  units.
2. Area of ABCD =  $(a+b)^2$  sq. units.
3. Area of four rectangular pieces =  $4(ab) = 4ab$  sq. units.
4. PQRS is a square of side  $(a-b)$  units.
5. Area PQRS = Sum of the areas of four rectangular pieces + Area of square PQRS.

$\therefore$  Area ABCD  $>$  Sum of areas of 4 rectangular pieces + Area of square PQRS

$$(a+b)^2 > 4ab + (a-b)^2$$
$$\frac{a+b}{2} > \sqrt{ab} \quad \therefore A.M. > G.M.$$

**OBSERVATION**

Take  $a = 10\text{cm}$ ,  $b = 6\text{cm}$

$\therefore AB = a+b = 16\text{ units}$

Area of ABCD =  $(a+b)^2 = 196$  sq. units

Area of each rectangle =  $ab = 60$  units

Area of square PQRS =  $(a-b)^2 = 16$  sq. units

Area ABCD =  $4(\text{Area of rectangular piece}) + \text{Area of square PQRS}$

$$196 = 4(60) + 16$$
$$\therefore 196 > 160$$

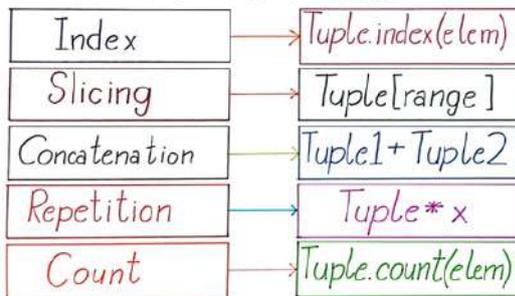
$\therefore (a+b)^2 > 4ab$  or  $\left(\frac{a+b}{2}\right)^2 > ab$

$$\therefore \frac{a+b}{2} > \sqrt{ab} \quad \therefore A.M. > G.M.$$

# COMPUTER SCIENCE

The tech-savvy computer students delved deep into the learning of Python. They well-formatted their ideas of Tuples and the dictionary of Python. The students well-formed their sets of indices (which are called keys) and values, as well as tuples, which is a collection that is ordered and unchangeable.

## COMMON TUPLE OPERATIONS



JAYATHI KUMAR  
11-561

WRITE A PYTHON PROGRAM TO INPUT NAMES OF 'N' EMPLOYEES AND THEIR SALARY DETAILS LIKE BASIC SALARY, HOUSE RENT & CONVEYANCE ALLOWANCE. CALCULATE TOTAL SALARY OF EACH EMPLOYEE AND DISPLAY.

```

CODE:
di = dict()
t = 1
n = int(input("Enter number of employees: "))
while t <= n:
    nm = input("Enter name of employee: ")
    bs = int(input("Enter basic salary: "))
    hr = int(input("Enter house rent allowance: "))
    ca = int(input("Enter conveyance allowance: "))
    di[nm] = [bs, hr, ca]
    t = t + 1
l = di.keys()
print("Name", "Rent", "Net Salary")
for i in l:
    salary = 0
    z = di[i]
    for j in z:
        salary = salary + j
    print(i, "Rent", salary)
    
```

OUTPUT:

```

Enter number of employees: 4
Enter name of employee: Ashwin
Enter basic salary: 10000
Enter house rent allowance: 1000
Enter conveyance allowance: 1000
Enter name of employee: Anshu
Enter basic salary: 10000
Enter house rent allowance: 1000
Enter conveyance allowance: 1000
Enter name of employee: Rishi
Enter basic salary: 12000
Enter house rent allowance: 2000
Enter conveyance allowance: 1000
Name          Rent          Net Salary
Ashwin        10000        12000
Anshu        10000        12000
Rishi        12000        15000

```

WASH 11-52

Compare the tuples and write the output.

```

(a) >>> tup1 = (1, 2, 3)
    >>> tup2 = (1, 0, 2, 0, 3, 0)
    >>> tup1 == tup2
(b) >>> tup1 = ("FARIDA", "VAIBHAV", "MINI", "RAGHAV")
    >>> tup2 = ("Ravi", "Mala", "AMAN", "SAKSHI")
    >>> tup1 < tup2
(c) >>> tup1 = (10, 20, 30, 40, 50)
    >>> tup2 = (4, 5, 10, 20, 30, 40, 50)
    >>> tup2 > tup1
(d) >>> tup1 != tup2
    
```

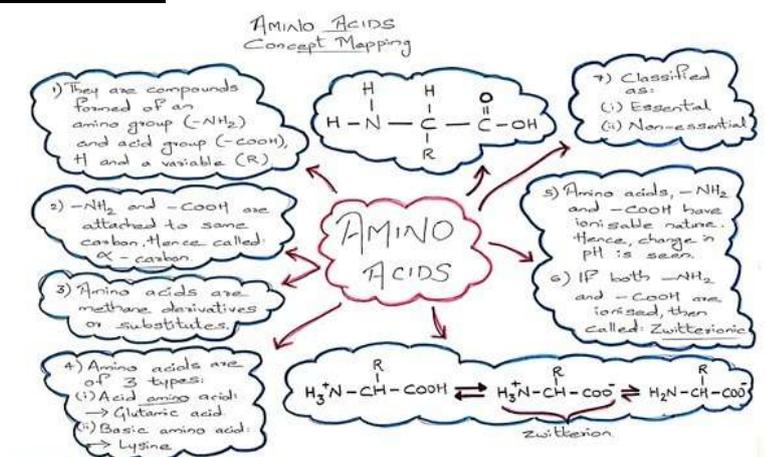
Ans: (a) True  
(b) True  
(c) False  
(d) True

Name: Varsha Aithani  
Class: 11-52

function	Syntax
<code>len()</code>	<code>len(d)</code> # d is dictionary
<code>clear()</code>	<code>d.clear()</code> # d is dictionary
<code>get()</code>	<code>d.get(key, default = None)</code>
<code>items()</code>	<code>D.items()</code>
<code>keys()</code>	<code>D.keys()</code>
<code>values()</code>	<code>D.values()</code>

# BIOLOGY

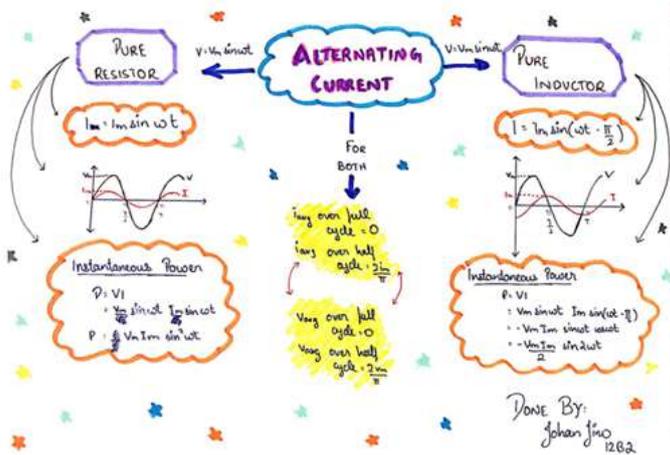
Students clearly expressed their understanding of Amino acids through creative mind maps and Frayer's models. Students' exemplary works truly projected their deep recognition of the topic



# GRADE 12

## PHYSICS

Students explored the concept of alternating current and portrayed their understanding through creative concept maps. They established their equations and verified their readings.



### OHM'S LAW

AIM - To determine the resistance per cm of a given metal wire by plotting a graph of potential difference versus current.

CIRCUIT - Copper Wire

TABLE

Voltage (V)	Current (A)	Resistance (Ω)
0.1	1.97	0.05
0.13	2.46	0.05
0.17	3.27	0.05
0.28	4.93	0.05
0.5	8.8	0.05

### RESISTANCE

$\text{Slope} = \frac{\Delta R}{\Delta L} = \frac{0.05 \Omega}{1 \text{ cm}} = 0.05 \Omega/\text{cm}$   
 $R = 0.05 \Omega/\text{cm} \times L$   
 $R = 0.05 \times 10 = 0.5 \Omega$   
 $R = 0.05 \times 20 = 1.0 \Omega$   
 $R = 0.05 \times 40 = 2.0 \Omega$

# CHEMISTRY

Our budding chemists strengthened their understanding of volumetric analysis through practical simulation of the titration experiment.

### READING-1

#### Determination of Concentration of $\text{KMnO}_4$ Solution

Titrant: MnO<sub>4</sub><sup>-</sup> salt

Drop rate: 0.1

Molarity of titrant, M1: 1 M

Volume of titrant, V1: 20 ml

Show volume of titrant, V2

4.0 ml

Developed by: Amrita University. Under license by: Amrita Online Lab  
Department of Environmental & Information Technology

9302522      Determination of concentration of  $\text{KMnO}_4$  solution (Simulation)    Class 12    Chemistry    Amrita Online Lab

Titrant	M1(M)	V1(ml)	v1	v2	(v2/v1)	(v1/v2)	V2(ml)	M2(M)	kg/g
0	20	10	2	5	4.2	0.24	0.95	158.10	
0	20	10	2	5	4	2.00	1.00	158.00	
0	20	10	2	5	4	4.00	1.00	158.00	

### Result:

<b>Molarity of <math>\text{KMnO}_4</math></b>	<b>1.0 M</b>
<b>Strength of <math>\text{KMnO}_4</math></b>	<b>158g/L</b>

# MATH

Students investigated the topic of derivatives, concluding that the square has maximum area among all rectangles of same perimeter by doing a hands-on lab activity. They also verified the result by using the concept of maxima and minima using second order derivative test.

**LAB ACTIVITY** John firo 1282

**APPLICATIONS OF DERIVATIVES** MAXIMA AND MINIMA

**OBJECTIVE:** To verify that amongst all the rectangles of the same perimeter, the square has maximum area.

**MATERIALS REQUIRED:** Chart paper, scale, cutter, pencil, eraser, glue

**METHOD:**

- 1) Take a paper and cut rectangles of different sizes each of 20 cm
- 2) Paste the rectangles on a sheet of paper
- 3) Calculate the area of these rectangles

**DEMONSTRATION:**

Area of rectangle I:  $2 \times 8 = 16 \text{ cm}^2$   
 Area of rectangle II:  $4 \times 4 = 16 \text{ cm}^2$   
 Area of rectangle III:  $5 \times 5 = 25 \text{ cm}^2$   
 Area of rectangle IV:  $3 \times 7 = 21 \text{ cm}^2$

∴ Perimeter of each rectangle is the same but their area are different. Area of rectangle III is maximum. It is a square of side 5 cm.

**OBSERVATION:**

- 1) Perimeter of each rectangle I, II, III, IV is 20 cm
- 2) Area of the rectangle III is maximum, which is  $25 \text{ cm}^2$

**CALCULATION:**

$P = 20$   
 $2(x+y) = 20$   
 $x+y = 10$   
 $y = 10-x$

$A = xy$   
 $A = x(10-x)$   
 $A = (10x - x^2)$

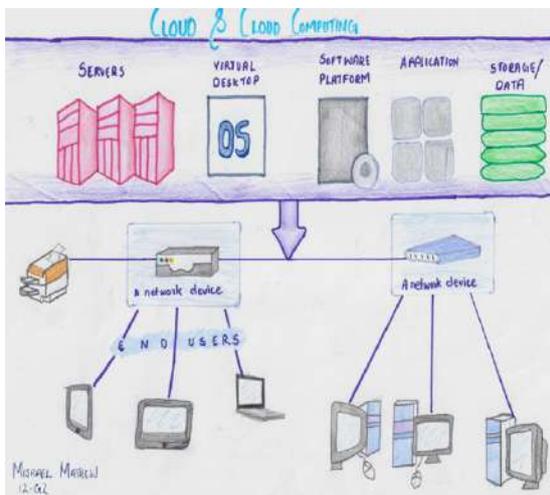
$\frac{dA}{dx} = 10 - 2x$   
 for maximum area  $\frac{dA}{dx} = 0$   
 $10 - 2x = 0$   
 $2x = 10$   
 $x = 5 \text{ cm}$

$\frac{d^2A}{dx^2} = -2$   
 ∴ Since  $\frac{d^2A}{dx^2} < 0$   
 maxima

∴ Side of rectangle are  $5 \text{ cm} \times 5 \text{ cm}$ .  
 thus it is a square.

# COMPUTER SCIENCE

Students traversed their way through Cloud storage, and learnt how cloud-computing enables them to remotely work on and transform data. The students also explored Python, learning about its inbuilt function for creating, writing, and reading files.



**FILE MODES**

TEXT FILE MODE	BINARY FILE MODE	DESCRIPTION	NOTES
'r'	'rb'	read only	• file must exist already exist, otherwise python raises IO error
'w'	'wb'	write only	• If the file does not exist a new file is created • If the file exist, it overwrites the content
'a'	'ab'	append	• file is in write only mode • If the file exists, the data is retained and new data is added at the end • If the file does not exist, it creates a new file
'a+'	'ab+'	read and write	• file must exist otherwise error is raised • both reading and writing operations work same
'w+'	'wb+'	write and read	• file is created if it does not exist • If file exists, file is truncated
'a+'	'ab+'	write and read	• both reading and writing operations • file is created if it does not exist • If file exists, data is retained and added to the end. Both reading and writing operations
'w+'	'wb+'	create, read and write a new file	• read and write if file does not exist • error is raised if file exist

Done by: Mithuna Thery 12-02

# Welcome to GEMS Rewards



GEMS Rewards is an exclusive rewards programme for our community of students, parents and staff designed to make quality education accessible.

With GEMS Rewards, GEMS families can explore a range of earning opportunities which help towards reducing the overall impact of annual school fees. Whether making savings through student referrals, our GEMS FAB Credit Card or directly using the GEMS Rewards app, our GEMS families can enjoy incredible benefits and discounts across various experiences including: dining, shopping, leisure, entertainment, beauty, wellness, travel and much more.



## WHY JOIN

Enjoy a better lifestyle with GEMS Rewards, an exclusive programme that gives you access to a world of savings and deals, from brands that offer a wide variety of services. The programme is also designed to ensure that families can make their children's education cost neutral through discounts and GEMS Points earning opportunities.



## HOW IT WORKS

It's easy! Simply download the GEMS Rewards app from your preferred app store and follow the simple instructions to login with your GEMS ID. Browse through an extensive list of deals that will allow you to earn GEMS Points or savings from select merchants across the UAE. Redeem your offers instantly and start saving.



## FAMILY ACCOUNT

The GEMS Rewards app allows for one account to be available for use across up to 8 devices. This means that it can be accessed by the entire family. So get everyone at home involved and start saving more.

# GEMS Rewards and ways to save



## HOW YOU CAN SAVE WITH GEMS REWARDS

GEMS families can explore cashback opportunities on student referrals and through the GEMS FAB Titanium Credit Card, and enjoy incredible savings and discounts across various experiences. You can also earn GEMS Points through our exclusive partner network and through our online shop, The Marketplace. These GEMS Points can then be redeemed against school fees. Learn more about the different ways you can use GEMS Rewards to save and earn.



### GEMS POINTS

Earn Points through the GEMS Rewards programme and use them to pay your child's school tuition fees.



### AMBASSADOR PROGRAMME

Refer a friend to a GEMS school and earn 4% in GEMS Points successfully enrolled referrals.



### GEMS FAB CREDIT CARD

Use the GEMS FAB Titanium Credit Card to pay school fees and earn up to 4.25% back.



### PARTNER NETWORK

Discover incredible deals and start saving by redeeming exclusive offers across our network of partners. You can also earn GEMS Points which you can later redeem against school fees.



### THE MARKETPLACE

Shop for those must-have essentials and life's luxuries on The Marketplace, a dedicated online store exclusively set up for our GEMS families. With each purchase you will earn GEMS Points making it the most rewarding online experience around.