

**APRIL 2020 | ISSUE 08**

# **APRIL NEWSLETTER**



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# Message from the Principal

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**Dear Parents,**

We are now midstream using Online-learning portal. Teachers and students have picked up strings of Remote Learning and are steadily improvising new skill sets. Terms such as Synchronous and Asynchronous have now entered the learners' lexicon.

Our journey so far has been both challenging and exciting. Nevertheless, our resolve for pitching the best practices will be evident through our programs that cater curricular and co-curricular learning opportunities in the digital space.

GEMS Education parents who successfully applied for the COVID-19 Relief Package have to date received discounts on the current term's fees ranging from 25 per cent all the way up to 100 per cent in cases of extreme hardship. More than 26,000 students across the GEMS network are set to benefit from the financial assistance designed to support families that have been adversely impacted by the Coronavirus outbreak. Our school has dished out relief packages to 320 families so far!

We do not take arbitrary decisions regarding the relief provided. Every application is screened and we take a decision based on the circumstances of the family. It is important to note that we, as an educational provider, must also take into consideration the best interests of our teachers and non-teaching staff, several of them being parents themselves.

Our teachers and education leaders have been working tirelessly to deliver the highest quality remote learning for all our students, and we are committed to honouring our obligation to continue to pay our teaching staff in full. With the help of parent feedback, we are also continuously looking at ways to improve and refine our E-learning programmes. Our mission is to provide the best education possible during this extremely testing period – an education that assures the academic success, well-being, health and happiness of our students. I am confident that you, as partners in our endeavour will support us through your unstinted co-operation.

Thank you and Stay Safe!

**K. George Mathew**  
**Principal/CEO**



# Message from the Vice Principal



**Dear Students and Parents,**

Here's wishing you all a peaceful and blessed month of Ramadan!

The Leadership team and teachers cannot thank you enough for all the sincere efforts you have been making to ensure the Remote Learning Program is a resounding success! We are now truly sailing smoothly in these winds of change and I thank all the teachers and leaders who have made this possible.

Staying at home can be a challenge and we all have realized that before. While it is in our best interest to stay home, it is also important to keep ourselves active and healthy. I request all eligible student groups to log onto the ACTIVE KIDS portal and engage with the fitness activities planned exclusively for GEMS students.

Parents who have signed up for TMG have appreciated age-appropriate stories and activities that keep children engaged and motivated. Here are some links to their current (free) digital edition for you to read out to one another at home and have fun while role-playing.

KG 1 & 2: Mekids Junior: <http://tmg-worldwide.com/emagazine/aprilmkj/index.html>

Grade: 1 – 3: Mekids: <http://tmg-worldwide.com/emagazine/aprilmk/index.html>

Grade: 4 & above - The Youngest:

<http://tmg-worldwide.com/emagazine/apriltyme/index.html>

The e-magazine files are downloadable and printable for convenient and future use. Competition pages have the topics for the month and submission related details. I'd like to close by encouraging all students to set weekly goals (for academics, fitness, creativity, relaxing and helping about at home) for themselves and work towards achieving them. This will keep you motivated and sharp.

Remember, even while in lockdown, you can still be kind and respectful to all around you thus keeping the flame of our UIS Jewels of Kindness & Respect burning bright! Till next time,

**Shaikh Murad Sarfraz**  
**Vice-Principal**



# Message from the Senior Supervisors



**Dear Parents,**

Ramadan Kareem!

We take this opportunity to thank you all for the support and understanding of the RLP. We are committed to offering your child the best virtual educational experience and are very grateful to our dedicated teachers who are tirelessly working to deliver their very best even during this uncertain situation.

We strongly believe that the RLP has certainly instilled many qualities in our students - being more appreciative of space and freedom, being patient, empathetic and have developed a sense of taking responsibility for their own learning. They have learnt to explore new IT skills and have definitely become very creative which is evident in the work samples/reflection sent back to the teachers.

At GUIIS, apart from the RLP, we have introduced the Remote Co-scholastic Activities for students.

Following are the activities scheduled for May:

- Elocution Competition (Grade 6, 7 & 8)
- JAM (Just a Minute) Grade 9, 10 & 11
- Quran Recitation Competition
- Virtual Painting Competition
- Investiture Ceremony

Things will not be coming to a standstill in spite of the distant learning.

UIS students' virtual engagement doesn't stop here!

You can surely look forward to more exciting competitions as we move forward.

We whole-heartedly acknowledge all the hard work, dedication and effort put in by the teaching staff in the success of the RLP in the last four weeks and are proud of the way our staff, students and parents have "come together" at a time when we need to stay apart.

We thank you all once again for your ongoing support.

Your health and wellness is our top priority.

Stay safe, stay healthy!

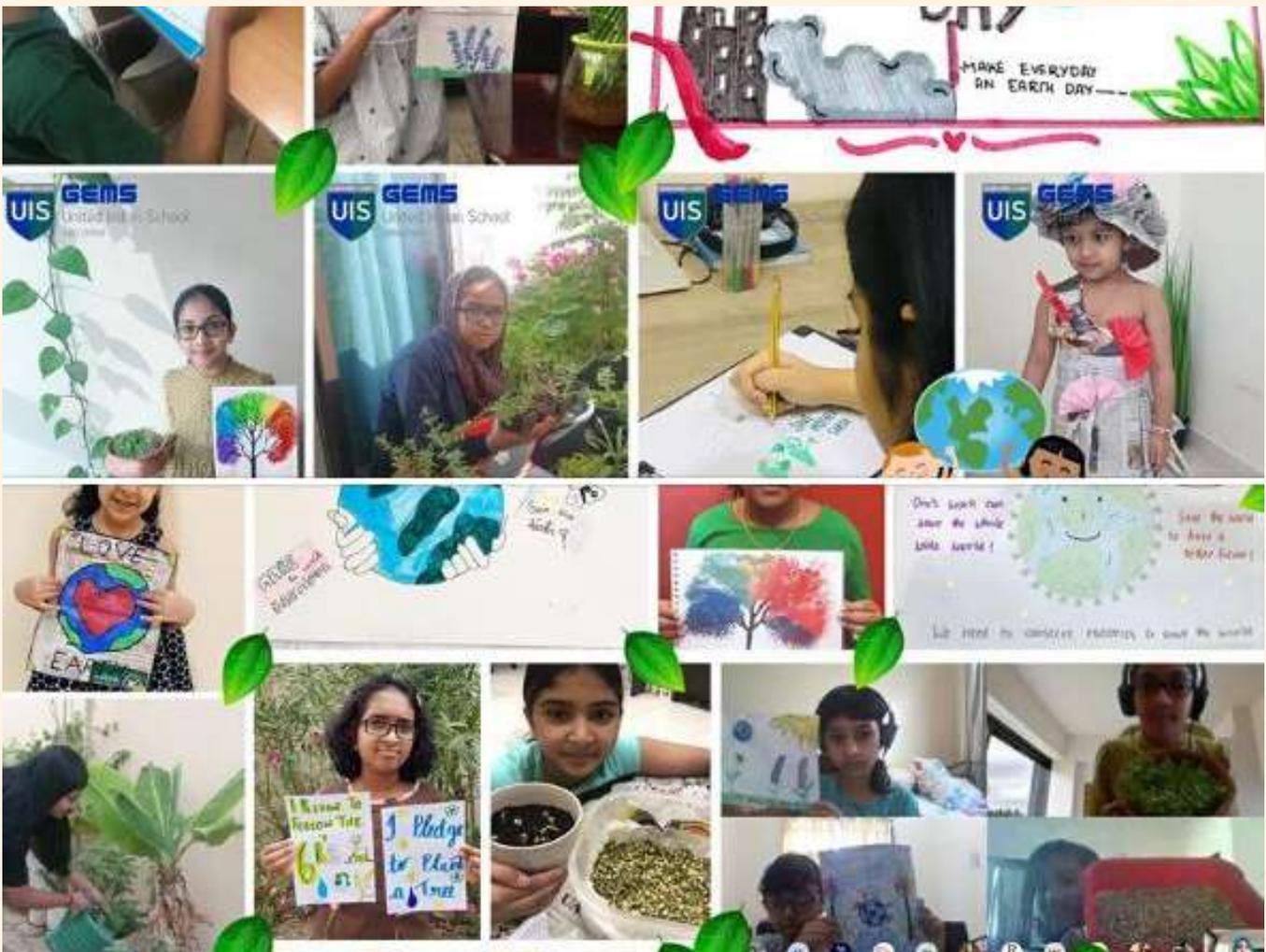
Regards,

**Senior Supervisors**

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



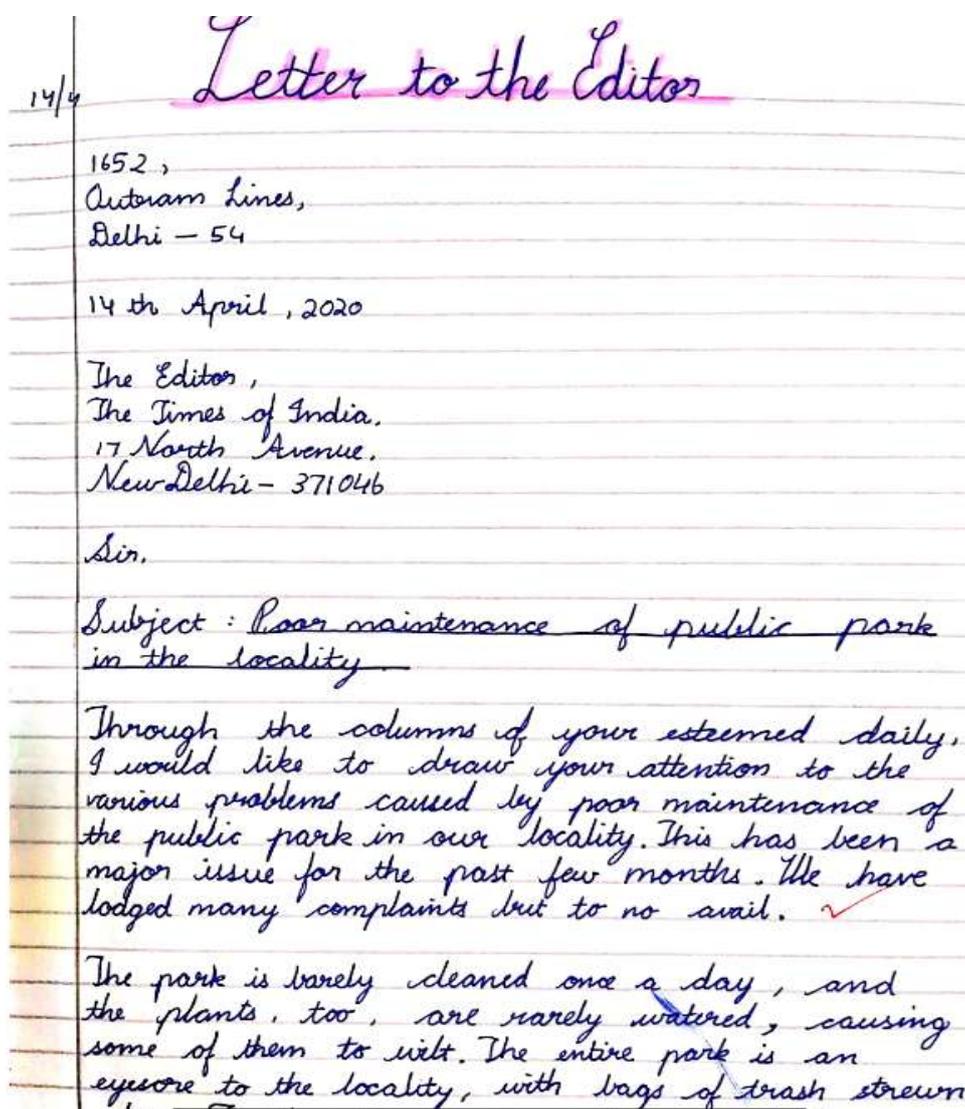
# Striding Forward



# Grade 10

## ENGLISH

Letter writing is an essential skill, which we commonly use on a day-to-day basis. It allows young minds to compose highly structured letters. Students are encouraged to write letters from an early age, in order to improve their writing skills. Students learned to write a letter of complaint and a letter to the editor. This enabled them to become more familiar with the structure and components of a formal letter.



# Grade 10

## Reflections / Assessments and Activities

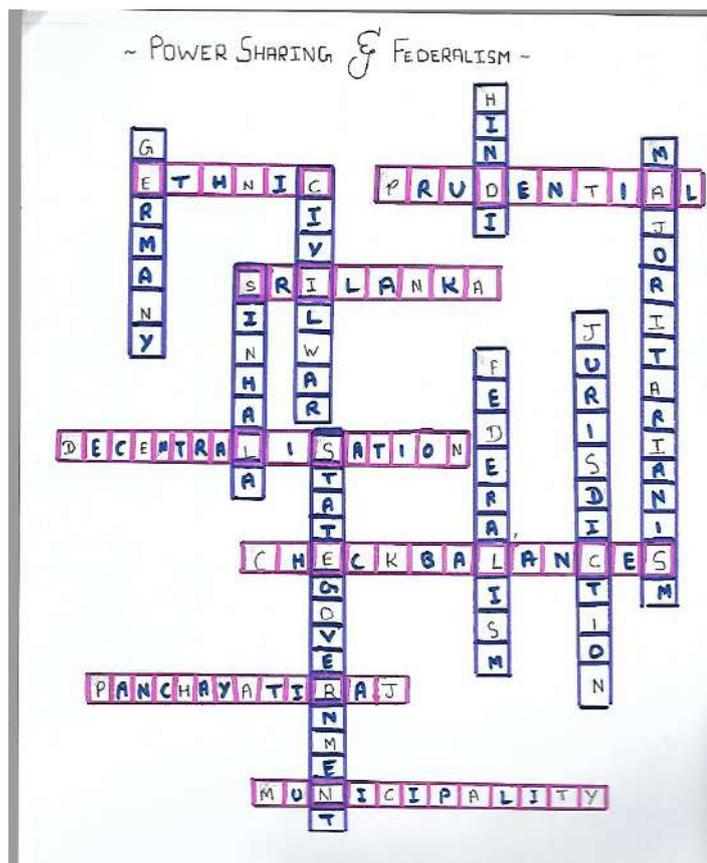
### FRAMING A CROSSWORD PUZZLE:-

#### Down-

1. Name any one border in Europe. Germany.
3. A belief that the majority community should be able to rule the country in whichever way it wants is Majoritarianism.
5. Language spoken in Sri Lanka. Sinhala.
6. A violent conflict between opposing groups within a country is Civil War.
9. Federalism is a system of government in which the power is divided between a central and various constituent units of the country.
10. The area over which someone has legal authority is Jurisdiction.
11. State government has power of its own for which it is not answerable to the central government.
12. India's official language. Hindi.

#### Across-

2. A social division based on shared culture. Ethnic.
4. Independent country in 1948 is Sri Lanka.
7. Based on prudence or on careful calculation of gains and losses is Prudential.
8. Judges appointed by the executive they can check the functioning of the executive or laws made by the legislatures and this system is called Checks and Balances.
13. When power is taken away from Central and State government and given to local government is called Decentralisation.
14. Rural local government is popularly known by the name Panchayat Raj.
15. Municipal chair person is the political head of Municipality.



### TYPES OF REACTIONS

- COMBINATION REACTIONS:** Two or more elements or simple compounds combine to form one product. Ex:  $C + O_2 \rightarrow CO_2$
- DECOMPOSITION REACTION:** One substance is broken down into two or more simple substances. Ex:  $2H_2O \rightarrow 2H_2 + O_2$
- THERMAL DECOMPOSITION:** When a decomposition reaction is carried out by heating, it is called thermal decomposition. Ex:  $CaCO_3 \xrightarrow{\text{heat}} CaO + CO_2$

We can determine a decomposition reaction has taken place by change in colour, change in state.

## Chemical Reactions and Equations :-

**LAW OF CONSERVATION OF MASS:-**

- Total mass of elements present in the reactants
- Total mass of elements present in the products

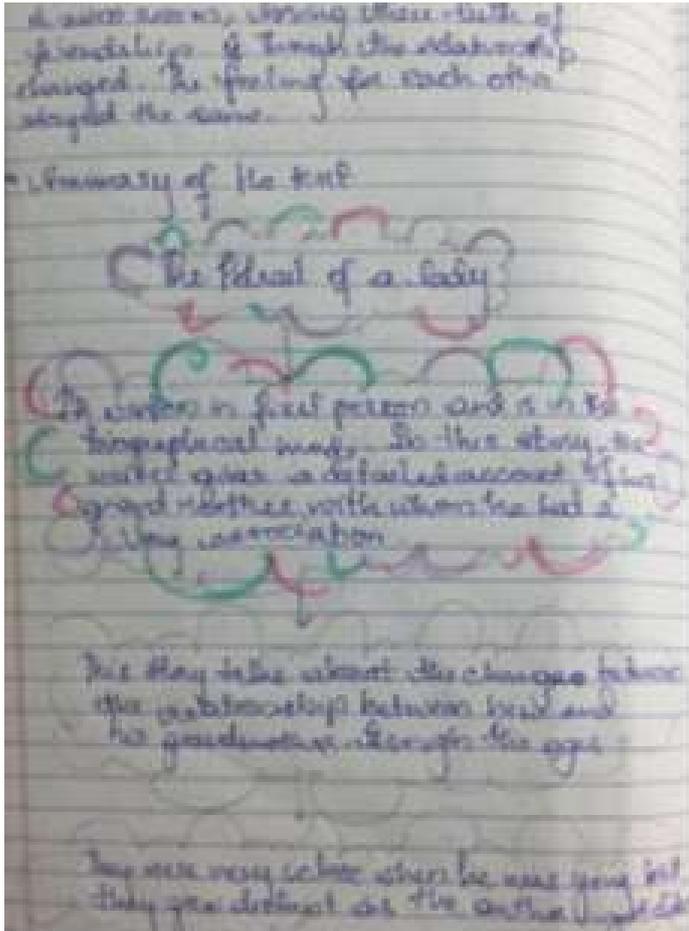
Unbalanced equations are known as skeletal equations. Reactants are written on the left hand side and products on right hand side.

### TYPES OF REACTIONS (CONTINUATION):

- ELECTROLYSIS:** Decomposition of water into  $O_2$  and  $H_2$  gas due to electric current being passed through it. Ex:  $2H_2O \rightarrow 2H_2 + O_2$
- DISPLACEMENT REACTION:** Reaction in which an element displaces another element from its compound. Ex:  $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$
- DOUBLE DISPLACEMENT REACTION:** Reaction in which two different atoms or groups of atoms exchange places.

# Grade 11

## ENGLISH



In the third week of e-learning, the girls of Grade 11 had done a prose lesson. The students had related the same, through real life situations. The girls designed a chart depicting the summary of the lesson as well as reflected the concept through mind maps.



# Grade 11

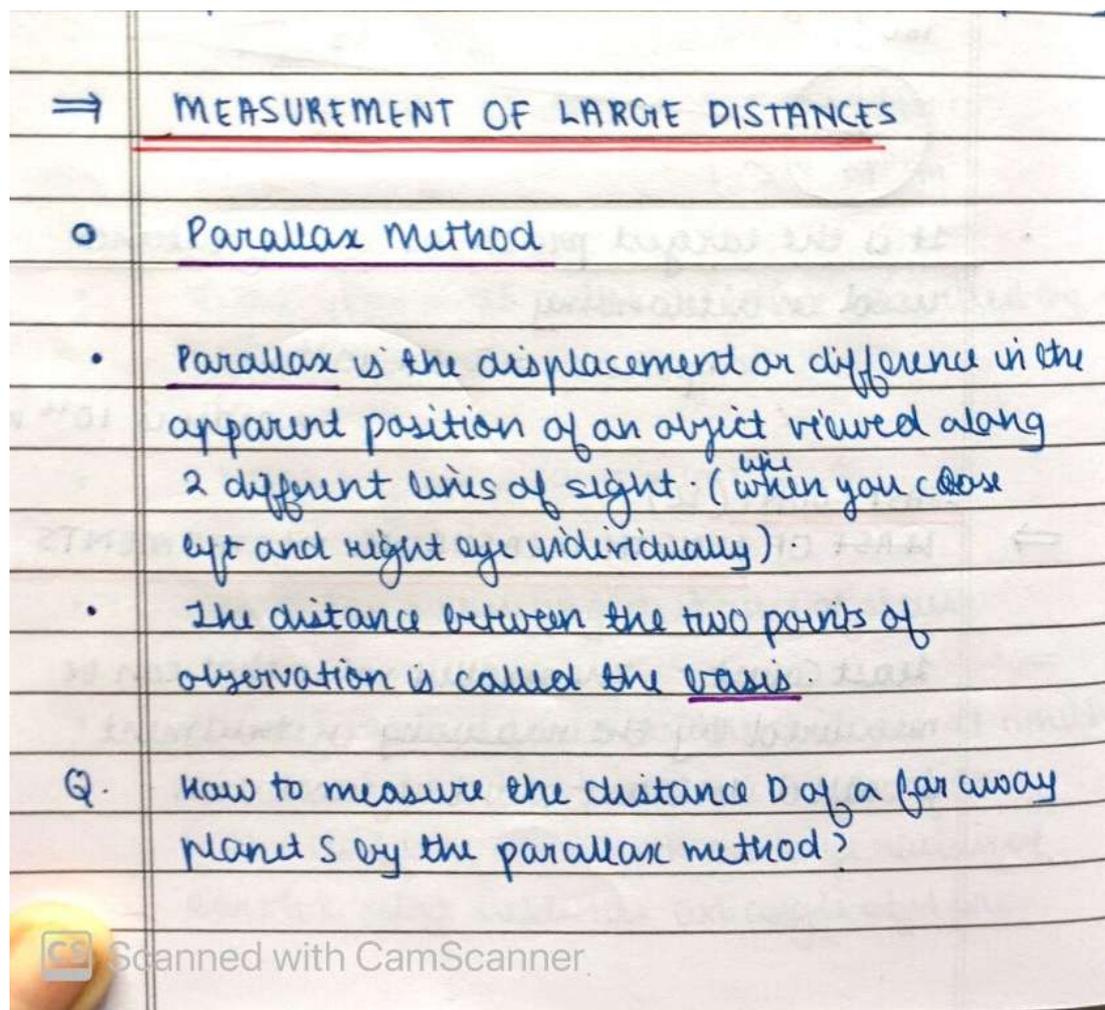
## ENGLISH WRITING TASK ( BY RYAN VARGHESE )

Values reflect our sense of right and wrong. They help us grow and develop. The decisions we make are a reflection of our values and beliefs. Unfortunately, gone are the days when positive moral sense prevailed in our society. Until the first quarter of the 20th Century, the majority of the people in the society had a prevailing sense of good morals. Nowadays, the exact opposite can be observed. To put it simply, the success of human civilization has gone to the heads of many people. People are losing their sense of humanity. Respect to others, gratitude, peace, human rights, equality, etc. are some of the universal values which are slowly being lost. Sadly, good things are not appreciated. Only wrong things are noted and blown out of proportion. Therefore, people lose the urge to do good deeds. One could still observe the effects of discrimination and prejudice in modern society. For instance, criminals use their influence to get innocent people punished instead of them taking the fall. All this leads to tensions between world superpowers. If this trend continues, human civilization and world peace may be destroyed beyond recognition.

# Grade 11

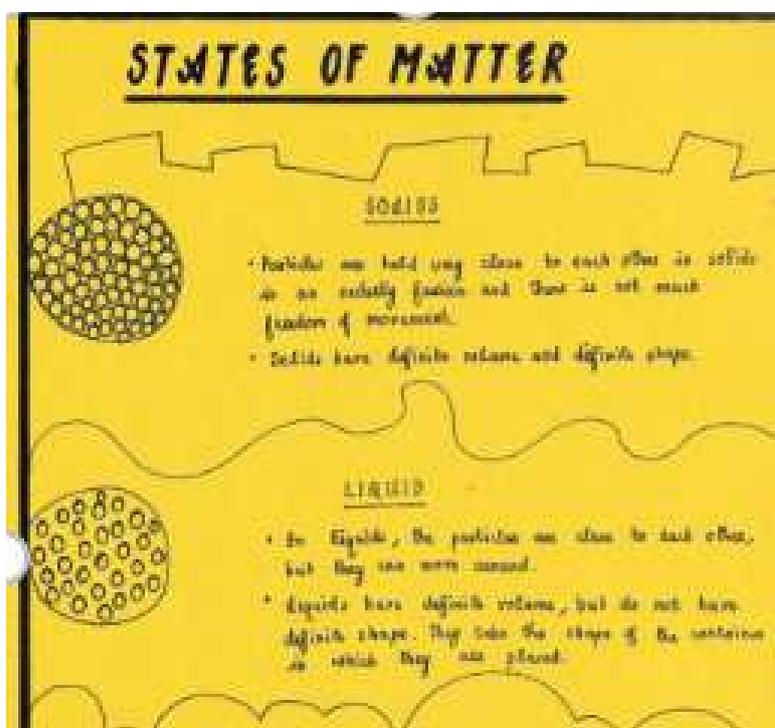
## PHYSICS

Practical methods for measuring distances were listed by the students. The discussion was facilitated through examples of finding the distances of celestial objects. The students were asked to write an assignment on the possible types of errors that occur in various measurements.



# Grade 11

## Chemistry Reflection on 'Some Basic Concepts of Chemistry'



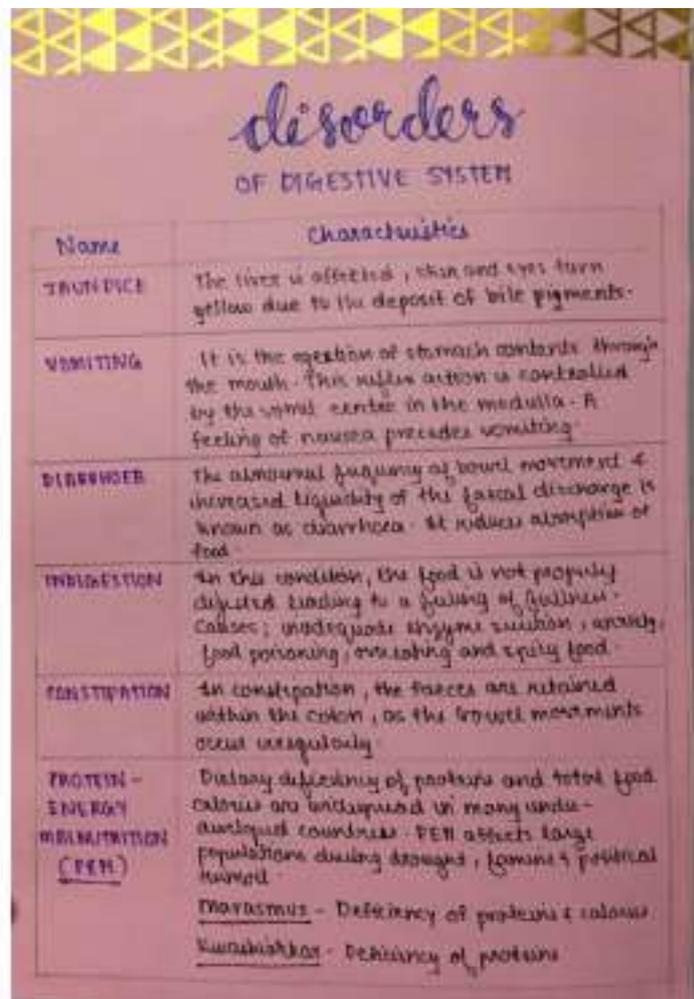
<b><u>PRIMARY - PURE SUBSTANCES AND MIXTURES</u></b>	
<b>PURE SUBSTANCES</b>	<b>MIXTURES</b>
<p>1. When all constituent particles of a substance are same in chemical nature, it is said to be a 'Pure substance'.</p> <p>2. Constituent particles of pure substances have fixed composition.</p> <p>2. Eg : Oxygen, Water</p>	<p>1. A mixture contains particles of two or more pure substances, which may be present in it in any ratio.</p> <p>2. Constituent particles of mixtures may be present in any ratio. They do not have a fixed composition.</p> <p>3. Eg : Air, Milk</p>
<p>Same type of molecule; Fixed ratio</p>	<p>Different molecules</p>

# Grade 11

## BIOLOGY

In the first month of e-learning, the students of Grade 11 and 12 learned various concepts through activities and the real life application of the same.

Students reflected the understood concepts through mind maps, flow charts and scientific diagrams as subject enrichment activities.



The image shows a handwritten mind map on a pink background. The title is 'disorders OF DIGESTIVE SYSTEM'. Below the title is a table with two columns: 'Name' and 'Characteristics'. The table lists several disorders: Jaundice, Vomiting, Diarrhoea, Indigestion, Constipation, Protein-Energy Malnutrition (PEM), and Kwashiorkor. Each disorder is followed by a brief description of its characteristics.

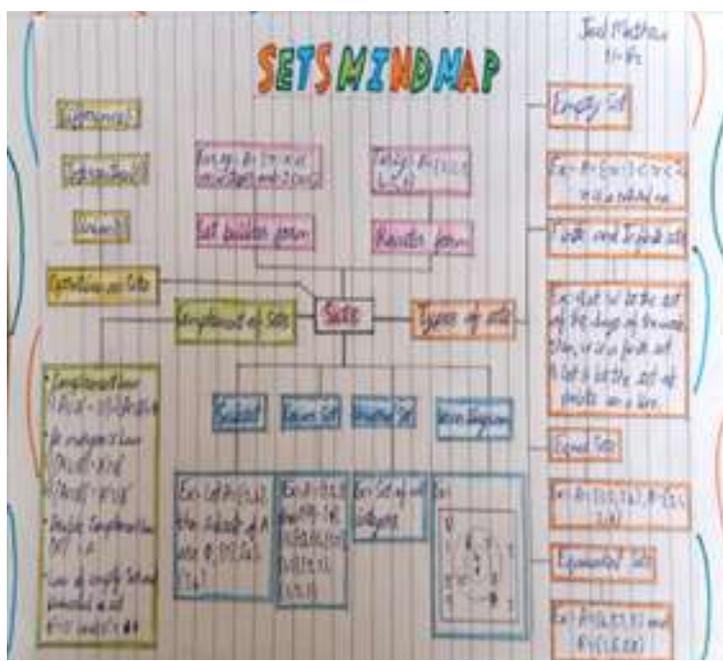
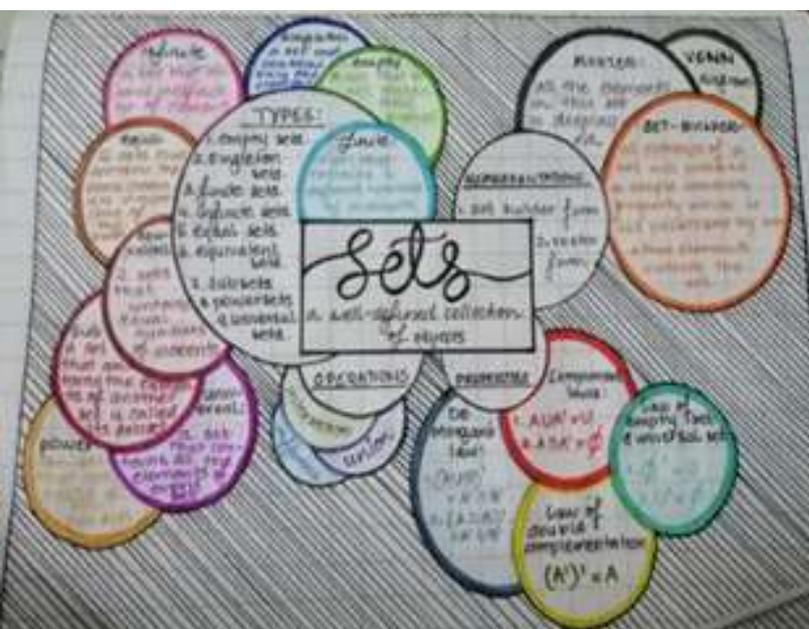
Name	Characteristics
JAUNDICE	The liver is affected, skin and eyes turn yellow due to the deposit of bile pigments.
VOMITING	It is the ejection of stomach contents through the mouth. This reflex action is controlled by the vomit center in the medulla. A feeling of nausea precedes vomiting.
DIARRHOEA	The abnormal frequency of bowel movement & increased liquidity of the faecal discharge is known as diarrhoea. It reduces absorption of food.
INDIGESTION	In this condition, the food is not properly digested leading to a feeling of fullness, Colic, inadequate enzyme secretion, anxiety, food poisoning, overeating and spicy food.
CONSTIPATION	In constipation, the faeces are retained within the colon, as the bowel movements occur irregularly.
PROTEIN-ENERGY MALNUTRITION (PEM)	Dietary deficiency of proteins and total food calories are widespread in many underdeveloped countries. PEM affects large populations during drought, famine & political unrest. <u>Marasmus</u> - Deficiency of proteins & calories. <u>Kwashiorkor</u> - Deficiency of proteins.

# Grade 11



## MATHEMATICS

Math is an abstract subject which is learned best by exploring facts and visualizing the concepts, and then applying as well as experiencing it in real life. The students of grade 11 reflected their understanding of the concepts with the help of mind maps.

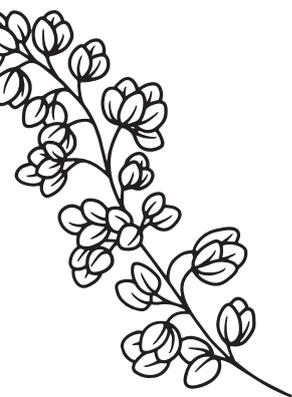
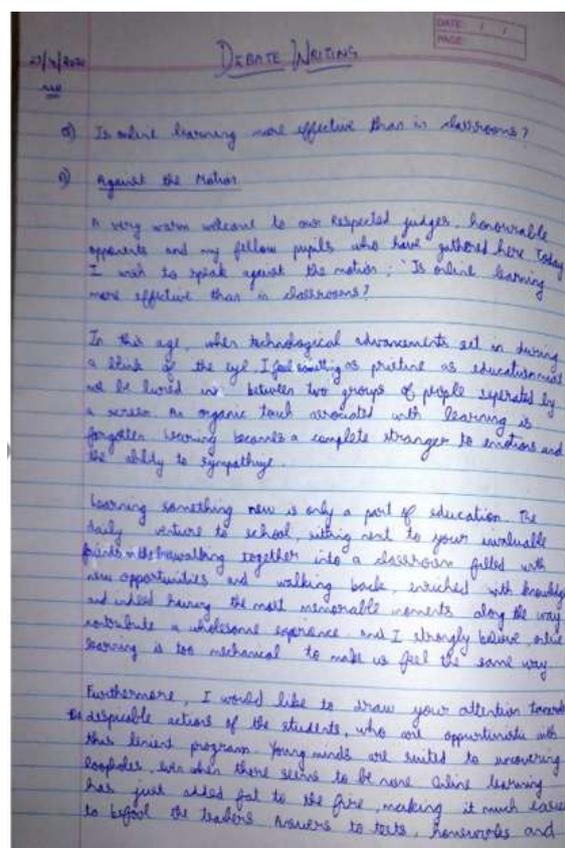
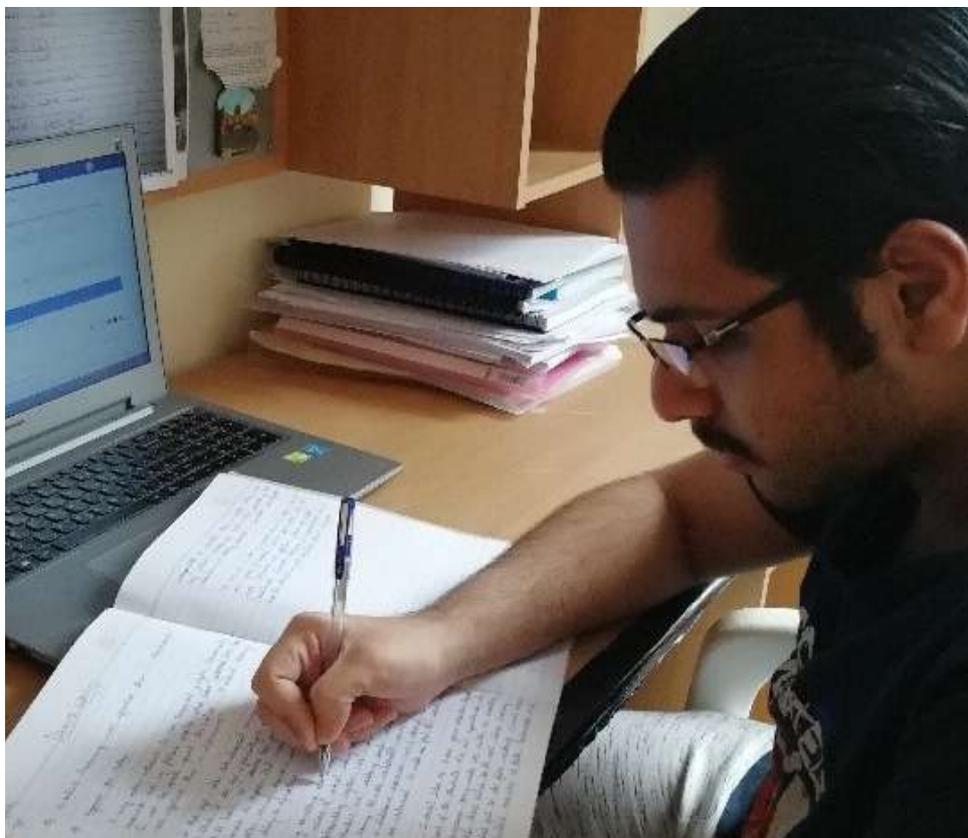


# Grade 12



## ENGLISH

It might be a daunting task to sharpen one's debating skills in a virtual classroom. Nevertheless, the students of Grade 12 engaged in a stimulating debate on the pros and cons of Remote Learning. They honed their debating skills with such elan and verve, that it provided fodder for illuminating discussion which led to a writing task, all under the guidance of the teacher. This aided in a large spectrum of ideas and offered a fresh approach to look at the ways and modes of learning from a student's perspective. Overall, the experience was interactive, invigorating and most importantly, educational.



# Grade 12

## PHYSICS

The concept of capacitance was introduced through an active discussion. The students schematically represented the effect of dielectric, in parallel plate capacitors.

Rearranging,

$$\sigma_1 = \left( \sigma - \frac{\sigma}{k} \right)$$

$$\sigma_1 = \sigma \left( 1 - \frac{1}{k} \right)$$

The potential difference (V) -

$$V_0 = E \cdot d \quad \text{of } \left. \begin{array}{l} \text{Initial} \\ \text{Final} \end{array} \right\}$$

$$V = \frac{E \cdot d}{k}$$

$\Rightarrow V_0$  of From (1)

Capacitance (C) -

$$C_0 = \frac{Q_0}{V_0} \quad C = \frac{Q}{V}$$

$$C = \frac{Q_0}{V_0} \cdot \frac{V_0}{V} \quad \text{From (2)}$$

$$\Rightarrow C = k C_0$$

Conclusion -

Initial	Final
$Q_0$	$Q$
$E_0$	$E$
$V_0$	$V$
$C_0$	$C$
$V_0$	$V$

Initial Final

$Q_0 \rightarrow Q$

$E_0 \rightarrow E$

$V_0 \rightarrow V$

$C_0 \rightarrow C$

$V_0 \rightarrow V$

$U = \frac{1}{2} C_0 V_0^2$  - Initial

Final  $\Rightarrow U = \frac{1}{2} \times C \times V^2$

$$\Rightarrow \frac{1}{2} C_0 k \times \frac{V_0^2}{k^2}$$

$$\Rightarrow \frac{1}{2} \times C_0 V_0$$

Energy decrease

Initial  $\Rightarrow U = \frac{1}{2} \frac{Q_0^2}{C_0}$

Final  $\Rightarrow U = \frac{1}{2} \frac{Q_0^2}{C}$

$$\Rightarrow \frac{1}{2} = \frac{Q_0^2}{C_0 k}$$

EXTRA FROM INITIAL ENERGY

Energy increases

L.C. - CAPACITORS

\* Dielectric is inserted with battery connected

Case - Before

- \*  $Q = Q_0$
- \*  $C = C_0$
- \*  $E = E_0$
- \*  $V = V_0$

After

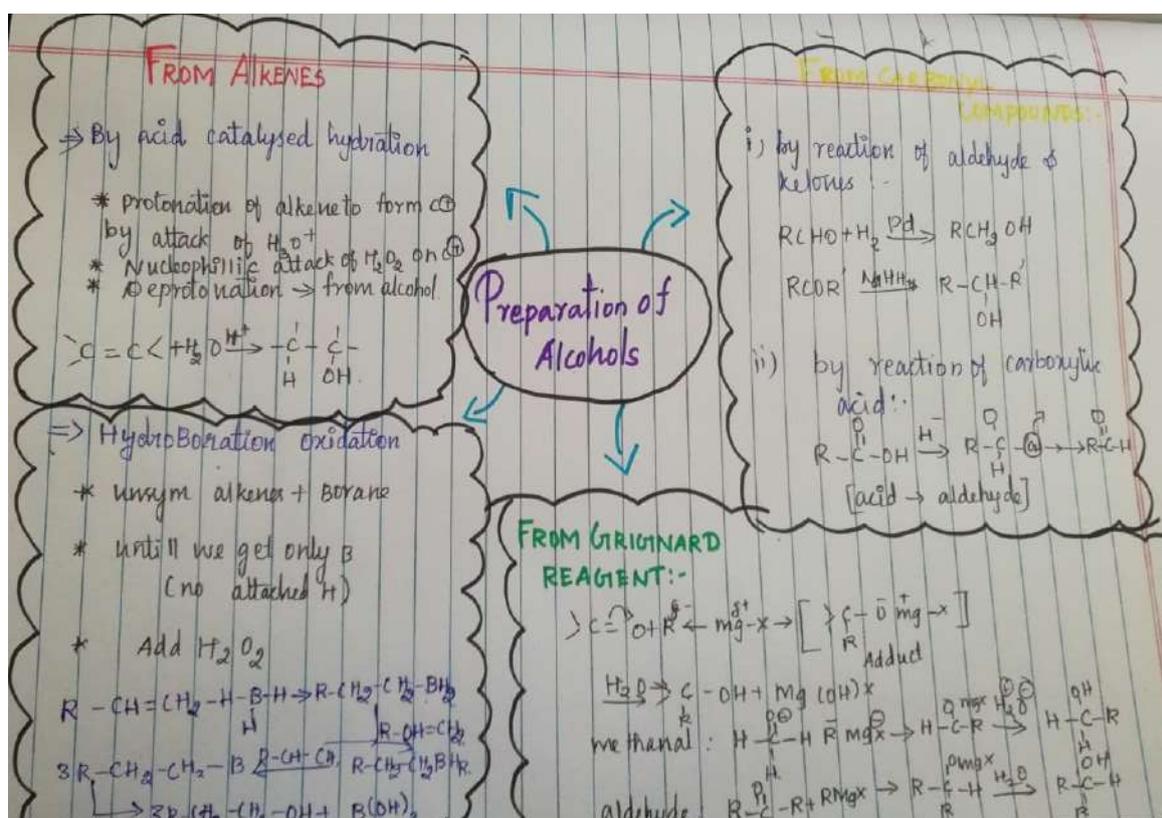
- \*  $V = V_0$  [ Battery connected ]
- \*  $C = k C_0$  [ ↑ ]
- \*  $Q = CV$
- $\Rightarrow k C_0 V_0$
- $\Rightarrow k \left[ \frac{Q_0}{A \cdot d} \right]$
- \*  $E = \frac{Q}{\epsilon_0 A} = \frac{\sigma}{\epsilon_0}$
- $\Rightarrow \frac{k Q_0}{A \cdot d} = \frac{\sigma}{\epsilon_0}$

Initially just inserted

# Grade 12

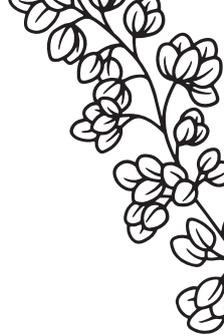
## CHEMISTRY

The students of Grade 12, learned the various concepts of organic chemistry. The students designed a concept map on the preparation methods of alcohol, phenol and ether. The students reflected the learned concepts in the form of a mind map.

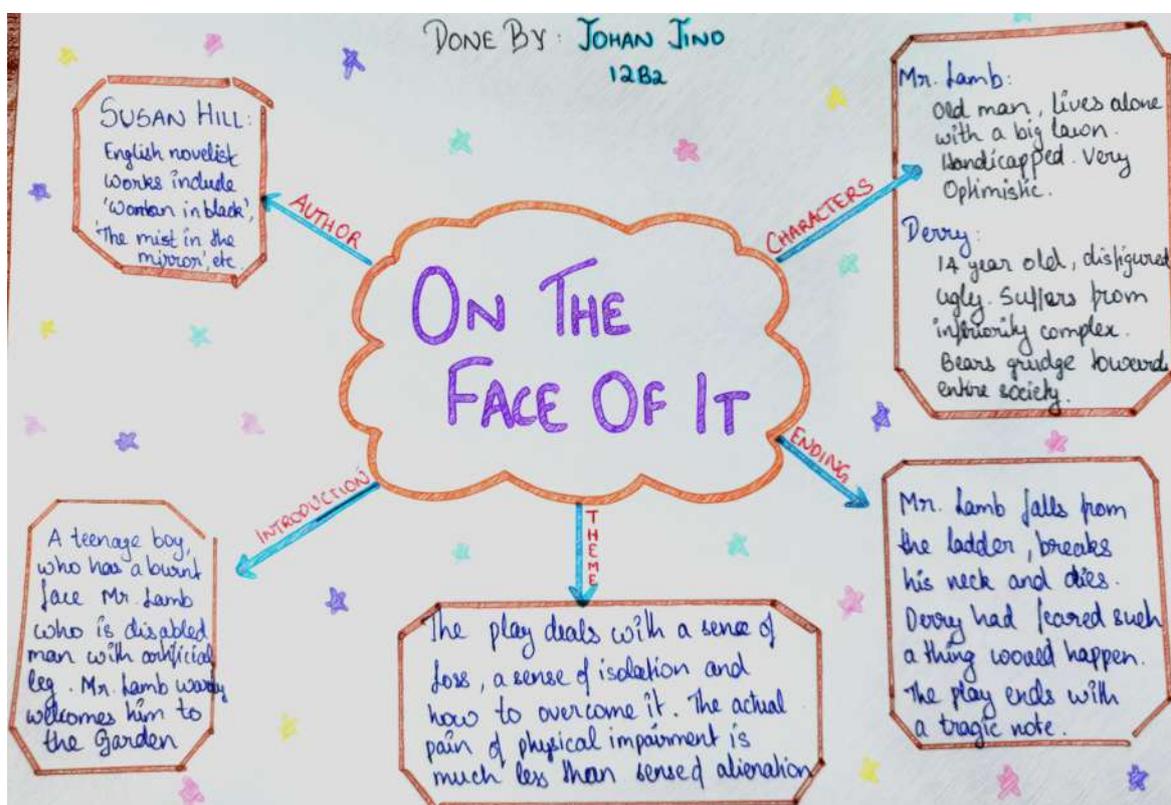


# Grade 12

## ENGLISH



On 17th March 2020, the students of grade 12 partook in a reader's theatre on the play "On the face of it" written by Susan Hill. A range of very talented voice actors gave life to the characters: Mr. Lamb-an old man with a prosthetic tin leg, Derry - a withdrawn and defiant 14-year-old boy, and the mother of Derry - a loving woman who pities her son's ill fate. The play offered the students, a peep into the minds of those who were not served well at the hands of life. It introduces us to a pathetic society that can deepen the wounds of those who choose to adhere to societal expectations. We come to understand that everyone who crosses the path of life serves a purpose and the impact is life-long, regardless of how small the encounter may be. We were reminded of a quote by Rumi, "The wound is the place where the light enters you". Life throws challenges at all, some may encounter many, while others comparatively less, nonetheless, it is everyone's duty and responsibility to respect others as well as themselves and to try to live in a somewhat functional society.



# Grade 12

## MATHEMATICS

### RELATIONS & FUNCTIONS

#### FRAYER'S MODEL

DEFINITIONS	CHARACTERISTICS
<p>A relation is a relationship between sets of values. In math, the relation is between the x-values and y-values of ordered pairs.</p> <p>A function is a relation between sets that associates to every element of a first set exactly one element of the second set.</p> <p>A function <math>f: A \rightarrow B</math> is called an into function if every element of the range of A has an image on B but <math>n(A)</math> can be greater than <math>n(B)</math>.</p> <p>A function <math>f: A \rightarrow B</math> is called an onto function if the range of f is B. In other words, if each <math>b \in B</math> there exists at least one <math>a \in A</math> such that <math>f(a) = b</math>, then f is an on-to function.</p> <p>A one-to-one function is a function of which the answers never repeat. (A function where all domains have unique ranges.) Also called a bijective function.</p>	<p>A relation is a set of ordered pairs.</p> <p>A function is a special case of a relation that assigns a single value in the range to each value in the domain. In other words, no x-values are used more than once.</p> <p>A Bijective function is both one-to-one and onto.</p> <p>The arguments of the function make up the domain, and the output values make up the range.</p> <p>The notation <math>f(x)</math> is read as "y is a function of x".</p>
EXAMPLES	NON-EXAMPLES
<p>One-to-one function : [(A, 1), (B, 2), (C, 3)]</p> <p>Onto function : <math>f(x) = 3x + 5</math>.</p> <p>Bijective Function: <math>f(x) = x + 1</math></p>	<p>One-to-one function: <math>F(x) = 3x</math> where <math>x \in \mathbb{R}</math></p> <p>Onto function: <math>f(x) = e^x</math></p> <p>Bijective Function: <math>F(x) = \sqrt{x}</math> where <math>x \in \mathbb{R}</math></p>

