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A great, possibly avoidable, disaster that happened on 14th April 1912 was the sinking of the 'unsinkable' RMS Titanic, on its maiden voyage from Southampton, United Kingdom, to New York. The demise of the RMS Titanic was attributed to a collision with an iceberg. However, sonar mapping of the ships' starboard hull later revealed only six thin tears from the iceberg with a total area open to the sea of only one square metre (not a 90-metre gash on the side of the ship, as popularly believed). This could not have caused the ship, which had 16 watertight compartments, to sink so rapidly.

Recent theories suggest that it was the three million wrought iron rivets used to hold the hull sections together that led the ship to sink quickly. Scientists discovered that the rivets used contained a high concentration of slag (the glassy residue left behind after the smelting of the iron ore) and were selected to cut costs. The slag made the rivets less malleable and weaker when exposed to very cold temperatures. This caused the rivet



MESSAGE FROM HEAD OF MIS - MR. ANDREW HAMILTON

The importance of personal development in education

Often when we think about our own schooling experience, we will be able to recall memories of high expectations being placed on us to perform well in academic examinations. A common reason given for this was that they are important for our future and allow us to choose from a range of courses and occupations in our adult life. While it is vital that our students achieve academic success, the increase in students achieving top grades and the limited number of spaces on courses has required colleges and universities to be more rigorous in the application process. No longer are top grades enough - institutions will also focus on the contributions that students have made to their school and local community and the types of attributes that they have developed.

As part of learning in Matrix International School, it is important that we also place focus on the personal development of our students - enhancing the attributes that they need to be successful through their time in school and in their adult life. One way that we do this is through Personal, Social, Health and Economic Education (PSHE) for non-Muslim students and Agama for Muslim students.



THIS WEEK'S TOPICS

1. MESSAGE FROM HEAD OF MIS - MR. ANDREW HAMILTON
2. MIEY EXIT POINT - "A DAY IN THE LIFE"
3. BOARDING HOUSE
4. MIS LOWER PRIMARY ART & CRAFT CCA
5. EXCITEMENT DURING MISP MATHEMATICS AND SCIENCE WEEK
6. RESEARCH ON ACCOUNTING IN MPS
7. ECONOMICS IN MIS YEAR 11
8. MPS SCIENCE: LIFE CYCLE OF ANIMALS

heads to break off upon impact with the iceberg which then allowed water to rush in between the separated hull plates.

Another reason stated for the Titanic sinking was that the ship's binoculars were locked in a store. The only key to the store was kept in an officer's trouser pocket who left the ship after his duty. At an inquiry into the sinking of the RMS Titanic, an officer who was on duty on the fateful night said binoculars might have helped them spot and dodge the iceberg in time.

A good lesson that we can learn from this disaster is the need to pay attention to the details. Details are complicated and likely to cause problems if not given the proper attention. As the saying goes, "The devil's in the details."

These subjects play an important role in helping our students understand more about themselves and others and developing attributes that they need for everyday life.

We also reinforce key morals and values through lessons and our pastoral procedures. Students are given opportunities to practice these attributes through the variety of learning experiences we offer, inside and outside of the classroom. Teachers will also provide feedback on what they are doing well in and how they can improve further so that they are better prepared to handle the world they will face after they leave Matrix. We will also highlight good examples of when students have displayed or made progress in their personal development. Some of the ways we do this is through our assemblies, providing certificates, sharing their success through our social media platforms and communicating with parents by emails, phone calls or our academic reports.

While school plays an important role in developing our students, it is also important that these personal attributes are developed at home to allow your child to achieve their maximum potential. Some ways that this can be done are:

- Praising your child when they did not give up during a difficult situation.
- Demonstrating these values and morals to your own child.
- Encouraging them to complete tasks by themselves and with others.
- Reinforcing the importance of time management and meeting deadlines.

CAMPUS PRINCIPAL'S MESSAGE TRANSLATED

1912 年 4 月 14 日号称“永不沉没的”铁达尼号，从英国南安普顿启程开往美国纽约的处女航中沉没，这本来或是一场可以避免的巨大灾难。

铁达尼的沉没归因于它与冰山碰撞。然而，船只右舷船体的声纳测绘显示，冰山上只有六个薄薄的裂缝，通向大海的总面积只有一平方米（不是普遍认为的船侧 90 米的裂缝）。这不可能导致拥有 16 个水密舱室的船沉得如此迅速。

最近的理论表明，正是用于将船体部分固定在一起的 300 万个铆铁铆钉导致船只迅速下沉。科学家发现，为降低成本，铁达尼号使用

了铆钉含有高浓度的炉渣（铁矿石熔炼后留下的玻璃状残渣）。炉渣使铆钉的暴露在非常冷的温度下，其适应性和强度会降低，因此导致铆钉头在撞击冰山时折断，让水涌入分离的船体板之间。

铁达尼号沉没的另一个原因是船上的双筒望远镜皆被锁在商店里，而商店唯一的钥匙则放在一名军官的裤袋里，他下班后离开了船。铁达尼沉没的调查过程中，一名值夜班的军官表示，双筒望远镜极有可能帮助他们及时发现并避开冰山。

我们可以从这场灾难中吸取的一个很好的教训即“注意细节”。细节很复杂，如果没有好好注意细节，很可能会引发大问题，俗话说的好“细节决定成败”！

daya lentur dan lemah apabila terdedah kepada suhu yang sangat sejuk. Ini menyebabkan kepala rivet terputus apabila hentaman dengan gunung ais berlaku yang kemudiannya membenarkan air mengalir di antara plat badan kapal yang dipisahkan.

Satu lagi sebab yang dinyatakan tenggelamnya Titanic ialah, teropong kapal itu telah dikunci di dalam stor. Satu-satunya kunci stor itu disimpan di dalam poket seluar pegawai yang meninggalkan kapal selepas bertugas. Pada siasatan ke atas RMS Titanic karam, seorang pegawai yang bertugas pada malam yang malang itu berkata penggunaan teropong mungkin dapat membantu mereka mengesan dan mengelak gunung ais itu tepat pada masanya.

Pengajaran baik yang boleh kita pelajari daripada bencana ini ialah keperluan untuk memberi perhatian kepada butirannya. Perincian adalah rumit dan berkemungkinan menjadi penyebab kepada masalah jika tidak diberi perhatian sewajarnya. Seperti dikatakan, "Masalah berbangkit disebabkan kekurangan perincian."

Bencana buruk yang mungkin boleh dielakkan yang berlaku pada 14 April 1912 iaitu tenggelamnya RMS Titanic yang dikatakan 'tidak dapat ditenggelamkan', dalam pelayaran sulungnya dari Southampton, United Kingdom, ke New York. Tragedi RMS Titanic dikaitkan dengan perlanggaran dengan gunung ais. Walau bagaimanapun, pemetaan sonar badan kanan kapal mendedahkan hanya terdapat enam koyakan nipis dari perlanggaran dengan gunung ais dengan jumlah keluasan koyakan hanya satu meter persegi (bukan koyakan 90 meter di sisi kapal, seperti yang dipercayai umum). Ini tidak mungkin menyebabkan kapal, yang mempunyai 16 petak kedap air, tenggelam dengan begitu pantas.

Teori terkini mencadangkan bahawa tiga juta rivet besi tempa yang digunakan untuk memegang bahagian badan kapal bersama-sama yang menyebabkan kapal itu tenggelam dengan cepat. Para saintis mendapati bahawa rivet yang digunakan mengandungi kepekatan tinggi sanga (sisa kaca yang tertinggal selepas peleburan bijih besi) telah dipilih untuk mengurangkan kos. Sanga menjadikan rivet kurang

MIEY EXIT POINT – “A DAY IN THE LIFE”

Throughout this unit, the children have explored various occupations. They have learned about community helpers, their parents' jobs, occupational vehicles, and so on. As an exit point, the children made an occupational vehicle. Three Reception classes took one of two occupational vehicles and made it together. The children painted the boxes themselves, fixed them with the teacher's guidance, and designed the vehicles in a group. They also did role-plays with the vehicles outside of the classroom by dressing up in appropriate occupational attire. The children were very ecstatic and enjoyed their learning through this theme.



BOARDING HOUSE

Midterm school holidays are over. The Matrix boarders returned to the Boarding House the day before school reopened again. Although we are transitioning to the endemic stage, basic epidemic prevention measures are maintained in order to provide better health and a safer environment for the borders.



Student arriving at the Boarding House.



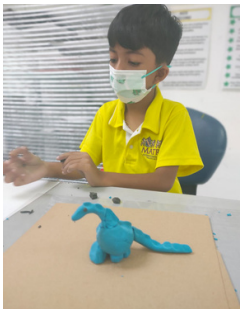
Registering at the Boarding House counter.



A swab test is done on every student to ensure they are healthy.

MIS LOWER PRIMARY ART & CRAFT CCA

Our Matrix International School lower primary students enjoyed making their dinosaur clay sculptures in their Art & Craft CCA. They managed to construct standing dinosaur structures and painted the base to create the scenery of a dinosaur Island.



Aasshman Prushotman (Year 3) and Keith Ashton Andrew (Year 1) making their dinosaur sculptures from clay and adding them to the scenery they created.

EXCITEMENT DURING MISP MATHEMATICS AND SCIENCE WEEK

Last week, MIS primary celebrated 'Mathematics and Science Week' which was held from Monday, 4th April until Friday, 8th April, 2022. The purpose of this week was to develop the interest of our students in mathematics and science and to encourage them to use their mathematical and scientific knowledge and skills in different ways.

MISP students participated in various activities and challenges in their mathematics and IPC classes throughout the week such as designing a 'Safety in Science' poster, a mathematics challenge, a science quiz and dressing up as an inventor.

Investigations that students did in science:

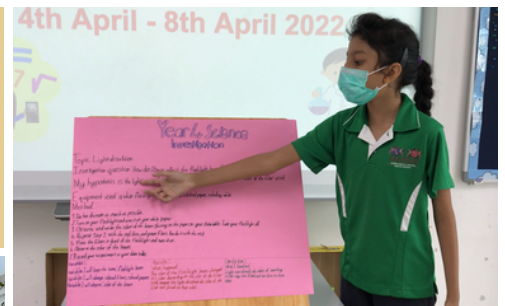
- Pollution: What would happen to all the sea animals if seas are polluted?
- Flight: How high can your rocket fly?
- Materials: Which material is best to protect an egg and stop it from breaking?
- Light absorption: How do filters affect the flashlight beam?
- Forces: When two objects fall from the same height, which object reaches the ground first? The lighter object or the heavier object? Why?



Chai Yi Chen (Year 1) taking part in a science treasure hunt.



Priscilla Lim (Year 3) testing her egg capsule.



Sameera Thevy Manidharan (Year 4) presenting her investigation write-up on how objects are able to absorb light.

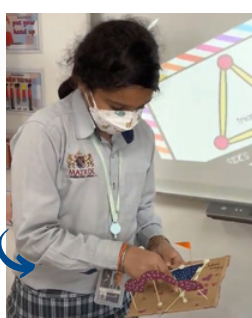


Lin Yu Zhong and Asher Mennye Yeong (Year 5) creating designs for their rocket.



Shin Harin and Valentine Chok (Year 1) investigating odd and even numbers using die.

Gur Alyshaa Kaur Mallan (Year 5) using a pinboard to investigate angles in 2D shapes.



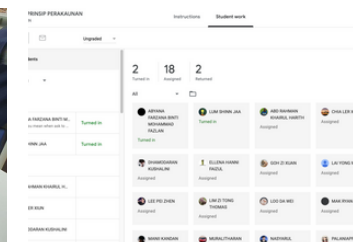
In mathematics, students investigated odd and even numbers, 3D shapes, different ways to solve multiplication, how numbers can be put in a triangle so that each side of the triangle adds up to the same number and drawing different types of triangles using cartesian planes to know whether they are reflected in the y-axis. It was such a wonderful experience for all from MIS primary to experience such great learning about mathematics and science throughout the week.

RESEARCH ON ACCOUNTING IN MPS

Our MPS Form 5 accounting students are taking a step ahead by doing research and analysing the past year and the state trial question papers. They have been assigned to focus on individual topics from the accounting syllabus and to conduct their own analysis on the type of questions that are asked. Besides, they are using Google Classroom to upload their research based on the assigned topics and share their findings among their peers. All students are benefiting from the collection of research papers which will help them in preparing for the upcoming SPM examinations in 2023.



"This exercise helps me to think on the important topics that may be included in the examination papers." Khushalini, Form 5



ECONOMICS IN MIS YEAR 11

During the last two years, our Year 11 students have been studying micro and macro-economics.

Economics is the study of how humans make decisions in the face of scarcity. These can be:

- individual decisions
- family decisions
- business decisions (micro)
- societal decisions (macro)



Economics is a social science. This means that economics has two important attributes. Economics studies human activities and constructions in environments with scarce resources and uses the scientific method and empirical evidence to build its base of knowledge.

Economics provides frameworks to analyse complex societal interactions, as in the case of consumer and organisational behaviour. An understanding of how wages and consumption flow between consumers and producers provide agents with an ability to understand the symbiosis of the relationship rather than fixating on the contentious components that surface from time to time.

Economics can help to explain real-world problems, events and issues. It is a 'living' subject – economics is all around us in everyday issues that happen in a constantly changing global environment. It helps to balance expectation and allows us to be an active and aware participant rather than a passive economic agent.



By developing an understanding of the foundations of economics, individuals can become better decision-makers with respect to their own lives and maintain a balance with respect to an externality that has the potential to supplement or deter their plans. Economics also allows individual agents to balance expectations. An understanding of the ebb and flow of the economy through the boom and bust of the business cycles creates the potential for emotional balance by reminding agents to limit desperation in downturns and exuberance in expansions.



Ee He Xun, Year 11T

During these two years of engaging in economics classes, I have procured a wide range of knowledge regarding the operation of market forces and I now have a deep comprehension about the roles of every seemingly insignificant economic agent; where every position in an economy is substantial and contributes to achieving the ultimate objective of every country – economic growth.

We, as a class, started learning economics, a subject that often manifested itself in our daily lives, by learning about microeconomics. This particular subtopic involves the study of individuals involved in the operation of the economy, and how the forces of

demand and supply in a market function to determine the price of any product. It was extremely interesting to see daily occurrences depicted in graphs and diagrams, such that we could picture the effect of a hazard on the supply of a certain good with a simple diagram.

Then, we delved into the next subtopic called macroeconomics, which described how governments functioned to achieve some crucial economic aims, such as the growth of a country economically. We learned how vital the presence of a government is for international cooperation and trade to take place."

MPS SCIENCE: LIFE CYCLE OF ANIMALS

These past two weeks, Standard 2 students learnt about the different reproduction methods. They were able to identify animals that give live birth to their young or by laying eggs. In the subtopic about the life cycle of various animals, our students were fascinated by the life cycles of a frog and a butterfly. To make the learning more memorable and fun, students were able to showcase their talent in drawing as well as in understanding the life stages of the two animals. Students were asked to create a 3D life cycle of a frog.



"I learnt that frogs lay eggs."
- Qays Qaseed, S2M



"I understand the life cycle of a frog better."
- Yeavyn Shashi, S2M



"I enjoyed doing this craft while learning."
- Jayashree Pillai, S2M



"This is the life cycle of a frog."
- Mohammad Rayyan Bin Mohd Azroy, S2M