Curiosity Gym classes started at the Mount Litera International School on August 8th 2017. Since then, 12 sessions for the Grades 6-7 and 14 sessions for Grades 4-5 have been conducted and they both the students’ and the instructors have thoroughly enjoyed the process.

The students’ have been very responsive and eager to learn. Each student has shown a spark and many times fire in the five pillars that we touch upon – Quick thinking, Innovation, STEM (Science, Technology, Engineering, Math), Creativity, Confidence and Leadership skills.

Here is a brief update on the activities conducted at the class:

**For Grades 4-5:**

Students explored the new technology of 3D Doodling & 3D Printing. Designs were brought to life with 3D Doodling. They learnt various designing tools in a CAD software & 3D Printed dice, vases and fidget spinners. This activity taught them that any object they wish to make can be designed by them and made a reality.

We gave students a free hand in designing a game on basic arithmetic. These were there footsteps towards Design Thinking as a culture to inculcate.

Students touched upon Physics and Robotics through activities like:

* Drawing Bot: An electronic circuit with vibrating motors
* Thaumatrope: They were exposed to the concept of ‘Persistence of Vision’
* DC Motor: They worked with motors while making the DrawingBot and here they learnt how that motor works and made a model
* Vortex Cannon: We see vortices in typhoons, while swirling a bucket of water and at many other places. Students’ made a model to generate Voritices with smoke that can blow a stack of cups kept far away.

Students touched upon Math and Technology and Critical Thinking through the following activities:

* Binary magic cards trick: A concept that is used in computers and involves Math
* Travelling Salesman: A Computer Science problem posed as a path reaching puzzle
* Cryptography: How to send secret messages. The messages can be read and can’t be understood. A Math and Computer Science problem which involves Critical Thinking.
* Modelling Machines: A Treasure hunt game that helps us understand how vending machines, elevators, robots can be modelled.
* Fibonacci encoding: A Math trick to encode messages. Students can encode their names or date of birth and make a wrist band or a neck chain with beads denoting zeroes and ones
* Bubble Sort: A game enacted by students to understand how computers order a set of numbers.

**For Grades 6-9:**

Students explored the new technology of 3D Doodling & 3D Printing. Designs were brought to life with 3D Doodling. They learnt various designing tools in a CAD software & 3D Printed dice, vases and fidget spinners. This activity taught them that any object they wish to make can be designed by them and made a reality.

We gave students a free hand in designing a game on basic arithmetic. These were there footsteps towards Design Thinking as a culture to inculcate.

Students touched upon Physics and Robotics through activities like:

* Drawing Bot: An electronic circuit with vibrating motors
* Magnetic Levitation: They made a floating pencil model with magnets to model the concept used in the Hyperloop and the maglev trains.
* Vortex Cannon: We see vortices in typhoons, while swirling a bucket of water and at many other places. Students’ made a model to generate rings with smoke that can blow a stack of cups kept far away.

Students touched upon Math and Technology and Critical Thinking through the following activities:

* Binary and Ternary magic cards tricks: A concept that is used in computers and involves Math and the aura around place value systems.
* Die Hard: A puzzle to crack and we discussed the algorithm behind to make it work and a math trick to detect unsolvable problems
* Crossword: An exercise to understand how crosswords are made
* Cryptography: How to send secret messages. The messages can be read and can’t be understood. A Math and Computer Science problem which involves Critical Thinking.
* Fibonacci encoding: A Math trick to encode messages. Students can encode their names or date of birth and make a wrist band or a neck chain with beads denoting zeroes and ones

Both the Grade sets had loads of fun passing on secret messages, dropping cups with smoke rings, performing math magic tricks, seeing their pencils float, play a treasure hunt game and so on.