



In partnership with



SHELL STREAM CLUBS

LEARNING OUTCOMES

By participating in the club for the term (January- March 2022), students will cover the following topics and objectives in the specified subject areas:

Arts

Topic: Graphics

Student should be able to:

1. Develop knowledge of design, layout techniques, lettering and illustration skills in order to portray ideas and messages.

Technology

Topic: Problem solving and Design

Students should be able to:

1. Have an understanding of the fundamental principles and practices of problem-solving on the computer.

Mathematics

Topics: Simultaneous Equations

Students should be able to:

1. Manipulate variables in equations to simplify or solve them.
2. Derive formulae from worded statements.
3. Understand and execute the methods of elimination and substitution to solve simultaneous equations.
4. Understand and execute graphical method of solving simultaneous equations.
5. Solve simultaneous equations with quadratics involved.

Biology

Topics: Genetics

Students should be able to:

1. Understand the importance of genetic variation in species.
2. Understand the concept of the gene as it pertains to DNA, chromosomes and allele.
3. Understand the role of genes and heredity factors in determining how traits can be altered and inherited by asexual and sexual means.
4. Understand natural selection, mutation and gene flow as mechanisms for biological evolution.

Chemistry

Topics: Organic Chemistry

Students should be able to:

1. Determine sources of hydrocarbons.
2. Relate bonding properties of carbon to simple organic compounds.
3. Classify hydrocarbons.
4. Understand the general pattern involved in the nature and formation of polymers.
5. Relate the properties of carbon compounds to their uses.

Physics

Topics: Mechanics

Students should be able to:

1. Define the moment of a force, T .
2. Apply the principle of moments.
3. Explain the action of common tools and devices as levers.
4. Determine the location of the centre of gravity of a body.
5. Define the terms: distance, displacement, speed, velocity, acceleration.
6. Apply displacement time and velocity time graphs.
7. State Newton's three laws of motion.
8. Use Newton's laws to explain dynamic systems.