IB Mission Statement

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programs of international education and rigorous assessment. These programs encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

TIPS Mission Statement

"To nurture inquiring, knowledgeable and caring young lifelong learners who are engaged citizens of our world through intercultural understanding and respect".

Dear Parents,

At the outset, we would like to welcome you all to the new academic year. A combination of Performing Arts (PA), Physical Education (PE) and Academics has been incorporated in a well balanced manner to give children an all-round development.

Learning experiences throughout the year are designed towards fostering skill development, independent and collaborative decision making in order to prepare the students for smooth transitions every year. Students work in partnership with their peers, parents and teachers – each recognizing their individual and collective responsibilities to create a community of global learners ready to take on the challenges of the 21st century.

The learning environment at TIPS aims at the all round development of the child. It provides ample opportunities for development in academic, physical, emotional and social spheres. Individual attention is ensured as the staff caters to the distinctive needs and talents of a child which is nurtured in a full -fledged manner.

How can parents assist students?

Parents can help their child in a variety of ways:

- Establish a regular routine to complete the homework and assigned tasks independently in an appropriate location that best suits thefamily.
- Available to discuss homework assignments.
- Exhibit support by being focused on time management and choice of resources.
- As a courtesy to classroom teachers, parents are requested to notify, in writing, any change in the student's regular routine. Examples of these include: changes in bus routine or afternoon pick up or after school programs/schedule changes. It is recommended that notification occurs through:
  - Email: a day before (or as soon as possible)
  - A message in the student's diary

Communication with teachers

At TIPS, all teachers value open and constant communication. We encourage students and parents to work in partnership with each other to foster self-responsibility by reflecting on daily routines. Any concerns of teachers and parents should be communicated in a respectful congenial manner. We also encourage parents to use the parent portal for communication/concern.

If you wish to discuss any serious matter with the child's class teacher, please send us an email with the issue on hand and request for an appointment. We do not encourage appointments for general progress updates, since six open forums have been scheduled periodically throughout the year.

Communication Diary: The student diary contains important information concerning school expectations, and procedures. The purpose of the diary is to support students in their efforts to develop organizational and time management skills. It is an important means of communication between school and home.

School circulars: Specific information regarding class routines and organizational matters are communicated through circulars. Additional detailed curriculum information will also be sent home throughout the year in the form of circulars or flyers.

Enhanced PYP

The Primary Years Programme endorses a belief that students learn best when the learning is authentic, relevant to the real world and transdisciplinary, where the learning is not confined within the boundaries of traditional subject areas but is supported and enriched by them.

Agency and the learning community

The learning community recognizes that agency and self-efficacy are fundamental to learning. A learning community that supports agency offers opportunities for students to develop important skills and dispositions, such as critical and creative thinking, perseverance, independence and confidence. These are vital to the learning process and the development of self-efficacy. The learning community further offers students multiple opportunities to experience the impact of their choices and opinions, which support their evolving perceptions of their identity.

TIPS is a school, with a focus on agency considers its perceptions of how children learn, children's capabilities and the overall value of childhood. When teachers consider their beliefs around children's identities and rights, they are examining personal beliefs, theories, cultural backgrounds and values. For example, the teachers' beliefs and values will influence their choices of how to allocate time, how to set up learning spaces, choose and arrange materials and foster relationships within the classroom and the broader community.

Students have voice, choice and ownership for their own learning. When students' have agency, the relationship between the teacher and students becomes a partnership. Students with a strong sense of self-efficacy bring a stronger sense of agency to the learning community. The learning community supports agency and fosters self-efficacy.

PYP students with agency use their own initiative and will, and take responsibility and ownership of their learning. They direct their learning with a strong sense of identity and self-belief, and in conjunction with others, thereby building a sense of community and awareness of the opinions, values and needs of others.

Transdisciplinary: Transdisciplinary learning is the exploration of a relevant concept, issue or problem that integrates the perspectives of multiple disciplines in order to connect new knowledge and deeper understanding to real life experiences Transdisciplinarity provokes the learner to reflect upon, and reconsider, what he or she believes about the world and about hisor her place in it. Students will feel obliged to respond when faced with challenges relating to themselves or to any issues in the world.

Engaging with the concept of transdisciplinarity forces a paradigm shift that moves most teachers out of their comfort zone and an effective implementation of the PYP will bring about "a change in the relationship between students and teachers", whereby students "become co-investigators in dialogue with the teacher and jointly responsible for a process in which all grow".

PYP Curriculum Model

Contributing to transdisciplinary learning in the PYP is the student engagement with units of inquiry at each year level. These units are consolidated into a matrix known as the transdisciplinary programme of inquiry, whereby the themes of global significance, listed below, frame the learning throughout the primary years. The development of each unit of inquiry is focused on a central idea that supports conceptual development and extends understanding of the transdisciplinary theme. The PYP key concepts, themselves transdisciplinary, are embedded in the central ideas. Thus, the knowledge component of the written curriculum is built up of transdisciplinary layers, one supporting the other in the following six themes.

Transdisciplinary Themes

Who we are : An inquiry into the nature of the self; beliefs and values; personal, physical, mental, social and spiritual health; human relationships including families, friends, communities and cultures; rights and responsibilities; what it means to be human.

Where we are in place and time: An inquiry into orientation with regard to time & place; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationships between individuals and civilizations, from local and global perspectives.

How we express ourselves: An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs, values; the aesthetic sense and creativity.

How the world works: An inquiry into the natural world and its laws; the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.

How we organize ourselves: An inquiry into the interconnectedness of human made systems and communities; the structure and function of organizations; societal decision making; economic activities and their impact on humankind and the environment.

Sharing the planet: An inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationships within and between them; access to equal opportunities; peace and conflict resolution.

Programme of Inquiry: The programme of inquiry is a matrix made up of the six transdisciplinary themes running vertically, and the age groups running horizontally. Organizing the curriculum around the six transdisciplinary themes contextualizes the learning for the students. It enables them to experience a balance of subject-specific knowledge, concepts and skills in order to develop an understanding of the transdisciplinary themes.

Unit of Inquiry : A unit of inquiry is a 6-8 week in-depth exploration of a concept. Students will inquire into a central idea or a main understanding by being guided by lines of inquiry and Prompting questions.

Central Idea: Each of the six units of inquiry has a central idea based on each theme. The central idea is written in one sentence that expresses precisely the context. Each central idea will support student's understanding of the particular transdisciplinary theme it is connected to, and would challenge and extend student's prior knowledge.

Lines of inquiry: Each unit will contain three or four lines of inquiry. The lines of inquiry clarify the central idea and define the scope of the inquiry. These contributing aspects of the central idea extend the inquiry, focus student research, and deepen student's understanding. Connections are made, as appropriate, between the lines of inquiry as well as with the central idea.

Concepts:

A concept - driven curriculum, helps the learner to construct meaning through improved critical thinking and the transfer of knowledge and understanding. The PYP key concepts— form, function, causation, change, connection, perspective, responsibility are themselves transdisciplinary and increase coherence across the curriculum. By identifying concepts that have relevance within each subject area, and across and beyond all subject areas, the PYP has defined an essential element for supporting its transdisciplinary model of teaching and learning. These concepts provide a structure for the exploration of significant and authentic content. In the course of this exploration, students deepen their understanding of the concepts and learn to think conceptually.

In planning units of inquiry, related concepts derived from the subject areas are also identified. These related concepts may be seen as subject-specific versions of the PYP key concepts, for example, transformation in science is a version of the key concept "change". These related concepts deepen an understanding of the subject areas while providing further opportunities to make connections throughout the learning, from one subject to another, and between disciplinary and transdisciplinary learning.

Key Concepts

- **Form:** The understanding that everything has a form with recognizable features that can be observed, identified, described and categorized.
- **Function:** The understanding that everything has a purpose, a role or a way of behaving that can be investigated.
- **Causation:** The understanding that things do not just happen, that there are causal relationships at work, and that actions have consequences.
- **Change:** The understanding that changes is the process of movement from one state to another. It is universal and inevitable.
- **Connection:** The understanding that we live in a world of interacting systems in which the actions of any individual element affect others.
- **Perspective:** The understanding that knowledge is moderated by perspectives, different perspectives lead to different interpretations, understandings and findings. Perspectives may be individual, group, cultural or disciplinary.
- **Responsibility:** The understanding that people make choices based on their understandings, and the actions they take as a result do make a difference.

Approaches to learning : These inquiries also allow students to acquire and apply a set of transdisciplinary skills: social skills, communication skills, thinking skills, research skills, and self-management skills. These skills are relevant to all learning, formal informal, in the school, and in events experienced beyond its boundaries. Students also develop skills and strategies drawn from the subject areas, but aligned with the five transdisciplinary skills.

For example, becoming literate and numerate enhances student's communication skills. The acquisition of literacy and numeracy, in their broadest sense, is essential as these skills provide students with the tools of inquiry. Within their learning throughout the program, students acquire a set of transdisciplinary skills - social, communication, thinking, research and self management. These skills are valuable not only in the unit of inquiry, but also for any teaching and learning that goes on within the class room and in life outside the school.

Thinking skills

- Critical-thinking skills: Analysing and evaluating issues and ideas
- Creative-thinking skills: Generating novel ideas and considering new perspectives
- Transfer skills: Using skills and knowledge in multiple contexts
- Reflection/metacognitive skills: (re)considering the process of learning

Research skills:

- Information-literacy skills: Formulating and planning, data gathering and recording, synthesizing and interpreting, evaluating and communicating
- Media-literacy skills: Interacting with media to use and create ideas and information
- Ethical use of media/information: Understanding and applying social and ethical technology

Communication skills

- Exchanging-information skills: Listening, interpreting, speaking
- Literacy skills: Reading, writing and using language to gather and communicate information
- ICT skills: using technology to gather, investigate and communicate information

Social skills

- Developing positive interpersonal relationships and collaboration skills: Using self-control, managing setbacks, supporting peers
- Developing social-emotional intelligence

Self-management skills

- Organization skills: Managing time and tasks effectively
- States of mind: Mindfulness, perseverance, emotional management, self motivation, resilience

IB Learner Profile Attributes:

The kind of student we hope, who graduates from a PYP school, will be laying the foundation upon which international mindedness will develop and flourish. The attributes of such a learner, as shown below are relevant to both students and adults in a PYP school. They are interpreted and modeled for students. The purpose of the modeling is not to encourage students to mimic but to provide support a metacognitive framework, to help students reflect on and develop their own set of values, albeit in the context of that being demonstrated. The teacher looks for authentic demonstrations of these attitudes in the daily life of the students in order to make them inquisitive, and build an appreciation for them.

IB learners strive to be:

Inquirers: We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

Knowledgeable: We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

Thinkers: We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

Communicators: We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

Principled: We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

Open minded: We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

Caring: We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

Risk takers: We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

Balanced: We understand the importance of balancing different aspects of our lives intellectual, physical, and emotional to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

Reflective: We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

SLC Overview

Student Led Conference is a platform to get a better picture of each child. It forces parents and teachers to sit down with each student and review strengths and weaknesses. These conversation/ presentations inform teaching and learning more than perhaps conventional assessments. **Student**-led Conferences communicate not only how a student is performing but also why. It also enable **the** student to take responsibility and control of their own efforts to learn and at the same time be a team member and ensure success for all.

Schedule of SLCs & PTMs:

- Students of Grade 1 to 5 will have 3 SLCs and 3 PTMs in an Academic Year (PTM 1 & SLC 1 - Online Meeting).
- SLC may be scheduled in between or before completion of the ongoing inquiry.
- SLC 1 & 2 will be held on a scheduled date in two sessions.
- SLC 3 - Project Exhibition and Presentation.

SLC Format:

- **SLC-1** to focus on the curriculum covered from the beginning of the academic year to the date of first SLC.
- **SLC -2** to focus on the curriculum covered from the first SLC to second SLC across subject areas.
- **SLC-3** the final SLC to focus on an elaborate Science Project undertaken by the students as part of their Science Learning till date.
    - Students will be able to choose from one of 3 science projects given to them based on the science learning completed during the academic year.
    - Students in their groups to develop and exhibit their understanding of the selected project with the help of working models/ ppts / displays and oral presentation as specified by the project document.
    - The assessment criteria and rubrics will be shared with the students for their selected science project.
    - The students would be assessed for their individual as well as group performance.
    - Project selection and project details will be completed by Nov/Dec to provide ample time for successful project completion.

SLC Overview – (1 & 2):

- At the beginning of each SLC timeframe, each student to be assigned in a group.
- Group to consist of 3 or 4 students.
- Each member of the group to choose a subject and topic to present for 5 mins
- All group members to choose different subjects to present
- Group members to prepare and support each other in planning
- Each member to present independently during the SLC
- Each SLC will cover the learning experiences of the students from one SLC to another.
- Presenters may make use of PPT/ Working Model/ Live demonstration/ Experiment/ Manipulative/ Note-books etc to showcase their learning experiences

Presentation Format: time allotted 5 mins for each team member (20 mins per group)

- Introduction
- Significance of the topic
- Content development
- Conclusion
- Acknowledgements

Essential conditions for SLC:

- Parental participation in all the SLCs is mandatory. The student will be assessed by both the parent and the teacher.
- Absentees will be marked zero
- Parents to assess on the given criteria, out of FIVE points.
- Teachers to assess each member of the team on the given criteria, out of TEN.
- The final points will be an yearly average of all SLC's

Expectations from the Parents:

- Be present for the SLC on time
- Encourage the child in her/his preparation
- Ask relevant questions to prepare the child as per the expectations
- Assess the child without bias

SLC Assessment: Each child is assessed on the following criteria by parents and teachers alike.

- Presentation style and confidence
- Clarity
- Subject content
- Self-Management skills
- Team work

Both parents and teachers are integral in ensuring student success.

Project-based learning

Project-based learning (PBL) is an instructional framework that encourages critical thinking, creativity, innovation, inquiry, collaboration and communication. Students investigate real-world questions and solve authentic challenges. Science-based PBL integrates science, technology, engineering, math, language arts, and other content areas.

Each PBL pack presents a scenario that establishes a problem to be solved and asks a **Driving Question**. This question sets a purpose for a student-driven investigation or challenge. Then students design a solution to the problem, develop a project, and deliver a presentation to the audience.

Based on the PBL units,

- Students are segregated in groups.
- Each group will research, plan, create and present the project based on the driving question of the unit.
- Each child will be receiving a student booklet which comprises of Project Outline, Project planner, Vocabulary, KWLS, Recommended Reading, Project Ideas, Project Description, Project Check Up, Presentation Rubric, and Team Reflection.

Parents participation is very essential in organizing the groups, providing the materials needed and supporting the child in every step to complete the project.

This inquiry based student-directed instruction will help the children to communicate and collaborate with others to solve problems which is an integral part in the real world.

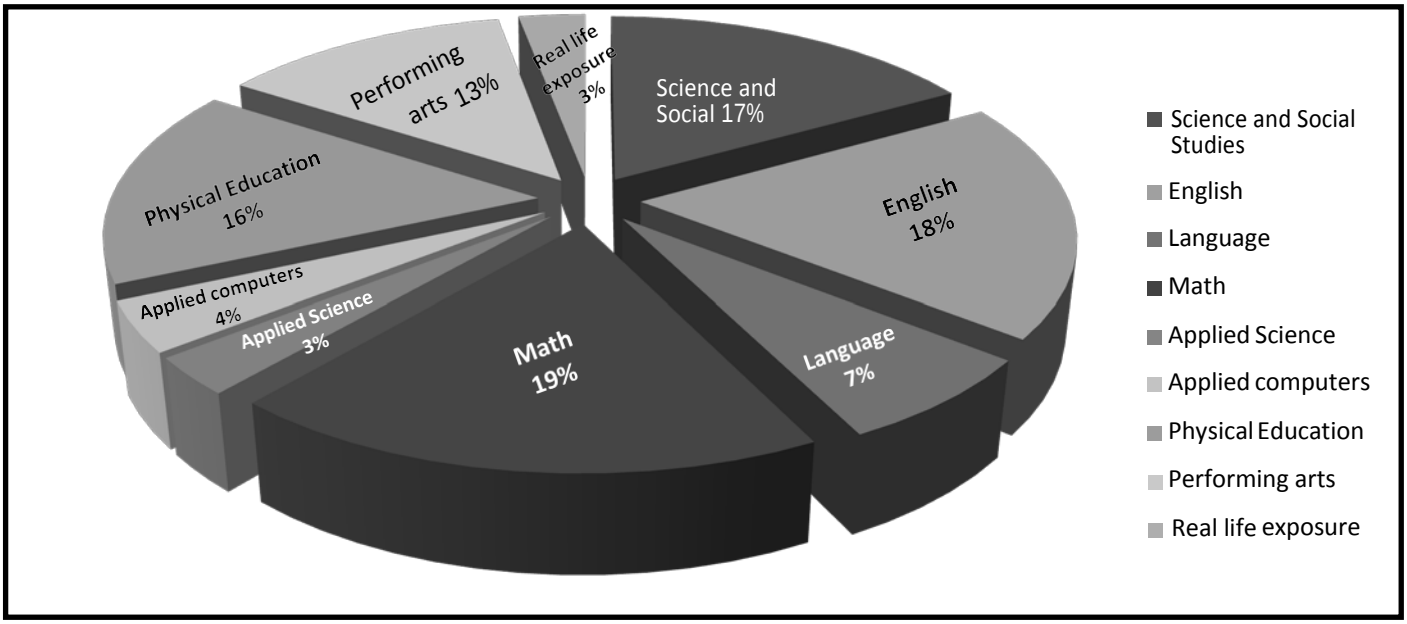
Parent Teacher Meeting

PTM is an informal session in the class room of your child with the class teacher. The Coordinators can also be met on the same day. This is an opportunity for parents to review their child's progress and discuss other issues with the class teacher. Parental participation in PTM is mandatory. School will organize 3 PTMs in an Academic Year.

Management Review Meetings:

The management of TIPS receives feedback about the academic year from the parents as well as shares the future plans with them. This platform provides another opportunity for parents to communicate and put forward their suggestions directly. The management provides an excellent platform for direct communication to the parents. They receive individual feedback about the academic year and about the future plans of the school.

ANNUAL CURRICULUM PLAN



This pie- chart gives you an approximate break-up of the various disciplines offered by the TIPS curriculum.
The subjects focused in each theme will be integrated in the units of inquiry.

Our Grade III children will be inquiring into the following Transdisciplinary themes

ANNUAL CURRICULUM OVERVIEW- UOI		
Discipline	**Objective**	
UOI	Where we are in place and time	**Sem -1**
	Who we are	
	How we express ourselves	
	How the world works	**Sem -2**
	Sharing the planet	
	How we organize ourselves	

Where we are in place and time: An inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationships between and the interconnectedness of individuals and civilizations, from local and global perspectives.

Central idea
Human migration is a response to challenges, risks and opportunities

Key Concepts
- Causation
- Connection
- Change

Related Concepts
- Factors
- History
- Transformation

Lines of Inquiry
- Reasons behind migration
- Human Migration through history
- Effects of migration on individuals and communities

Subject Focus : Social Studies, Math and Language

Strands
- Social Studies : Human System and Economic Activities, Continuity and Change Through Time
- Math : Money
- Language : Visual - Viewing and Presenting

The learning outcomes after the inquiry are that the students will be able to
- explain why humans migrate including push and pull factors
- describe categories of people who migrate
- articulate changes and continuities of the experience of migrations across a range of histories and geographies
- understand and explain the positive and negative impacts of migration

Expected Transdisciplinary skills while inquiring into this theme
- Research skills
- Social skills
- Communication skills

While inquiring into this theme, children exhibit these learner profile attributes
- Inquirers
- Open- minded
- Communicators

Students have an access to the following resource during this inquiry

Reading Resources
- Caribbean family history – Vic Parker
- Why do animals migrate – Bobbie Kalman
- Migration – Monica Hughes
- Moving People – Louise Spilsbury
- How much should human immigration be restricted – Andrew Langley

Vocabulary
- Human migration
- Push factors
- Pull factors
- Voluntary migration
- Involuntary migration
- Emigration
- Immigration
- Migrant
- Industrialization
- Immigrant
- Relocation
- Emigrant
- Economic
- Environmental
- Political
- Population

Who we are: An inquiry into the nature of the self; beliefs and values; personal, physical, mental, social and spiritual health; human relationships including families, friends, communities and cultures; rights and responsibilities; what it means to be human.

Central idea

The effective interactions between human body systems contribute to health and survival

Key Concepts

- Form
- Function
- Responsibility

Related Concepts

- Body Systems
- Interdependence
- Health

Lines of Inquiry

- Major body systems and how they work
- Functions and interdependence of the body systems
- Impact of lifestyle choices on our body

Subject Focus: Science, Math and PSPE

Strands

- Science : Living things
- Math : Measurement
- PSPE : Active Living

The learning outcomes after the inquiry are that the students will be able to

- list and describe the parts and functions of major body systems
- explore how different systems within the body work independently and together to form a functioning human body
- explain the importance of good health in relationship to the body

Expected Transdisciplinary skills while inquiring into this theme

- Research skills
- Social skills
- Communication skills

While inquiring into this theme, children exhibit these learner profile attributes

- Inquirers
- Balanced
- Reflective

Students have an access to the following resource during this inquiry

Reading Resources

- Human Body
- Asthma
- Exercise: Get Moving!
- Sports Injuries
- Your Hardworking Heart
- Skin: It has you covered

Possible Hands on Activity

- Experiment – Meter-stick drop

Project Based learning

- Effects of exercise on body system

Vocabulary

- Arteries
- Bladder
- Blood stream
- Bone marrow
- Brainstem
- Cardiac muscle
- Liver
- Cerebrum
- Cerebellum
- Circulatory
- System
- Esophagus
- Large intestine
- Small intestine
- Respiratory system
- Inhale
- Exhale
- Lungs
- Diaphragm
- Excretory system
- Digestive system
- Kidneys
- Sweat glands
- Skeletal system
- Spine
- Trachea
- Pancreas
- Pelvis

Note to parents: If you find any other useful books / website please email to us

How we express ourselves: An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; our appreciation of the aesthetic.

Central idea

A variety of signs and symbols facilitates local and global communication

Key Concepts

- Form
- Connection
- Perspective

Related Concepts

- Opinion
- Media
- Pattern

Lines of Inquiry

- Signs and symbols
- Role of signs and symbols in communication system
- Specialized systems of communication

Subject Focus : Social Studies, Arts and PSPE

Strands

- Social Studies : Human System and Economic Activities, Social Organization and Culture
- Arts : Responding and Creating
- PSPE : Interaction

The learning outcomes after the inquiry are that the students will be able to

- explore and understand signs and symbols in their community
- explain how signs and symbols are used in communication system
- communicate complex ideas through the visual art medium

Expected Transdisciplinary skills while inquiring into this theme

- Communication skills
- Self-management Skills
- Thinking Skills

While inquiring into this theme, children exhibit these learner profile attributes

- Thinker
- Risk-taker
- Communicator

Students have an access to the following resource during this inquiry

Reading Resources

- The Printing press – Richard tames
- Inventions and discoveries – Communication – World Book Inc
- How do animals communicate – Bobbie Kalman
- Communicating Today – Post - Chris Oxlade
- Animal Communication – Phil Gates

Vocabulary

- Sign
- Symbol
- Gesture
- communication
- Visual
- Verbal
- Semiotics
- Icons
- Pattern
- Hieroglyphics
- Character
- Perceive
- Countenance
- Cipher
- Silhouette
- Eloquent

Note to parents: If you find any other useful books / website please email to us

How the world works: An inquiry into the natural world and its laws; the interaction between the natural world(physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.

Central idea

Humans use their understanding of scientific principles to make their lives easier

Key Concepts

- Form
- Function
- Change

Related Concepts

- Force
- Design
- Mechanics

Lines of Inquiry

- Simple machines and how they work
- Applying scientific knowledge to create complex machines
- Impact of machines in our daily life

Subject Focus : Science and Math

Strands

- Science : Force and Energy
- Math : Shapes and Space

The learning outcomes after the inquiry are that the students will be able to

- understand how machines make our work easier.
- identify the different simple machines (Lever, Pulley,Inclined Plane, Screw, Wheel & axle Wedge),their function and the type of force applied.
- understand that two or more simple machines makes a complex machine.
- create / invent a machine interpreting the basic principles of simple machine.

Expected Transdisciplinary skills while inquiring into this theme

- Thinking Skills
- Self-management skills

While inquiring into this theme, children exhibit these learner profile attributes

- Inquirers
- Thinkers

Students have an access to the following resource during this inquiry

Reading Resources

- Simple and complex machine
- The mole machine
- Let's ride a bike
- Spaceship motion and deep deep oceans
- Wrecking Ball Vs Strong Wall
- Water wheels and windmills

Possible Hands on Activity

- Exploration - Design Machine

Project Based learning

- Design a machine to solve problem

Vocabulary

- Axle
- Fulcrum
- Gear
- Simple Machine
- Wedge
- Complex machine
- Inclined Plane
- Lever
- Screw
- Tool
- Force
- Load
- Machines
- Pulley
- Ramp
- Friction
- Work
- Earth Mover
- Excavator
- Robot

Note to parents: If you find any other useful books / website please email to us

Sharing the Planet: An inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; and the relationships within and between them; access to equal opportunities; peace and conflict resolution.

Central idea

Over time, living things need to adapt in order to survive

Key Concepts

- Form
- Connection
- Change

Related Concepts

- Adaptation
- Habitat
- Evolution

Lines of Inquiry

- Concept of adaptation
- Circumstances that lead to adaptation
- How plants and animals adapt or respond to environmental conditions

Subject Focus : Science, Social Studies, and Math

Strands

- Science : Living Things
- Social Studies : Human and Natural Environments
- Math : Data Handling

The learning outcomes after the inquiry are that the students will be able to

- understand the different types of adaptations exhibited by living organisms.
- explore various adaptations undergone by human beings.
- recognize how and why plants, animals including human and other organisms adapt to the environment.
- analyze the effect of human activities on nature and how plants and animals have to adapt to changes in the ecosystem.

Expected Transdisciplinary skills while inquiring into this theme

- Research Skills
- Thinking Skills
- Self-management skills

While inquiring into this theme, children exhibit these learner profile attributes

- Inquirers
- Thinkers
- Caring

Students have an access to the following resource during this inquiry

Reading Resources

- Adaptations
- Plant Behavior
- Dogs by Design
- Emperors of the Ice
- The Curious Case of the Peppered Moth
- Darwin's Finches

Possible Hands on Activities

- Exploration - Bird Beak Adaptations
- Experiment - Controlling Water Loss from Leaves
- Projects - Design Animal Adaptations

Vocabulary

- Habitat
- Species
- Organisms
- Mutation
- Reflex
- Extinct
- Inherited
- Naturalist
- Adapt
- Behaviour
- Characteristics
- Environment

Note to parents: If you find any other useful books / website please email to us

Sharing the planet : (Sub Unit) An inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; and the relationships within and between them; access to equal opportunities; peace and conflict resolution.

Central Idea :

Unique characteristics of different classes of vertebrates help them in surviving and in performing different activities

Key Concepts

- Form
- Change
- Connection

Related Concepts

- Features
- Characteristics
- Classification

Lines Of Inquiry

- Important characteristics of vertebrates (Skeleton & Structure)
- Classifying Vertebrates
- Comparing Vertebrates

The learning outcomes after the inquiry are that the students will be able to

- differentiate the animal kingdom into vertebrates and Invertebrates.
- identify the common characteristic of Vertebrates - Skeleton system.
- compare and identify the five recognized categories for classifying vertebrates.

Expected Trans disciplinary skills while inquiring into this theme

- Thinking Skills
- Research Skills

While inquiring into this theme, children exhibit these learner profile attributes

- Knowledgeable
- Thinkers
- Balanced

Students have an access to the following resource during this inquiry.

Reading Resources

- Vertebrates
- Extreme amphibians
- Vertebrates of Madagascar
- Mammals of the trees
- Animals in groups
- Wild pets

Hands on Process Activity

- Exploration -Pipe Cleaner Skeleton

Project Based learning

- Skeletal structure and movement

Vocabulary

- Amphibian
- Animal Kingdom
- Bird
- Bone Marrow
- Skeleton
- Cartilage
- Characteristic
- Classify
- Feature
- Fish
- Invertebrates
- Joint
- Mammals
- Reptiles
- Skeleton
- Skull
- Spine
- Warm -Blooded
- Tissue
- Vertebra
- Vertebrates
- Gills
- Lungs
- Cold- blooded

Note to parents: If you find any other useful books / website please email to us

How we organize ourselves: An inquiry into the interconnectedness of human made systems and communities; the structure and function of organizations; societal decision-making; economic activities and their impact on human kind and the environment.

Central idea
Technological innovations often alter the relationships people have with their local and global environment

Key Concepts
- Change
- Causation
- Responsibility

Related Concepts
- Communication
- Ethics
- System

Lines of Inquiry
- Technology and inventions at home, workplace and leisure activities
- The positive and negative aspects of current technology
- Responsible use of technology

Subject Focus: Science, Language, and PSPE

Strands
- Science : Earth and Space, Force and Energy
- Language : Written - Reading and Writing
- PSPE : Identity

The learning outcomes after the inquiry are that the students will be able to
- explain how technology has made an impact in day to day life
- analyze the positive and negative effects of technology
- explain and demonstrate ethical use of technology

Expected Transdisciplinary skills while inquiring into this theme
- Research Skills
- Self-management skills

While inquiring into this theme, children exhibit these learner profile attributes
- Principled
- Thinkers

Students have an access to the following resource during this inquiry

Reading Resources
- Learn about science Inventions – World Book Inc
- The story of inventions – Anna Claybourne
- Inventing the camera – Joanne Richter
- The inside and out guide to inventions – Chris Oxlade
- Science and Technology – Jane Bingham
- Inventions and Discoveries – Industry and Manufacturing – Paul.A.Kabosa

Vocabulary
- Automation
- Machinery
- Computers
- Mechanics
- Mechanization
- Robotics
- Telecommunications
- Applied science
- Technique
- Computerized
- Development
- Information
- Technology
- Technical
- Gadgets
- Techie
- Innovative
- Revolution
- Obsolete

Note to parents: If you find any other useful books / website please email to us

ANNUAL CURRICULUM OVERVIEW – ENGLISH		
Discipline	**Skills**	
English	**Reading Readiness**	
	Reading Comprehension	Analyze character
		Analyze Plot
		Analyze setting
		Cause and Effect
		Fact or Opinion
		Author's purpose(Entertain)
		Author's purpose(Inform)
		Author's purpose(Persuade)
		Identify Character point of view
		Compare and Contrast
		Main idea and Details
		Make Inferences and Draw Conclusions
		Problem and solution
		Reality and fantasy
	Writing	Writing Readiness
		Fairy Tale
		Informational Report
		Persuasive Pro/Con
		Biography
		How To?
		Descriptive Writing
		Personal Narrative
		Realistic Fiction
		Persuasive Opinion
	Language skills	Warming up
		Nouns
		Common and Proper nouns
		Singular and Plural Nouns
		Possessive Nouns 1
		Possessive Nouns 2
		Personal Pronouns
		Pronouns: I and Me, They and Them
		Possessive Pronouns
		Action and Linking verbs
		Helping Verbs
		Verb Review 1

English	**Language skills**	Verb Tenses
		Regular Verbs
		Singular and Plural Verbs
		Irregular Verbs
		Verb Review 2
		Adjectives 1
		Adjectives 2
		Proper Adjectives
		Compound Adjectives
		Adverbs
		Prepositions
		Conjunctions
		Interjections
		Part of Speech Review
		Simple Subjects and Predicates
		Subject of a Sentence
		Predicate of a Sentence
		Subject and Predicate Review
		Simple and Compound sentences
		Declarative and Imperative Sentences
		Kinds of Sentences
		Sentence Fragments
		Run-on Sentences
		Combining Sentences with a keyword
		Combining Sentences with a series of Words or Phrases
		Combining Sentences with Compound Subjects and Verbs
		Sentence combining Review
	Vocabulary Cluster	The Human body
		75, 76, 80, 115
		140, 157, 160, 191, 213, 336
		Combustion and Temperature
		78, 220, 376, 414
		Sounds and Noises
		84, 103
		156, 165, 175
		Water
		87, 101, 102
		127, 296
		352, 353, 391, 90, 226, 307, 375,406

English	**Vocabulary Cluster**	Parts of Dwelling
		91, 113,
		123, 134, 217, 284
		Machines and Tools
		92, 96, 118
		119, 163, 242, 254, 275
		276, 314, 315, 316, 419, 420
		Vehicles and Transportation
		93, 97, 120
		218, 159, 234, 318, 331
		Groups
		98, 200, 258, 298, 401
		Money and Goods
		104, 109, 116, 122, 201, 214
		Containers, Materials and Buildings
		107, 164, 181
		251, 268, 325, 367
		Actions that are helpful or Destructive
		110, 116, 250, 260
		Actions involving Holding and Touching
		131, 149, 197
		Rocks, Metal and Soil
		133, 237, 259, 337, 402
		Seeing and Perceiving
		135, 183, 195
		Games, Sports and Recreation
		143, 158, 209, 304, 370
		Actions involving the Face
		151, 152, 196, 241
		Mathematical Operations and Quantities
		166, 340, 410
		Locations and Places Where People Live
		172, 180
		Events
		179, 412, 413

English	**Vocabulary Cluster**	Cleanliness
		185, 223, 288
		Physical Traits of People
		186, 187, 253, 407
		Texture, Durability and Consistency
		202, 323
		Language
		219, 238, 286
		Danger and Difficulty
		221, 240
		Diseases and Death
		230, 231, 287, 305, 371, 404,
		Life, death and Survival
		245, 329
		Popularity, Familiarity and Likelihood
		261, 289, 328
		Complexity and Conformity
		262, 290
		Light and Darkness
		271, 272, 306, 372, 405
		Chemicals and Matter
		377, 418

Our Language programme includes all aspects of English such as

Reading Comprehension

At Tips , the students will be going through a complete reading Programme which motivates them to read in an engaging way. The multi-sensory approach and the hands – on activities help them learn the important components of reading – Phonological awareness, decoding, vocabulary, Fluency and comprehension. This curriculum aims at laying a firm foundation of learning and create interest in reading

Writing

In order to develop writing skills, the children write for a wide variety of purposes using many different forms. These include *writing Biography, Descriptive, Experimental report, How to, Informational Report, Informative Speech, Narrative – Fairy Tale, Personal Narrative, Realistic Fiction, Persuasive – Opinion, Persuasive – Pro-Con* at the expected grade level.

Listening & Speaking

The language of the classroom is English. Our aim is that children will become comfortable speaking English in the classroom. Pupils are provided with many opportunities to convey ideas in class discussions. Listening skills are taught as a means of articulating clear responses upon reflection of ideas expressed by others. Children are reminded of the value of good listening skills so that they develop greater competency.

Vocabulary – Clusters

Robert J. Marzano identified basic and advanced vocabulary which a speaker who wishes to communicate in the English language should know. These words are grouped into clusters. Grades 1 3 will be given basic vocabulary, while Grades 4 & 5 will be given advanced vocabulary. We will be sending home sets of words which will be discussed in the class. Your child will illustrate his/her understanding of the word in the space provided. We will send this home every day and children have the liberty to complete the work throughout the week rather than in one sitting. Allow your child to take time to look at the word, recall the meaning and illustrate. This will help the child identify the word in a text and use the same while writing as well.

Language Skills

Children need Grammar/Structure/Punctuation to master their writing skills. This will be accomplished through the *Language skills* book which will be dealt with, in the class. They will learn *Verbs, Adverbs, Nouns, Plural nouns, Pronouns, Possessive nouns, Comparative & superlative adjectives, Commas, Use of contractions, Compound words, Difference between past & present tense, Past tense verbs, Suffixes and Prefixes.* They will also have additional grammar practice every day. The resource used for this will be *Write Rights.*

ANNUAL CURRICULUM OVERVIEW - HINDI

DISCIPLINE	OBJECTIVE	TIME FRAME
HINDI	1. पुनरावृति- स्वर, व्यंजन, बारहखड़ी 2. पाठ- संयुक्त वर्ण 3. पाठ- फ़्लोरेंस नाइटिंगेल 4. गिनती 1- 10 5. मेरी हिन्दी	Sem I
	1. पाठ- नटखट बसंत 2. पाठ – जान है तो जहान है 3. व्याकरण- संज्ञा और उसके भेद (पुनरावृति), सर्वनाम (परिचय) 4. गिनती 11- 20 5. मेरी हिन्दी	
	1. पाठ- बलवान कौन 2. पाठ- लोकमान्य तिलक पाठ- 3. व्याकरण- उपसर्ग, प्रत्यय (परिचय) 4. गिनती 21- 30 5. मेरी हिन्दी	
	1. पाठ- मूल्यवान वस्तु 2. व्याकरण- काल (परिचय) 3. गिनती 31- 40 4. मेरी हिन्दी	Sem II
	1. पाठ- कौन सिखाता 2. व्याकरण- सर्वनाम के भेद (पुरूषवाचक, निजवाचक, संबंधवाचक) 3. गिनती 41- 50 5. मेरी हिन्दी	
	1. पाठ- मैसूर की सैर 2. पाठ- आओ भर लें खुशियाँ 3. व्याकरण- सर्वनाम के भेद (निश्चयवाचक, अनिश्चयवाचक, प्रश्नवाचक) 4. गिनती 1- 50 (पुनरावृति) 5. मेरी हिन्दी	

<u>लेखन कौशल</u>

<u>केन्द्रीय शिक्षण बिन्दु :</u>

वाचन एवं अर्थ ग्रहण की क्षमता ।

<u>शैक्षणिक उद्देश्य</u> :

- अर्थ समझकर वाक्य बनाना
- संयुक्ताक्षर का अभ्यास
- शब्द निर्माण
- शब्द भंडार में वृध्दि
- विषय वस्तु संबंधित रचनात्मक कार्य करना और जानकारी इकट्ठा करना

<u>पठन /वाचन कौशल</u> :

<u>केन्द्रीय शिक्षण बिन्दु</u> :

- स्पषट एवं शुद्ध उच्चारण

<u>शैक्षणिक उद्देश्य</u> :

- सही उच्चारण के साथ पढ़ने का अभ्यास
- वार्तालाप का अभ्यास
- अर्थ बोध का ज्ञान

<u>श्रवण कौशल</u> :

<u>केन्द्रीय शिक्षण बिन्दु</u> :

- बोलचाल की भाषा के प्रति आत्मविश्वास जगाना

<u>शैक्षणिक उद्देश्य</u> :

- विचार व्यक्त करना
- कहानी बताकर उससे सम्बंधित प्रश्न पूछना
- शीर्षक के अनुसार अपने विचार प्रकट करना

<u>संदर्भ ग्रंथ सूची</u> :

पंखुड़ियाँ	-	वीवा एजुकेशन
स्वाति	-	सरस्वति हाउस प्रा. लि.
गुंजन	-	मधुबन एजुकेशनल बुक्स
वितान	-	मधुबन एजुकेशनल बुक्स
ज्ञान मंजरी	-	एशिया बुक हाउस
पल्लवी	-	एलाइट पब्लिशर्स प्रा. लि.

<u>Websites</u> :
www.akhlesh.com ,
www.Hindiclassroom.com
www.indg.in/primary-education/Shiksha

ANNUAL CURRICULUM OVERVIEW - TAMIL

DISCIPLINE	OBJECTIVES	TIME FRAME
TAMIL	சொற்களின் அமைப்பு மற்றும் பயன்பாடுகளை அறிந்து, எளிய வாக்கியங்களில் நிறுத்தற்குறியின் பயன்பாட்டினை அறிதல்.	SEM I
	சொற்களில் வரும் எழுத்துக்களின் உச்சரிப்பு வேறுபாட்டினையும், இடங்களையும், சொல் வகைகளையும் அறிந்து கொள்ளுதல்.	
	அறம் சார்ந்து வாழ்வில் பின்பற்றி நடக்கும் வழிமுறைகளையும், வாக்கியங்களின் பொருளையும் உணர்தல்.	
	பொதுவான சூழலில், உரையாடல் சார்ந்த கருத்துக்களை புரிந்து கொள்ளுதலுடன், வாக்கியங்களில் ஒருமை - பன்மை, காலங்களின் பயன்பாட்டினை அறிதல்.	SEM II
	எளிய வாக்கியங்களைக் கொண்டு பத்திகள் அமைக்கும் முறையையும், கிரந்த எழுத்துக்களின் பயன்பாடு மற்றும் திணை, பால் வகைகளை அறிதல்.	
	செயல்வழிக் கற்றல் மூலம் மொழிப்பாடத்தின் கருத்துக்களை உணரவும், கட்டுரை அமைக்கும் முறையினையும் அறிந்து கொள்ளுதல்.	

LISTENING AND SPEAKING

LEARNING OBJECTIVES: (கற்றலின் குறிக்கோள்கள்)

- உரையாடல்களை அறிமுகமாகாத சூழலிலும் புரிந்து கொள்ளுதல்.
- ஏற்ற இறக்கங்களுடன் சரியான உச்சரிப்புடன் பேசுதல்.
- சற்று கூடுதலான பிணைவுக் கேள்விகளை கேட்டல்.
- சிறுகதைகள், நகைச்சுவைத் துணுக்குகள் சூழல் அறிந்து பேசுதல்.

READING

LEARNING OBJECTIVES: (கற்றலின் குறிக்கோள்கள்)

- சுவர் ஒட்டிகள், சாலை அடையாளங்கள், எச்சரிக்கை பலகை படிக்கும் திறன்.
- எளிய கதை புத்தகங்கள், குழந்தைகளுக்கான வெளியீடுகளை வாசித்தல்.
- உரைநடையைப் படித்தபின் அதில் எழுப்பும் வினாக்களுக்கு விடை அறிந்து கொள்ளுதல்.

WRITING

LEARNING OBJECTIVES: (கற்றலின் குறிக்கோள்கள்)

- தன் எண்ணத்தில் தோன்றும் கருத்துக்களை சேகரித்தல்.
- சேகரித்த கருத்துக்களை தகுந்த சொற்கள் கொண்டு வெளிப்படுத்துதல்.
- நிறுத்தற்குறிகளின் பயன்பாடு, ஒலி வேறுபாட்டுச் சொற்கள் அறிந்து பிழையின்றி பத்தி அமைத்தல்.

RESOURCE BOOKS **: அழகு தமிழ், வண்ணத்தமிழ் இலக்கணப் பயிற்சி நூல்.**

WEBSITES : *www.tamilnoolagam.com* , *www.tamilcube.com, www.tamilvirtual.com*

ANNUAL CURRICULUM OVERVIEW - MATH			
Discipline	**Objectives**		
Math	**Revisiting Previous Year Concepts**		
	Numbers to 10,000	Counting	Use base-ten blocks to count, read, and write numbers to 10,000.
			Count by 1's, 10's, 100's and 1,000's to 10,000's
		Place Value	Use base-ten blocks and place-value chart to read, write, and represent numbers to 10,000.
			Read and write numbers to 10,000 in standard form, expanded form, and word form.
		Comparing and Ordering numbers	Use base-ten blocks to compare and order numbers.
			Use place value to compare and order numbers.
	Mental Math and Estimation	Mental Addition	Add 2 digit numbers mentally with or without regrouping.
		Mental Subtraction	Subtract 2 digit numbers mentally with or without regrouping.
		More Mental Addition	Use different strategies to add 2 digit numbers close to 100 mentally
		Rounding Numbers to Estimate	Round numbers to estimate sums and differences
		Using Front-End Estimation	Use Front-End estimation to estimate sums and differences.
	Addition up to 10,000	Addition Without Regrouping	Add greater numbers without regrouping
		Addition with Regrouping in Hundreds	Add greater numbers with regrouping in hundreds
		Addition with Regrouping in Ones, Tens, and Hundreds	Add greater numbers with regrouping in ones, tens, and hundreds
	Subtraction up to 10,000	Subtraction Without Regrouping	Use base-ten blocks to subtract without regrouping.
		Subtraction Without Regrouping in Hundreds and	Use base-ten blocks to subtract with regrouping.
		Subtraction with Regrouping in Ones, Tens, Hundreds, and	Use base-ten blocks to subtract with regrouping.
		Subtraction Across Zeros	Use base-ten blocks to subtract across zeros.
			Write subtraction number sentences
			Solve subtraction word problems.
	Using Bar Models: Addition	Real World Problems	Use bar models to solve 2-step real- world problems involving addition and subtraction.
	Multiplication Tables of 6,7,8 and 9	Multiplication Properties	Use Multiplication properties
		Multiply by 6	Understand multiplication by using array models
			Practice multiplication facts of 6
		Multiply by 7	Understand multiplication by using area models
			Practice multiplication facts of 7

Math	**Multiplication Tables of 6,7,8 and 9**	Multiply by 8	Understand multiplication by using number lines and area models.
			Practice multiplication facts of 8
		Multiply by 9	Understand multiplication by using array models and area models
			Practice multiplication facts of 9
		Division: Finding the Number of items in Each Group	Divide to find the number of items in each group.
			Understand related multiplication and division facts.
			Write division sentences for real-world problems.
		Division: Making Equal Groups	Divide to find the number of groups
			Understand related multiplication and division facts.
			Express division sentences for real-world problems.
	Multiplication	Mental Multiplication	Multiply ones, tens, and hundreds mentally
		Multiplying Without Regrouping	Multiply ones, tens, and hundreds without regrouping
		Multiplying Ones, Tens, and Hundreds with Regrouping	Multiply ones, tens, and hundreds with regrouping
	Division	Mental Division	Use related multiplication facts to divide
			Use patterns to divide multiples of 10 and 100
		Quotient and Remainder	Divide a 1 digit number or a 2 digit number by a 1 digit number with or without remainder
		Odd and Even Numbers	Use different strategies to identify odd and even numbers.
		Division Without Remainder and Regrouping	Use base –ten blocks and place value to divide 2 digit numbers without regrouping or remainders
		Division with Regrouping in Tens and Ones	Use base-ten blocks and place value to divide 2 digit numbers by a 1 digit number with regrouping, with or without
	Using Bar Models: Multiplication and Division	Real-World Problems-Multiplication	Use bar models to solve one-step multiplication word problems
		Real-World Problems-Multiplication	Use bar models to solve two-step word problems
			Choose the correct operations in two- step word problems
		Real-World Problems :Division	Use bar models to solve two-step division word problems.
	Using Bar Models: Multiplication and Division		Recognize number relationship
		Real-World Problems : Two-step problems with Division	Use bar models to solve two-step division word problems
			Choose the correct operations to solve two- step word problems.
		Real World Problems: Two-step Problems	Solve two-step problems using the four operations
			Represent the unknown quantities with letters.
		Addition	Add money in different ways without regrouping
	Money		Add money in different way with regrouping.

Math	**Money**	Subtraction	Subtract money in different ways without regrouping
			Subtract money in different way with regrouping.
		Real-World Problems- Money	Solve up to two-step real-world problems involving addition and subtraction of money
	Metric Length, Mass and Capacity	Meters and Centimeters	Use meters and centimeters as units of measurements of length
			Estimate and measure length
			Convert units of measurement
		Kilometers and meters	Use meters and centimeters as units of measurements of length
			Estimate and measure length
			Convert units of measurement
		Kilograms and Grams	Read scales in kilograms and grams
			Estimate and find actual masses of objects by using different scales.
			Convert units of measurement
		Liters and Milliliters	Estimate and find volume of liquid in liters and milliliters
			Find volume and capacity of a container
			Convert units of measurement.
	Real-World Problems- Measurement	Real-World Problems- One-Step Problems	Draw bar models for one-step measurement problems
			Choose the operation for the one-step problems.
		Real-World Problems- Two-Step Problems	Draw bar models for two-step measurement problems
			Choose the operation for the two- step problems.
	Bar Graphs and Line Plots	Making Bar Graphs with Scales	Making bar graphs with scales using data in picture graphs and tally chart.
		Reading and Interpreting Bar Graphs	Read and interpret data from bar graphs
			Solve problems using bar graphs
		Line Plots	Make a line plot to represent and interpret data
	Fractions	Understanding Fractions	Read, write and identify fractions from wholes with more than 4 parts.
			Identify numerator and denominator
		Understanding Equivalent Fractions	Use models to identify equivalent fractions
			Use a number line to identify equivalent fractions
		More Equivalent Fractions	Use multiplication and division to find equivalent fractions
			Write fractions in simplest form

Math	**Fractions**	Comparing Fractions	Compare and order fractions
			Show fractions as points and distances on a number line.
			Compare and order fractions using benchmark fractions.
		Adding and Subtracting Like fractions	Add two or three fractions with sums to 1
			Subtract a like fraction from another like fraction or one-whole.
		Fraction of a Set	Read, write and identify fractions of a set.
			Find the number of items in a fraction of a set.
		Fractions	Express whole numbers as fractions
			Recognize fractions that are equal to whole numbers.
	Time and Temperature	Telling Time	Tell Time to the minute
			Read time on a digital clock
		Converting Hours and Minutes	Change minutes to hours or hours to minutes
		Adding Hours and Minutes	Add time with and without regrouping
		Subtracting Hours and Minutes	Subtract time with and without regrouping
		Elapsed Time	Find elapsed time.
	Time and Temperature	Measuring Temperature	Read a Fahrenheit thermometer
			Choose the appropriate tool and unit to measure temperature.
			Use a referent to estimate temperature
		Real-World Problems- Time and Temperature	Solve up to two-step word problems on time.
			Solve word problems involving temperature.
	Angles and Lines	Understanding and Identifying Angles	Find angles in plane
			Shapes and real-world.
			Compare the number of sides and angles of plane shapes.
		Right Angles	Make a right angle
			Compare angles to a right angle
			Identify right angles in plane shapes.
		Perpendicular Lines	Define and identify perpendicular lines
		Parallel Lines	Define and identify parallel lines

Math	**Two-Dimensional Shapes**	Classifying Polygons	Identify open and closed figures
			Identify special polygons and quadrilaterals
			Classify polygons by the number of sides, vertices, and angles.
			Classify quadrilaterals by parallel sides, length of sides, and angles.
			Combine and separate polygons to make other polygons
		Congruent Figures	Identify a slide, flip, and turn.
			Slide, flip, and turn shapes to make congruent figures.
			Identify congruent figures.
		Symmetry	Identify symmetric figures.
			Use folding to find a line of symmetry.
	Area and Perimeter	Area	Understand the meaning of area
			Use square units to find the area of plane figures made of squares and half squares.
			Compare areas of plane figures and make plane figures of the same area.
		Square Units (cm^2 and $in.^2$)	Use square centimeter and square inch to find and compare the area of figures.
	Area and Perimeter	Square Units (m^2 and ft^2)	Use square meters and square feet to find and compare the area of plane figures.
			Estimate the area of small and large surfaces.
		Perimeter and Area	Understand the meaning of perimeter
			Find the perimeter of figures formed using small squares.
			Compare the area and perimeter of two figures.
		Real-World Problems- Area	Multiply the side lengths of rectangles to find the area to solve real world
			Represent whole number product as rectangular areas.
			Find the area of figures by separating them into two rectangles and adding their
		More Perimeter	Find the perimeter of a figure by adding up all its sides
			Choose the appropriate tool and units of length to measure perimeter.
			Measure the perimeter of surfaces of objects and places.

APPLIED SCIENCE - STEM

STEM inculcates Science, Technology,Engineering and Mathematics . We focus on these areas together not only because the skills and knowledge in each discipline are essential for student success, but also because these fields are deeply interwined in the real world and in how students learn most effectively. STEM is an interdisciplinary and applied approach that is coupled with problem based learning .

Curriculum Introduction:

Our unique curriculum is an attempt to integrate the "hands-on" science and practical application with the regular school curriculum for STEM subjects (Science, Technology, Engineering, and Mathematics).

STEM through Robotics:

An early introduction to robotics through STEM encourages our children's essential growth and expression, engaging their cognitive, critical, and creative potential. When used in this way, robotics can help these future creators, designers, and engineers to better understand and explore the world around them.

Core values of STEM:

- New Opportunities for Creative and Critical Thinking
- Hands-On Lessons with Real-World Applications
- Fun and Inspired Learning ,Safe Introduction to Technology
- Establish links between 'cause and effect'
- Actively build ,explore,investigate,inquire,and communicate together.

Importance of STEM:

A curriculum that is STEM-based has real-life situations to help the student learn. Programs like Engineering For Kids integrates multiple classes to provide opportunities to see how concepts relate to life in order to hopefully spark a passion for a future career in a STEM field. STEM activities provide hands-on and minds-on lessons for the student. Making math and science both fun and interesting helps the student to do much more than just learn.

ANNUAL CURRICULUM OVERVIEW – APPLIED SCIENCE		
Discipline	**Objective**	**Time Frame**
Fundamentals of LEGO Robotics	Understanding the basic principles of robotics, Laws of Robotics , Component name and its applications	SEM-I
S4A: Introduction	Understanding the basic principle of robotics, laws of robots and the component name & its application.	
Robot Simulator	Understanding basic robot movement techniques by design and programming a circuit in Tinkercad	
Speed Control Technique	Learn and prepare algorithm to control motor speed using pot and PWM	
Build h-bridge using SPDT	Understanding the working of DC motor and its terminals(Movement vs. Polarity)	SEM-II
Sensor Interface	Program a robot to avoid obstacles using ultrasonic sensor and verify the robot performance in simulator.	
Obstacle avoider - PIR	Program a robot to avoid obstacles using PIR sensor by detecting any motion and verify the robot performance in simulator	
Fire detector	Program the Robot to detect fire and extinguish the fire in simulator	

WORKSHEET :

As students come in for each session , they will do worksheet for the modules practiced in the lab. All these worksheets will be recorded and maintained in the form of log book which will be evaluated.

ANNUAL CURRICULUM OVERVIEW- APPLIED COMPUTERS						
Module	**Objective**	**Focus**	**Integration**	**Software Applications**	**Technical Skills**	**Time frame**
EDITOR	Students use word processing software to format text and create Illustrations. They learn Shortcut commands to format the document	Working with Objects Formatting Techniques Thesaurus Cut, Copy, Paste Final Edit	Language Arts Social studies	Microsoft office word	Word Processing	**SEM 1**
PRESENTER	Students gather facts from the internet and organize the same onto the slide to produce a multimedia Presentation.	About Presentation Picture Insertion Table Insertion Formatting Animation and Slide Show	Language Arts	Microsoft office PowerPoint Internet Explorer	Graphics Presentation	
DYNAMIC	Students use various tools to create their own character and add new frames to animate the character	About Pivot Use of Tools Character Creation Positioning Figures Animation	Language Arts	Pivot Animator	Graphics	**SEM 2**
BUILDING BLOCKS	Students create their sprite and use different blocks to animate their sprite	About Scratch Paint editor and Basic blocks Motion and Control block Looks block Sensing Blocks Animation	Language Arts Mathematics	Scratch	Graphics	

Mission:

Our Mission is to combine Education and Technology to provide children with the core computing skills that will best prepare them for the future.

Technology Integration:

Technology projects have detailed step by step instructions, that are used to integrate technology into curriculum effectively to create meaningful learning opportunities for students. Each technology project contains theme-related assignments that use Microsoft and Adobe applications.

Learning Outcomes

- edit and format text in a Ms word file.
- create power point slides with basic formatting tools.
- search and view information on internet.
- create simple animation with basic tools.
- use different blocks to animate sprite.

Technology skills : Word processing, photo editing, animation, desktop publishing, internet, and presentation skills

Application of skills

Project Based Learning is a unique approach to teaching technology skills. With project based learning students complete technology projects that focus around problem solving tasks. Students learn technology skills gradually as they complete activities such as publishing a magazine, creating a multimedia storyboard, or developing a website.

Physical Education (PE)

PE involves human movement in relation to the physical environment. It is concerned with learning about physical activity and through physical activity. PE offers students the opportunity to discover the capabilities of their bodies and the variety of ways in which they are able to use their bodies to solve problems, address physical challenges, function as part of a group, manipulate equipment or apparatus and express themselves in a range of situations. Through movement, students develop personally, socially and emotionally as well as physically. They learn to understand and accept their own strengths and weaknesses in Physical Education.

Students will be exposed to a number of activities that will develop motor skills, which may later be applied in various physical activities within and beyond the school setting. They will become aware of a number of positive leisure-time pursuits. In PE, students are exposed to a wide variety of physical and health-related activities and experiences so that they can make informed choices throughout their lives.

Students are encouraged to participate in an active lifestyle and recognize the ways exercise affects their bodies and their overall fitness or well-being, developing an understanding of the role of physical activity in a healthy lifestyle. Students also come to recognize that PE takes place within a cultural context that should be appreciated. PE offers students the opportunity to set themselves physical objectives, gaining pleasure or satisfaction from accomplishing these physical tasks or challenges and reflecting on their performance.

The PE component of the curriculum also provides opportunities for students to :

- learn about body control and spatial awareness
- master new skills and techniques in a variety of physical activities
- manipulate equipment or apparatus
- recognize the importance of fair play
- understand how strategies can assist when participating in physical activities
- use cooperative behaviours in order to function as part of a group or team
- use proper safety precautions when engaging in physical activities

ANNUAL CURRICULUM OVERVIEW- PHYSICAL EDUCATION		
Discipline	**Game**	**Basic skills**
Physical Education	**Soccer**	Receiving
		Ball control (controlling the ball at speed)
		Heading
		Dribbling (drills, basic dribbling, intermediate moves and advanced)
		Throw-in
		Passing
	Swimming	Freestyle
		Backstroke - Leg beat
		Backstroke - Hand Movement
		Breaststroke
	Track and Field	Sprint
		Hurdles
		Relay
	Badminton	Straight line Footwork, Forehand serves, Clears
		Forehand serves, Service returns and drives
		Drops and net lifts

Performing Arts

Arts are viewed by the PYP as a form of expression that is inherent in all cultures. They are a powerful means to assist in the development of the whole child, and are important for interpreting and understanding the world. Arts in the PYP promote imagination, communication, creativity, social development and original thinking.

Learners of the arts are both active and reflective. As well as being actively involved in creating and performing, students reflect on their work and on the work of others. Collaborative activities with other students in their own classes or other classes are essential; inquiring, working and reflecting with other students (older or younger) in a two-way learning process.

The arts component of the curriculum also provides opportunities for students to:

- develop proficiency as musicians, actors and visual artists
- acquire audience skills such as listening and viewing responsively
- interpret and present their own or others works to a range of audiences
- evaluate the different roles of artists in society such as to entertain, provoked debate or challenge views and perceptions
- create and critique plays, compositions and artwork using a selection of tools and techniques
- express feeling, ideas, experiences and beliefs in a variety of ways
- improve coordination, flexibility, agility, strength and fine motor skills.

Music perspective

Music includes the study and exploration of sound and the expressive use of musical elements. Students will join together in musical activities using their voices, bodies and simple instruments to develop concepts about sound and musical awareness. Students will be exposed to and work on, a wide range of musical stimuli. They will participate both individually and in groups. Students will read, develop and record musical ideas in composition. They will develop an awareness and appreciation of music from a range of times, places and cultures. The development of listening skills will be constantly reinforced through live and recorded performances. Students will have opportunities for practice and consistent exposure to music in order to produce mastery and lifelong appreciation.

Dance perspective

Dancing is the act of moving the body in rhythm, usually in time to music. It seems natural for people to express themselves through rhythmic movement. Young children jump up and down when they are excited and sway gently when content or at rest. Dancing is both an art form and a form of recreation. Dance as art may tell a story, set a mood, or express an emotion. Some dances consist of symbolic gestures that tell a story completely through movement. As recreation, dancing has long been a people's source of fun, relaxation, and companionship.

Health benefits

Dancing can be a way to stay fit for people of all ages, shapes and sizes. It has a wide range of physical and mental benefits including:

- Improved condition of the heart and lungs
- Increased muscular strength, endurance and motor fitness
- Weight management
- Stronger bones and reduced risk of osteoporosis
- Better coordination, agility and flexibility
- Improved balance and spatial awareness
- Greater self confidence and self esteem
- Better social skills.

ANNUAL CURRICULUM OVERVIEW - PERFORMING ARTS				
Discipline	**Music**	**Classical Dance**		**Western Dance**
		Theory	**Practical**	
PERFORMING ARTS	• Introduction to music • Classical basic notes • Forms of songs • Practicing different tempos/ thalams	• Samyuktha Hasthas and Meaning	• Namaskaram • Basic Postures • Hand gestures & description • Basic steps – Adavus • Facial Expressions - Bhavanas	• Basic foot-work • Combination of foot-work and beat knowledge • Flexibility exercises • Free-style combination of steps • Basics of specific style • Floor steps & balancing • Body and face expression • Choreography knowledge

*** The above is the plan scheduled. There may be alterations which will be informed through circulars.**