

CBSE



THE JOY OF LEARNING

# Grade 10

## Learning Experience

# We at Pupil Tree believe in a world beyond boundaries where education should continuously evolve and adapt as the world changes.

Pupil Tree is a community of children, educators and parents where everyone learns together. At Pupil Tree, our students find their purpose, passion and community to make a difference in the world.

## FIND New Ways to Learn

Our innovative learning model goes beyond conventional norms. We apply interdisciplinary skills to think differently and solve real-world problems.

We equip students with skills such as problem solving, collaboration, critical thinking, reflection and global awareness. Students engage in authentic tasks and challenges to investigate each learning area deeply and transfer their learning to new situations.

For example, in Mathematics, students apply their counting skills to determine the requirements for the daily functioning of a farm and in Computer Science, students design an outdoor garden's fencing using patterns.

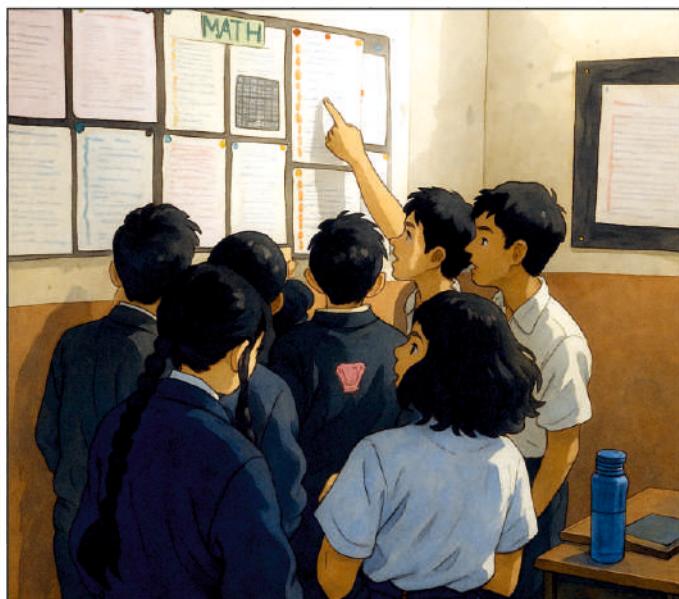
## Mathematics

The mathematics program focuses on foundational concepts and builds a mathematical mindset, problem-solving abilities, skills, processes and metacognition.

Students learn by doing and use the Concrete-Pictorial-Abstract method, which enables them to construct meaning and uncover abstract math concepts.

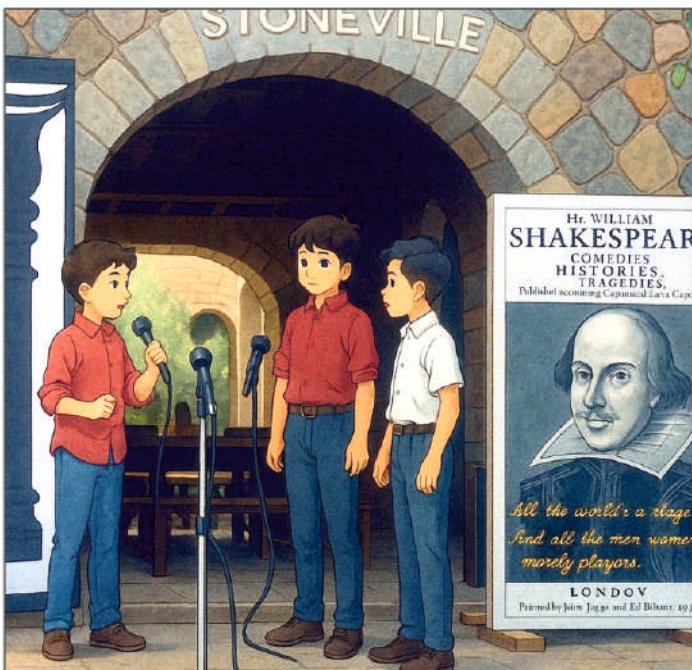
### Core Concepts and Skills

- Cardinal (up to 100) and ordinal numbers
- Arithmetic operations and number bonds
- Shapes and patterns • Time and money • Data representation • Analysing parts and whole • Using heuristics to identify patterns • Comparing and classifying



## English

The English Program provides a strong foundation for learners to build essential skills like reading, writing, listening and speaking, using sources like fiction, nonfiction and poetry.



The love to read program in the english curriculum ensures students develop a lifelong habit of reading and become confident readers through deep discussions about books.

### Core Concepts & Skills

- Concepts related to fiction, Nonfiction and poetry • Key grammar concepts . Decoding, interpreting and representing information
- Reciting and expressing • Predicting, reading and retelling • Comprehension and communicating in multiple ways • Collaborating and presenting
- Writing using conventions

## Second Language Hindi / Kannada

The second language program enables students to use languages, participate and communicate in linguistically and culturally diverse contexts.

Students learn additional languages building their linguistic skills. This allows students to explore and learn about related cultures and lifestyles and apply their learning to real-world situations.

### Core Concepts and Skills

- Concepts related to fiction, Non-fiction and Poetry
- Key grammar concepts
- Writing skills writing 2,3 and 4 letters words, short sentences
- Broad reading skills-use strategies to read words and simple sentences
- Listening and speaking skills- share and respond to ideas and instructions

## Science

The science program cultivates a mindset of interest, curiosity and scientific enquiry. The program provides students with a deep understanding of the core concepts. It integrates key scientific practices: developing and using models and systems, conducting investigations, and analysing data.

Students establish connections among the various branches of science, including physical and life science. Furthermore, students actively learn through the hands-on experiments provided in their Science Kits.

### Core Concepts and Skills

- Matter and nature of materials
- Plant structures
- Animal habitats . Land forms
- Observation
- Construction of explanations
- Investigation, analysis and interpretation of data
- Communication of information



## Social Science

The social science program encourages students to be curious about their world; they explore stories from the past and present about people, families and places.

Students explore the concept of change in relation to themselves, their families and their communities. Through engaging learning experiences, students develop a sense of belonging to the city and learn to care about their environment.

### Core Concepts and Skills

- People and places
- Concept of change (concerning people and places)
- Study of past, present and the near future (within the context of the student's world)
- Questioning
- Researching .
- Analysing
- Evaluating and reflecting
- Communicating



## Computer Science

The computer science program enables students to learn programming, physical computing, user-centred design, and data.

Students work on projects that require the application of design thinking principles and computational thinking skills.

### Core Concepts and Skills

- Introduction to computing devices
- Digital citizenship
- Sequences, Patterns and loops
- Events
- Word processing
- Data, collection, visualisation and inference
- Digital Art
- Handling and using a computer
- Using editing software
- Connecting peripherals such as speakers, microphones and printers.
- Coding exercises in play lab (sequences, patterns, loops and events)
- Debug a block of code



## Performing Arts

The performing arts program empowers students to recognise patterns, identify rhythm and become familiar with creating and performing a sequence of movements through dance, theatre and music.

Students are exposed to music, dance and drama themes during the performing arts sessions to explore and understand the connection between the mind and the body.

### Core Concepts and Skills

- Dance, music and theatre • Body and torso movements • Explore and express emotions • Build Motor Skills • Spatial awareness • Verbal and non-verbal communication • Collaboration

## Physical Education

The physical education program aims to instil a sense of personal responsibility for lifelong health and fitness. The two key strands of the curriculum are strength and conditioning, skills and sportsmanship.

Strength and Conditioning includes training for a wide range of exercises that focus on mind, mobility, stability, strength, endurance, power, speed, agility and performance. Skills and sportsmanship includes a variety of sports and skill-building activities. The program incorporates attitude and behaviour to positively impact a student's overall development.

### Core Concepts and Skills

- Safety, health and nutrition • Sports and exercise
- Motor skills, movement and strategies
- Collaboration • Sportsmanship

## Visual Arts

The visual arts curriculum aims to develop creativity and imagination among students through observation and making. Students are introduced to various media and techniques to express their creativity.

The students will be introduced to fundamental design skills and are encouraged to work with simple materials to achieve an artwork. They gain experience with tools, materials, methods and techniques to explore and experiment without hesitation.

### Core Concepts and Skills

- Drawing, painting, origami, paper weaving, clay work and simple sewing techniques • Colours and colour mixing • Textures and printing using natural and found materials • Introduction to stitching
- Drawing and painting using simple tools • Observing and playfully exploring various materials

## Life Skills

The life skills program is based on the socio-emotional and ethical learning framework. The curriculum focuses on cultivating positive emotional regulation, self-compassion, and interpersonal skills to improve academic progress and personal well-being.

Student learning is organised into three dimensions: Awareness, Compassion and Engagement.

### Core Concepts and Skills

- Kindness and compassion for self and others
- Building resilience • Self-regulation • Interpersonal awareness for self and others • Relationships
- Understanding interdependence • Recognising common humanity • Community engagement

