



THE JOY OF LEARNING

Grade 10

Learning Experience



**EKYA
SCHOOLS**

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

Ekya is a community of children, educators and parents where everyone learns together. At Ekya, 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 the English Language Curriculum, students use the skill of collecting data and analysing the findings to write proposals to people of authority. Similarly, in Math students design a game of chance based on probability concepts. In social science, students analyse and compare election data results of India to report on whether local or state elections matter in India.

English

The English Program helps students develop skills and understanding in reading, writing, speaking and Listening as well as an appreciation for literature and language.

The program covers a wide range of topics, including grammar, vocabulary, composition, and literary analysis. Students learn how to analyse and interpret literary works, and express their ideas and opinions in a clear and persuasive manner. The program emphasises the development of critical thinking skills, encouraging students to question assumptions and consider multiple perspectives. They learn how to analyse complex texts and make informed judgments about the meaning and significance of literary works.

Core Concepts and Skills

- Reading resources, including a range of fiction genres
- Poetry and play scripts
- Non-fiction texts
- Communication and presentation
- Language skills for social and academic purposes
- Reasoning, interpretation and inference
- Writing on a variety of topics for different audiences and purposes
- Self-learning

Mathematics

The Mathematics Program aims to equip students with a mathematical mindset, problem-solving abilities, skills, processes and metacognition.

Students engage in mathematical discussion and challenges and use essential mathematical skills, knowledge and competencies to apply Math in solving real-world problems. They learn to use mathematical models to make predictions and draw conclusions and communicate their findings effectively to others. The program encourages students to work collaboratively in groups and develop interpersonal skills such as communication,

Core Concepts and Skills

- Number systems
- Algebra
- Coordinate geometry
- Geometry
- Trigonometry
- Mensuration
- Statistics and probability
- Problem solving
- Reasoning
- Connecting
- Communicating
- Representing
- Reflecting
- Selecting computational tools and strategies.



Science - Physics, Chemistry, Biology

The Science Program aims to develop a sense of wonder and curiosity about the cosmos, subatomic world and living systems to make students "science aware". Students develop scientific temperament by cultivating a mindset of interest, curiosity and scientific inquiry. They engage in scientific practices such as building and investigating models, systems, and theories to understand themselves and the world better.

Students engage in scientific practices such as building and investigating models, systems, and theories to understand themselves and the world better. They explore concepts through hands-on laboratory work. They formulate hypotheses, test them against observations, and draw conclusions after conducting experiments and computer simulations to examine various concepts.

Core Concepts and Skills

- Electricity and Magnetism • Light • Human Body Systems • Heredity and Evolution Ecology • Chemical Interactions and processes in everyday life
- Classification of substances • Organic chemistry
- Asking questions and defining problems • Planning and carrying out investigations • Analyzing and interpreting data • Engaging in arguments from evidence • Obtaining, Evaluating, and communicating information



Second Language Hindi / Kannada

The Second Language Program enables students to use languages, participate and communicate in linguistically and culturally diverse contexts.

Students apply their learning to real-world contexts; for example, they create a newsletter and write about different topics using advanced writing skills.

Core Concepts and Skills

- Concepts related to Fiction, Non-fiction and Poetry • Key Grammar concepts and vocabulary
- Comprehension - reading and writing • Listening and Speaking skills- sharing and responding to ideas, and discussions • Reading, articulating and expressing opinions • Writing in a variety of forms

Social Science

The Social Science Program equips the students to understand the environment in its totality and develop a broader perspective and an empirical, reasonable and humane outlook. It provides students with a deep understanding of human behaviour and society, as well as the skills needed to conduct research, analyze data, and communicate findings effectively.

The components of the program are History, Geography, Economics and Civics.

Core Concepts and Skills

- Nationalism in India and Europe, Age of industrialisation (History) • Resources and development, Forest and wildlife, Agriculture, minerals and energy resources (Geography)
- Democracy, political party, constitution, power sharing, federalism(Civics) • Sectors of the Indian economy, money and credit and globalisation (Economics) • Questioning • Researching • Analysing • Evaluating and reflecting • Communicating



Computer Science

The Computer Science Program, enables students explore object oriented programming using Java. They gain an understanding of concepts such as Java functions, string manipulation, arrays and reusability of code.

Students work on programming projects that allow them to apply their knowledge to real-world problems. They also complete an year-end design thinking project that involves identifying and defining complex problems and developing creative solutions and prototypes to solve them.

Core Concepts and Skills

- User-defined functions • Polymorphism • Arrays
- Search and sort using arrays • String manipulation
- Design, create, build, and debug • Problem solving
- Collaborating • Communicating • Recognising patterns • Creating, testing, debugging and modifying



Makery

The Makery Program is an innovative educational program that aims to foster creativity, innovation, and collaboration among students.

The Makery program provides hands-on learning experiences that allow students to explore and create with technology and tools. The curriculum typically covers a wide range of topics, including programming, robotics, and design thinking.

Core Concepts and Skills

- Creating • Collaboration • Curiosity • Observation
- Thinking

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

Physical Education

The Physical Education Program aims to instil a sense of personal responsibility for lifelong health and fitness. Students engage in a variety of games and sports to learn movement skills and strategies. The two key strands of the curriculum are Strength, conditioning, Skills and Sportsmanship.

Strength and conditioning includes training for these skills with 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 programs. The program incorporates skills and sportsmanship attitude and behaviour to positively impact a student's overall development and future success.

Core Concepts and Skills

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

