

Grade 5 – Learning Area specific course descriptions

ENGLISH

In Grade 5 English, students continue to learn words and apply skills learnt to decipher implicit and explicit meanings in a variety of texts. They will explore the usage of word roots, prefixes and suffixes. When writing, students will learn about the process and structure of different text formats and also attempt writing their own compositions on similar lines. Students will be able to select appropriate grammatical devices and use accurate spelling and punctuation. Students refine their work by editing and redrafting, and are able to write formal and informal pieces. Their unit end reminiscences will be compiled together.

Students become familiar with a range of fictional and nonfictional texts and are able to analytically review them. They will develop as active and articulate readers. Text will be studied in greater detail than previous grades, as students explore different parts of it. Students speak confidently, make effective contributions in group and classroom discussions, respect and respond to others' view. In addition to speaking, their listening skills will also continue to be honed.

MATHEMATICS

Mathematics lays a solid foundation for conceptual understanding using a three-step process, taking students from concrete, to pictorial, then abstract approaches to learning. Concepts are addressed from a number of directions that challenge students to think and understand. Grade 5 curriculum teaches students to think mathematically rather than just having them memorize the mechanics of problem solving.

By the end of Grade 5, students are more in tune with their number sense and mathematical confidence. The curriculum includes whole numbers, estimation of addition and subtraction, multiplying and estimation of answers, division and long division, mixed operations and Bodmas Math, multiplying and dividing by 10s, 100s or 1000s, word problems. Students learn more about fractions and mixed numbers, decimal calculations and average calculations, factors, multiples and percent calculations, ratios. Students are given real world experiences when they learn about area of a triangle, finding unknown angles, graphing, percent, rate, 4-sided figures and volume of a solid.

SCIENCE

The Science Curriculum in Grade 5 introduces discipline focused topics like physical and chemical changes in matter, energy and matter flows in ecosystems. Students will learn about the larger Earth systems and how they affect one another and build an understanding of space systems. The Physical Science will focus on light, sound and motion. The light and sound will be explored in the form of the waves. The concept of force and gravity will be explored on small and large scale. For earth and space sciences, the units will focus on patterns and cycles in the solar system. Furthermore, the units will explore the idea of stability and change in Earth's larger systems. The life sciences units introduce the level of organization within organisms and how all of its parts function as a whole to perform the tasks necessary for the survival of the organism.

As part of the curriculum, students participate in a design thinking challenge to develop solutions to real world problems using engineering practices.

SOCIAL SCIENCE

Grade 5 students will examine early migration, settlement patterns, people and their interactions with the environment in the Early Vedic Age and in Ancient Greece. They would recognize patterns, cause and effect of migration in the past and the present. The curriculum focuses on how human-environment interactions shape the character of places enabling students to recognise patterns in different scenarios. Students examine the way spaces are organised and managed and how people work to prevent, mitigate and prepare for natural hazards. Students' mental map of the world expands to North America and Australia, two continents from different hemispheres of the world.

SECOND LANGUAGE – HINDI/KANNADA

By the end of Grade 5, students are adapted at using grammatical expressions precisely. They will be able to read and write different narratives at length and understand more complex supported questions. They will be in position to provide basic information about themselves and others at discourse level on a range of general topics.

The curriculum encourages students to familiarize with the language by narrating stories and enacting role plays with simple dialogues. Students begin to read and follow short forms of Hindi literature – fiction, non-fiction and poems that highlight how the language is used based on context and situation. Students will also explore spellings of high frequency words and write picture compositions with relatively longer sentences.

COMPUTER SCIENCE

By the end of Grade 5, students learn to use Google Apps to create and send emails, share files through Google Drive and use Google Classroom to view and turn in assignments. They become aware about Internet safety and validation of information found on the internet. They trace the history and evolution of computing devices.

Students get an introduction to Scratch programming. They learn to construct sequential and conditional blocks in Scratch and build simple games using Scratch. Students will also continue to learn additional features in Word. They explore spreadsheets and its use to collect, format and display data. Students learn about Read Only Memory and its classification. They solve simple problems using algorithms and flowcharts. Students are introduced to Python programming language.

Practical Skills:

- Create sequential programs, event based animations and simple games in Scratch.
- Research and gather information on given topics using internet.
- Add mathematical equations, symbols, superscripts, subscripts and hyperlinks in documents.
- Use MS PowerPoint to create slideshows.
- Enter, format and display data and use features autosum and autofill in a spreadsheet.
- Open, read, write and send emails.
- Use Google Apps to create, modify, share information and collaborate with peers.
- Construct solutions to simple programs using sequential and conditional statements in Python.

READING

Grade 5 Reading program fosters the love for literature in students by expanding the foundational skills through literature discussions, genre studies and independent, guided and shared reading.

VISUAL ARTS

The curriculum under visual arts is designed to develop imagination, creative confidence and critical thinking among students making. Students are introduced to the idea of thinking through making and learn to use a variety of media, tool, techniques and methods. Hands on making and learning from experimenting and exploring new techniques and methods will bring new ways of observations and expressions.

Visual art classroom encourages collaborative making and building a personal portfolio.

The student learns to critically look at their own art practice and learn to present their work.

Art history introduces key movements in Contemporary art.

Core learning includes:

Representational skills through drawing and painting

Learn to explore and experiment with wet and dry media

Observe and translate through drawing

Translate an idea into 2 dimensional and 3-dimensional work using different techniques and methods

Use imagination to go beyond the obvious and experiment with new methods

PERFORMING ARTS

Through the music curriculum under performing arts, the students develop interest and appreciation towards music. Students learn to differentiate genres, familiarize with famous songs, analyse lyrics and sounds. Higher grades learn how to differentiate between pitch and rhythm while exploring how pattern and repetition work in music. Across all grades, the music curriculum encourages students to express their creativity and talent through classes and competitions.

THIRD LANGUAGE

Grade 5 curriculum offers Kannada or Sanskrit as the third language. The third language curriculum helps students with the skills of listening, speaking, reading and writing in a variety of contexts and trains students to be able to adapt language to suit different tasks, audiences and purposes. It aims to develop confidence in the students so that they can communicate in the language effectively.

It helps the students work on their ability to critique - to analyse and evaluate diverse texts, thereby, questioning ideas and articulating their point of view.

Learning third language from Grades V to VIII is mandatory for students as per CBSE guidelines.

LIFESKILLS

Life-skills in primary school, encourages students to adopt habits of the mind and heart. Through these, they learn to work independently, develop self-discipline, express emotions appropriately and become confident, resilient and adaptable learners. Students identify personal capabilities –

gain and use knowledge, ask questions, clarify concepts and ideas, seek possibilities, consider alternatives and solve problems. They learn how to show respect, how to be considerate and understanding of other's perspectives, emotional states and needs. The program helps students to develop social and emotional skills, learn to manage themselves, relate to others, develop a sense of self-worth, resolve conflict, engage in teamwork and feel positive about themselves and the world around them - i.e. in their daily life, society and the environment.

OTHER

Students in Grade 5 also attend weekly sessions in Yoga, Physical Education, Outdoor games and quiet reading time at the school library.