

## Grade 4 – Learning Area specific course descriptions

### ENGLISH

Grade 4 English will have students explore the features of fiction, non-fiction and poetry as they understand conventions of Standard English. They will read and analyse stories and poems by renowned children's authors, post which they are to plan and write their own accounts. They will be able to scan a text to access specific information or skim through it to get an overall sense of the content. The curriculum gets the students to investigate spelling patterns, syllables, prefixes, and suffixes in multi-syllabic words and use effective strategies in spelling and reading.

Students will learn to recognize and respond to all punctuation marks and use pronouns and prepositions accurately. Students will familiarize with different styles of handwriting and how appropriate each is for the kind of audience and purpose the writing serves. They are also taught to write letters, addressing real scenarios as significant attention is paid to how they plan and structure their drafts. These will be reviewed, revised and edited with the goal of improving the student's writing. The onus is not just on their writing skills as students build on their ability to talk confidently in extended turns and listen purposefully in a range of contexts.

### MATHEMATICS

Grade 4 Mathematics introduces the students to the concept of factors and multiples as they learn to count up to 100000. They learn about whole numbers, solving word problems associated with them and performing operations of multiplication and division. In addition to being introduced to symmetry, students delve deeper into the concepts of angles, squares and rectangles.

Lessons on fractions will continue as the students learn to perform operations of addition and subtraction of fractions. They are introduced to the concept of decimals and grasp the four operations of decimals. Students further explore the area and perimeter of spaces and time. The subject will also help them classify, organize and interpret data through tables and line graphs.

### SCIENCE

The Science curriculum in Grade 4 focuses on the structure and function of an organism, information processing, and the concept of energy and information transfer. It also includes the study of energy, exploring the cause and effect relationship between energy and collisions. Students are introduced to waves and their properties, and the idea that waves can cause objects to move. They use these core ideas to understand the scale and rate of weathering and erosion in certain environments. In earth science, the subject's focus is on force which covers the earth's systems and their processes of change.

The curriculum is designed such that students have several opportunities to build on concepts they may have learned earlier. They explore various science and engineering practices, engineering design and cross cutting concepts – these with a combination of the subject's core ideas enable students to develop a concrete understanding of energy transfer and related phenomena. As part of the curriculum, students put into effect what they learn by participating in a design thinking challenge to develop solutions to real world problems.

### SOCIAL SCIENCE

The Grade 4 Social Science curriculum focuses on interactions between people, places and environments over time and space and the effects of these interactions. Students learn about the ancient society of the Indus Valley Civilization while the unit about exploration and navigation allows them to research the contributions of historical figures like Vasco Da Gama, Captain James Cook, Marco Polo, Christopher Columbus and Ibn Battuta.

The student's mental map of the world expands to Africa and Australia – the climate, resources, people and other characteristics. Students also learn about the significance of the environment, examining how man's need and want of resources over time has affected communities across the world. Students get to examine the concept of sustainability and its application to resource use and waste management. The curriculum introduces the students to the role of local government, rules and laws.

### SECOND LANGUAGE – HINDI\*

By the end of Grade 4, students begin to follow a sequence of classroom instructions conveyed in the language and respond to it. They begin to read and comprehend small passages – fiction and nonfiction texts, with the required assistance. They are able to distinguish cause and effect, fact and opinion, main idea and supporting details to a limited range. The language's grammatical structures are explored as students will write short compositions based on pictures.

Idioms and one word replacements are introduced to the students to make their conversation interesting. They will be able to use a few non-verbal gestures as tools of communication. The curriculum is designed to involve the students in group activities, role plays and dramatizations. They are encouraged to partake in debates and classroom discussions, to help convey their point of view and share their thoughts in Hindi.

### COMPUTER SCIENCE

Students learn about computer memory and its classification. They learn about features such as spell check, headers and footers in Word. They explore different types of media used in communication and presentation. They learn to create slideshows and present topics using PowerPoint. They learn the concept of Personalization.

Students are introduced to Scratch programming. They construct event based projects and storyboards using loops and conditionals in Scratch. They get familiar with problem solving strategies such as Divide and Conquer, Draw a Diagram, Work Backward, Guess and Check. Practical Skills:

- Use internet appropriately to research and gather information on given topics.
- Add header, footer, ordered and unordered lists in documents.
- Use spell check feature in text editor.
- Use MS PowerPoint to create slideshows.
- Personalize system settings.
- Introduce sounds and backdrops in Scratch.
- Construct dialogues in Scratch.
- Create interactive animations in Scratch.
- Build stories and simple games in Scratch.

### READING

The Grade 4 Reading program looks to develop effective oral and reading skills in a student while instilling a lifelong love for reading. Reading is the keystone to all other academic disciplines, hence reading skills are imparted in a systematic and multisensory way. Students are encouraged to read widely, explore and analyse the work of literature – features of fiction, non-fiction and poetry.

### VISUAL ARTS

The curriculum under visual arts is designed to stimulate creativity and imagination among students and hone their artistic skills. Students get to experience various types of media, explore different kinds of art and their techniques. They learn the fundamentals of art and design, gain experience with tools, materials and techniques required for making the art, master the required concept and skills.

### 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.

### STORY TELLING

Storytelling is an extremely important component of Grade 4 curriculum. It is considered one of the most innate, humane and important form of classroom discourse and communication. Story telling sessions engages and encourages students to employ their predisposition to respond to story and use their narrative understanding as the primary meaning making tool. Students benefit from storytelling as it:

- Supports and promotes auditory processing skills and listening skills
- Introduces new vocabulary
- Expands visualization skills as children form pictures in their minds.
- Heightens sensory imaging as all senses are elicited: tasting, touching, smelling, hearing, and feeling.
- Brings order through use of thinking skills.
- Improves decision-making skills.
- Enhances memory and stretches attention spans.
- Encourages public speaking.
- Helps them empathise with different characters, events and settings.
- Makes connections and understandings between the past, present, and future.
- Strengthens writing skills as examine the structure of a story.

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