

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 get familiarized 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 Math uses the Concrete > Pictorial > Abstract approach that encourages the active thinking process, communication of mathematical ideas and problem solving. Students get a good amount of practice without too much repetition. Challenging word problems build thinking skills and help students apply Math in a variety of situations. The curriculum is designed in a spiral manner where concepts and skills are revisited in Grade IV and built upon to achieve greater depth and understanding.

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 overarching theme for Grade 4 Science is that students can find evidence of patterns and systems throughout the world. Each unit relates to energy transfer, as students begin to learn about the concept of energy in moving and colliding objects and the role it plays in large systems and then can apply that knowledge to information transfer. The Physical Science units focus on energy, energy transfer, electricity, magnetism and electromagnetism. The Life Sciences introduces the idea of patterns and systems we see in organism structure and how those structures function in information transfer. The units include adaptation and sense organs; particularly how human eyes work. The Earth Sciences focuses on natural resources, renewable and nonrenewable resources and natural disasters.

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

In Grade 4, Students will explore how the Earth's environment sustains all life, in a historical and geographical context. Within a historical frame, students are introduced to the evolution of ancient river valley civilizations and the role of the river in sustaining these civilizations. They delve deep into the first civilizations that flourished on the face of the Earth and examine how the environment played a fundamental role in shaping their spread and eventual decline. Students will expand their grasp of physical geography by closely examining the human-environment interactions in two continents located in the same latitudinal range - South America and Africa. They will develop their views on sustainability and the imperativeness of living an environmentally and socially sustainable life. In Civics, students investigate different types of governments and its role in the smooth functioning of a society.

### SECOND LANGUAGE – HINDI/KANNADA

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. They will be able to translate from English to Hindi and Hindi to English.

# 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 multi sensory way. Students are encouraged to read widely, explore and analyse the work of literature – features of fiction, non-fiction and poetry.



### COMPUTER SCIENCE

Students learn about computer memory and its classification. They use 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.

Students get an introduction to Scratch programming. They construct event based projects. They design storyboards and implement these in Scratch using loops and conditionals. They get familiar with problem solving strategies such as Divide and Conquer, Draw a Diagram, Work Backward, Guess and Check, etc.

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 Adobe Spark to create multimedia content.
- Use MS PowerPoint to create slideshows.
- Explore decision and loop structures using Scratch
- Introduce sounds and backdrops in Scratch.
- Construct dialogues in Scratch.
- Create interactive animations in Scratch.
- Build stories and simple games in Scratch.

#### VISUAL ARTS

The curriculum under visual arts is designed to develop creativity and imagination among students through observation and 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 Western art and Visual art terminology.

#### **Core learning:**

Representational skills through drawing and painting

Learn to explore and experiment with wet and dry media

Observe and translate through drawing

Use imagination to go beyond the obvious

#### Art and design Skills:

Traditional Visual Art & design skills include drawing, painting, mixed media, rendering, quilt making, wire work sculpture and basic clay-work

Visual Art terminology will be discussed with examples from elements and Principles of art and design

Through individual projects, the students get an opportunity to develop a visual language, which will further help them to compile a portfolio.

Classroom projects encourages collaborative work with a given context or theme.

Every session in Visual art works towards hands on making without hesitation and allowing failures as a way of learning.



# 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 engage and encourage 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 they 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.

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