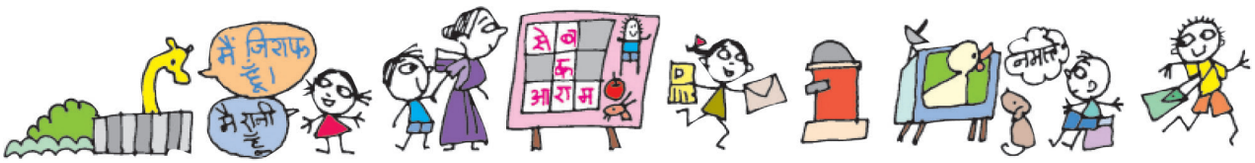
Class VI (English)

Suggested Pedagogical Processes	Learaning Outcomes
The learner may be provided opportunities in pairs/groups/ individually and encouraged to– • become familiar with songs/poems/prose in English through input-rich environment, interaction, classroom activities, discussion etc. • listen to English news(TV, Radio) as a resource to develop listening comprehension • watch/ listen to English movies, serials, educational channels with sub-titles, audio-video materials, talking books, teacher reading out from materials and to understand and respond • participate in individual talk viz. introducing oneself and other persons; participate in role play / make a speech, reproduce speeches of great speakers • summarise orally the stories, poems and events that he/she has read or heard • locate sequence of ideas, events and identify main idea of a story/poem through various types of comprehension questions • read different kinds of texts such as prose, poetry, play for understanding and appreciationand write answers for comprehension and inferential questions • raise questions based on their reading • interpret tables, charts, diagrams and maps and write a short paragraph • think critically and try to provide suggestion/ solutions to the problems raised • read/ discuss the ideas of the text for critical thinking • use dictionary as a reference book for finding multiple meanings of a wordin a variety of contexts • take dictation of words, phrases, simple sentences and short paragraphs • understand the use of antonym (impolite/ polite) synonym (big/large) and homonym (tail/tale)	**The learner–** • participates in activities in English like role play, group discussion, debate, etc. • recites and shares poems, songs, jokes, riddles, tongue twisters, etc. • responds to oral messages, telephonic communication in English and communicates them in English or home language. • responds to announcements and instructions made in class, school assembly, railway station and in other public places • reads a variety of texts in English / Braille and identifies main ideas, characters, sequence of ideas and events and relates with his/her personal experiences • reads to seek information from notice board, newspaper, Internet, tables, charts, diagrams and maps etc. • responds to a variety of questions on familiar and unfamiliar texts verbally and in writing • uses synonyms, antonyms appropriately deduces word meanings from clues in context while reading a variety of texts • writes words / phrases / simple sentences and short paragraphs as dictated by the teacher • uses meaningful sentences to describe / narrate factual / imaginary situations in speech and writing • refers to dictionary to check meaning and spelling, and to suggested websites for information • writes grammatically correct sentences for a variety of situations, using noun, pronoun, verb, adverb, determiners, etc. • drafts, revises and writes short paragraphs based on verbal, print and visual clues • writes coherently with focus on appropriate beginning, middle and end in English / Braille • writes messages, invitations, short paragraphs and letters (formal and informal) and with a sense of audience

• understand the grammatical forms in context/ through reading e.g. Noun, pronoun, verb, adverb, determiners, etc. • understand the context for various types of writing such as messages, notices, letters, report, biography, diary entry, travelogue etc. • draft, revise and write in English / Braille with punctuation andwith focus onappropriate beginning, middle and end • use ICT (Net, mobile, website, Youtube, TED talks etc) to browse for information, for projects/PPT etc. • look at cartoons/ pictures/comic strips with or without words, and talk/write about them • visit a language laboratory • write a Book Review.	• visits a language laboratory • writes a Book Review.



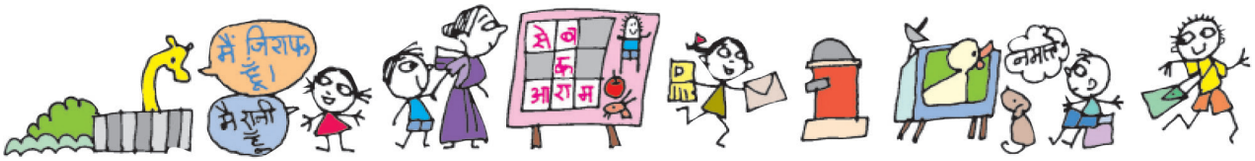
Class VI (Mathematics)

Suggested Pedagogical Processes	Learning Outcomes
The learner may be provided opportunities in pairs/groups/ individually and encouraged to — • encounter situations having numbers up to 8 digits, e.g., cost of property, total population of different towns, etc. • compare numbers through situations like cost of two houses, number of spectators, money transactions, etc. • classify numbers on the basis of their properties like even, odd, etc. • observe patterns that lead to divisibility by 2,3,4,5,6,8,10 and 11. • create number patterns through which HCF and LCM can be discussed • explore daily life situations to involve the use of HCF and LCM • create and discuss daily life situations involving the use of negative numbers • observe situations that require the representation by fractions and decimals • use different contexts in mathematics to appreciate the necessity of representing unknowns by variables (alphabet) • explore and generalise the need of using variables alphabets • describe situations involving the need for comparing quantities by taking ratio • discuss and solves word problems that use ratios and unitary method • explore various shapes through concrete models and pictures of different geometrical shapes like triangles and quadrilaterals, etc. • identify various geometrical figures and observe their characteristics in and outside the classroom environment either individually or in groups • make different shapes with the help of available materials like sticks, paper cutting, etc. • observe various models and nets of 3-Dimensional (3-D) shapes like cuboid, cylinder, etc. and discuss about the elements of 3-D figures such as faces, edges and vertices	**The learner —** • solves problems involving large numbers by applying appropriate operations (addition, subtraction, multiplication and division) • recognises and appreciates (through patterns) the broad classification of numbers as even, odd, prime, co-prime, etc. • applies HCF or LCM in a particular situation • solves problem involving addition and subtraction of integers. • uses fractions and decimals in different situations which involve money, length, temperature etc. For example, 7½ metres of cloth. distance between two places is 112.5 km etc. • solves problems on daily life situations involving addition and subtraction of fractions / decimals • uses variable with different operations to generalise a given situation. e.g., Perimeter of a rectangle with sides x units and 3 units is 2(x+3) units • compares quantities using ratios in different situations. e.g., the ratio of girls to boys in a particular class in 3:2 • uses unitary method in solving various word problems. For example, if the cost of a dozen notebooks is given she finds the cost of 7 notebooks by first finding the cost of 1 notebook • describes geometrical ideas like line, line segment, open and closed figures, angle, triangle, quadrilateral, circle, etc., with the help of examples in surroundings • demonstrates an understanding of angles by – identifying examples of angles in the surroundings – classifying angles according to their measure – estimating the measure of angles using 45°, 90°, and 180° as reference angles • demonstrates an understanding of line symmetry by – identifying symmetrical 2-Dimensional (2-D) shapes which are symmetrical along one or more lines

• share the concept of angles through some examples like opening the door, opening the pencil box, etc. Students can be asked to give more such examples from the surroundings • classify angles based on the amount of rotation	– creating symmetrical 2-D shapes • classifies triangles into different groups/ types on the basis of their angles and sides. For example- scalene, isosceles or equilateral on the basis of sides, etc. • classifies quadrilaterals into different groups/types on the basis of their sides/ angles • identifies various (3-D) objects like sphere, cube, cuboid, cylinder, cone from the surroundings • describes and provides examples of edges, vertices and faces of 3-D objects • finds out the perimeter and area of rectangular objects in the surroundings like floor of the class room, surfaces of a chalk box etc. • arranges given/collected information such as expenditure on different items in a family in the last six months, in the form of table, pictograph and bar graph and interprets them.

कक्षा VI (हिंदी)

सीखने-सिखाने की प्रक्रिया	सीखने के प्रतिफल (Learning Outcomes)
सभी शिक्षार्थियों (भिन्न रूप से सक्षम बच्चों सहित) को व्यक्तिगत, सामूहिक रूप से कार्य करने के अवसर और प्रोत्साहन दिया जाए ताकि उन्हें– • अपनी भाषा में बातचीत तथा चर्चा करने के अवसर हों। • प्रयोग की जाने वाली भाषा की बारीकियों पर चर्चा के अवसर हों। • सक्रिय और जागरूक बनाने वाली रचनाएँ, अखबार, पत्रिकाएँ, फ़िल्म और ऑडियो-वीडियो सामग्री को देखने, सुनने, पढ़ने, लिखने और चर्चा करने के अवसर उपलब्ध हों। • समूह में कार्य करने और एक-दूसरे के कार्यों पर चर्चा करने, राय लेने-देने, प्रश्न करने की स्वतंत्रता हो। • हिंदी के साथ-साथ अपनी भाषा की सामग्री पढ़ने-लिखने की सुविधा (ब्रेल/ सांकेतिक रूप में भी) और उन पर बातचीत की आज़ादी हो। • अपने परिवेश, समय और समाज से संबंधित रचनाओं को पढ़ने और उन पर चर्चा करने के अवसर हों। • अपनी भाषा गढ़ते हुए लिखने संबंधी गतिविधियाँ आयोजित हों, जैसे–शब्द खेल। • हिंदी भाषा में संदर्भ के अनुसार भाषा विश्लेषण (व्याकरण, वाक्य संरचना, विराम चिह्न आदि) करने के अवसर हों। • कल्पनाशीलता और सृजनशीलता को विकसित करने वाली गतिविधियों, जैसे– अभिनय, रोल-प्ले, कविता, पाठ, सृजनात्मक लेखन, विभिन्न स्थितियों में संवाद आदि के आयोजन हों और उनकी तैयारी से संबंधित स्क्रिप्ट लेखन और रिपोर्ट लेखन के अवसर हों। • साहित्य और साहित्यिक तत्वों की समझ बढ़ाने के अवसर हों। • शब्दकोश का प्रयोग करने के लिए प्रोत्साहन एवं सुलभ परिवेश हो। • सांस्कृतिक महत्त्व के अवसरों पर अवसरानुकूल लोकगीतों का संग्रह करने, उनकी गीतमय प्रस्तुति देने के अवसर हों।	**बच्चे–** • विभिन्न प्रकार की ध्वनियों (जैसे– बारिश, हवा, रेल, बस, फेरीवाला आदि) को सुनने के अनुभव, किसी वस्तु के स्वाद आदि के अनुभव को अपने ढंग से मौखिक/सांकेतिक भाषा में प्रस्तुत करते हैं। • सुनी, देखी गई बातों, जैसे– स्थानीय सामाजिक घटनाओं, कार्यक्रमों और गतिविधियों पर बेझिझक बात करते हैं और प्रश्न करते हैं। • देखी, सुनी रचनाओं/घटनाओं/मुद्दों पर बातचीत को अपने ढंग से आगे बढ़ाते हैं, जैसे– किसी कहानी को आगे बढ़ाना। • रेडियो, टी.वी., अखबार, इंटरनेट में देखी/सुनी गई खबरों को अपने शब्दों में कहते हैं। • विभिन्न अवसरों/संदर्भों में कही जा रही दूसरों की बातों को अपने ढंग से बताते हैं, जैसे– आँखों से न देख पाने वाले साथी का यात्रा-अनुभव। • अपने परिवेश में मौजूद लोककथाओं और लोकगीतों के बारे में जानते हुए चर्चा करते हैं। • अपने से भिन्न भाषा, खान-पान, रहन-सहन संबंधी विविधताओं पर बातचीत करते हैं। • सरसरी तौर पर किसी पाठ्यवस्तु को पढ़कर उसकी विषयवस्तु का अनुमान लगाते हैं। • किसी पाठ्यवस्तु की बारीकी से जाँच करते हुए उसमें किसी विशेष बिंदु को खोजते हैं, अनुमान लगाते हैं, निष्कर्ष निकालते हैं। • हिंदी भाषा में विभिन्न प्रकार की सामग्री (समाचार, पत्र-पत्रिका, कहानी, जानकारीपरक सामग्री, इंटरनेट पर प्रकाशित होने वाली सामग्री आदि) को समझकर पढ़ते हैं और उसमें अपनी पसंद-नापसंद, राय, टिप्पणी देते हैं। • भाषा की बारीकियों/व्यवस्था/ढंग पर ध्यान देते हुए उसकी सराहना करते हैं, जैसे– कविता में लय-तुक, वर्ण-आवृत्ति (छंद) तथा कहानी, निबंध में मुहावरे, लोकोक्ति आदि। • विभिन्न विधाओं में लिखी गई साहित्यिक सामग्री को उपयुक्त उतार-चढ़ाव और सही गति के साथ पढ़ते हैं। • हिंदी भाषा में विविध प्रकार की रचनाओं को पढ़ते हैं। • नए शब्दों के प्रति जिज्ञासा व्यक्त करते हैं और उनके अर्थ समझने के लिए शब्दकोश का प्रयोग करते हैं।

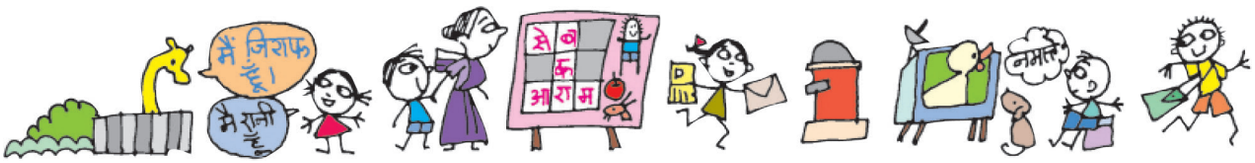


	• विविध कलाओं, जैसे– हस्तकला, वास्तुकला, खेती-बाड़ी, नृत्यकला आदि से जुड़ी सामग्री में प्रयुक्त भाषा के प्रति जिज्ञासा व्यक्त करते हुए उसकी सराहना करते हैं। • दूसरों के द्वारा अभिव्यक्त अनुभवों को ज़रूरत के अनुसार लिखना, जैसे– सार्वजनिक स्थानों (जैसे– चौराहों, नलों, बस अड्डे आदि) पर सुनी गई बातों को लिखना। • हिंदी भाषा में विभिन्न प्रकार की सामग्री (समाचार, पत्र-पत्रिका, कहानी, जानकारी परक सामग्री, इंटरनेट पर प्रकाशित होने वाली सामग्री आदि) को समझकर-पढ़ते हैं और उसमें अपनी पसंद-नापसंद, टिप्पणी को लिखित या ब्रेल भाषा में व्यक्त करते हैं। • विभिन्न विषयों, उद्देश्यों के लिए उपयुक्त विराम-चह्नों का उपयोग करते हुए लिखते हैं। • विभिन्न अवसरों/संदर्भों में कही जा रही दूसरों की बातों को अपने ढंग से लिखते हैं। • विभिन्न संदर्भों में विभिन्न उद्देश्यों के लिए लिखते समय शब्दों, वाक्य संरचनाओं, मुहावरे आदि का उचित प्रयोग करते हैं।

Class VI (Social Sciences)

Suggested Pedagogical Processes	Learning Outcomes
The learner be provided opportunities in pairs/groups/ individually and encouraged to — • use diagrams, models and audio-visual materials to understand motions of the earth. • observe stars, planets, satellite (Moon), eclipse under the guidance of parents/ teacher/elders, etc. to understand astronomical phenomena. • use globe for understanding latitudes and longitudes. • use diagrams for understanding lithosphere, hydrosphere, atmosphere and biosphere. • explore maps for locating continents, oceans, seas, States/UTs of India, India and its neighbouring countries, physical feature of India such as mountains, plateaus, plains, deserts, rivers, etc. • discuss myths linked to eclipses. • use pictures, drawings of different types of sources to read, explain, discuss these to understand how historians have interpreted these to reconstruct history of ancient India. • undertake map activity: for locating important places, sites of hunter-gatherers; food producers, Harappan civilisation, *janapadas*, *mahajanapadas*, empires, places related to events in the life of the Buddha and Mahavira; centres of art and architecture-areas outside India with which India had contacts. • explore epics, *Ramayana*, *Mahabharata*, *Silappadikaram*, Manimekalai or some important works by Kalidas etc. • discuss basic ideas and central values of Buddhism, Jainism and other systems of thought– relevance of their teachings today– development of art and architecture in ancient India– India's contribution in the area of culture and science. • role play on various historical themes like change of Ashoka after Kalinga War–one of the events, incidents from literary works of the time etc.	**The learner —** • distinguishes between stars, planets and satellites e.g., Sun, Earth and Moon • recognises that the earth is a unique celestial body due to existence of life, zones of the earth with special reference to biosphere • demonstrates day and night; and seasons • locates directions on the flat surface; and continents and oceans on the world map • identifies latitudes and longitudes, e.g., poles, equator, tropics, States/UTs of India and other neighbouring countries on globe and the world map • locates physical features of India such as– mountains, plateaus, plains, rivers, desert ,etc. on the map of India • draws a neighbourhood map showing scale, direction, and features with the help of conventional symbols • examines critically the superstitions related to eclipses • identifies different types of sources (archaeological, literary etc.) and describes their use in reconstruction of history of this period. • locates important historical sites, places on an outline map of India • recognises distinctive features of early human cultures and explains their growth • lists out significant contributions of important kingdoms, dynasties with examples viz., Ashokan inscriptions, Gupta coins, Ratha temples by Pallavas etc. • explains broad developments during the ancient period, e.g., hunting–gathering stage, the beginning of agriculture, the first cities on the Indus etc. and relates the developments occuring in one place with another • describes issues, events, personalities mentioned in literary works of the time • describes the implications of India's contacts with regions outside India in the fields of religion, art, architecture, etc.

• undertake projects on the evolution of state-working of *ganas* or *sanghas*– contributions of kingdoms, dynasties in the field of culture– India's contact with areas outside India highlighting the impact of these contacts and classroom discussion on projects • visit museums to see the material remains of early human settlements– Harappan and discuss the continuity and change between these cultures • participate in discussions on the concepts of diversity, discrimination, government, and livelihood. • observe examples of fair/unfair treatments to people meted out in the family, school, society, etc. • study from the text and directally observe of functioning of a *Gram Panchayat* or a municipality/corporation (according to the place a student lives) • understand the role of governance in society, and the difference between affairs of a family and those of a village/city. • describe case studies of nearby localities/ villages in respect of occupations.	• outlines India's significant contributions in culture and science viz. astronomy, medicine, mathematics, and knowledge of metals, etc. • synthesises information related to various historical developments • analyses basic ideas and values of various religions and systems of thought during ancient period • describes various forms of human diversity around her/him. • develops a healthy attitude towards various kinds of diversity around her/him • recognises various forms of discrimination and understands the nature and sources of discrimination. • differentiates between equality and inequality in various forms to treat them in a healthy way • describes the role of government, especially at the local level. • identifies various levels of the government— local, state and union • describes the functioning of rural and urban local government bodies in sectors like health and education • describes factors responsible for availability of different occupations undertaken in rural and urban areas.



Class VI (Science)

Suggested Pedagogical Processes	Learning Outcomes
The learner is to be provided with opportunities in pairs/groups/ individually in an inclusive setup and encouraged to— • explore surroundings, natural processes, phenomena using senses viz. seeing, touching, tasting, smelling, hearing • pose questions and find answers through reflection, discussion, designing and performing appropriate activities, role plays, debates, use of ICT, etc. • record the observations during the activity, experiments, surveys, field trips, etc. • analyse recorded data, interpret results and draw inference/ make generalisations and share findings with peers and adults • exhibit creativity presenting novel ideas, new designs/patterns, improvisation, etc. • internalise, acquire and appreciate values such as cooperation, collaboration, honest reporting, judicious use of resources, etc.	**The learner—** • identifies materials and organisms, such as, plant fibres, flowers, on the basis of observable features, i.e., appearance, texture, function, aroma, etc. • differentiates materials and organisms, such as, fibre and yarn; tap and fibrous roots; electrical conductors and insulators; on the basis of their properties, structure and functions • classifies materials, organisms and processes based on observable properties, e.g., materials as soluble, insoluble, transparent, translucent and opaque; changes as can be reversed and cannot be reversed; plants as herbs, shrubs, trees, creeper, climbers; components of habitat as biotic and abiotic; motion as rectilinear, circular, periodic etc. • conducts simple investigations to seek answers to queries, e.g., What are the food nutrients present in animal fodder? Can all physical changes be reversed? Does a freely suspended magnet align in a particular direction? • conducts simple investigations to seek answers to queries, e.g., What are the food nutrients present in animal fodder? Can all physical changes be reversed? Does a freely suspended magnet align in a particular direction? • relates processes and phenomenon with causes, e.g., deficiency diseases with diet; adaptations of animals and plants with their habitats; quality of air with pollutants, etc. • explains processes and phenomenon, e.g., processing of plant fibres; movements in plants and animals; formation of shadows; reflection of light from plane mirror; variations in composition of air; preparation of vermicompost, etc. • measures physical quantities and expresses in SI units, e.g., length • draws labelled diagrams / flow charts of organisms and processes, e.g., parts of flowers; joints; filtration; water cycle, etc.

	• constructs models using materials from surroundings and explains their working, e.g., pinhole camera, periscope, electric torch, etc. • applies learning of scientific concepts in day-to-day life,e.g., selecting food items for a balanced diet; separating materials; selecting season appropriate fabrics; using compass needle for finding directions; suggesting ways to cope with heavy rain/ drought, etc. • makes efforts to protect environment, e.g., minimising wastage of food, water, electricity and generation of waste; spreading awareness to adopt rain water harvesting; care for plants, etc. • exhibits creativity in designing, planning, making use of available resources, etc. • exhibits values of honesty, objectivity, cooperation, freedom from fear and prejudices.