redbricks | school

Semester Overview

Class: 10		March 2020 – July 2021
Subject	Name of Units/Chapter	Skills
ENGLISH	SHORT STORIES: Short Story: All Summer in a Day POEMS: Poem: Abou Ben Adhem English Language Letter Writing - Formal & Informal Narrative Writing Argumentative Writing	Reading and viewing: Read fluently and demonstrate comprehension and interpretation of a range of grade-appropriate literary texts, writing techniques and specialized language, including literature from modern and ancient cultures, short stories, novels, non-fiction and instructional material, reports and articles, advertising and promotional materials, authentic texts, poems and plays in a variety of forms Select and use various strategies before reading and viewing to develop understanding of text, including setting a purpose, accessing prior knowledge to make and share connections, making predictions, asking questions, previewing texts Select and use various strategies during reading and viewing to construct, monitor, and confirm meaning, including predicting, making connections, asking and answering questions, making inferences and drawing conclusions, figuring out unknown words, reading selectively, determining the importance of ideas/events, summarizing and synthesizing, identifying facts, opinions and writers'/narrator's/characters' bias Select and use various strategies after reading and viewing to confirm

- and extend meaning, including making inferences and drawing conclusions, reflecting and responding, using graphic organizers to record information and summarizing and synthesizing
- Identify how structures and features of text work to develop meaning, including form, function, and genre of text (e.g., brochure about smoking to inform students; genre is persuasive) 'text features' (e.g., copyright, table of contents, headings, index, glossary, sidebars, hyperlink, diagrams, pull-quotes) literary elements (e.g., characterization. mood. setting. viewpoint, foreshadowing, conflict. protagonist, antagonist, theme. descriptions) non-fiction elements (e.g., topic sentence, development of ideas with supporting details, central idea. evidence or example, explanation) literary devices (e.g., onomatopoeia, imagery, simile. metaphor, symbolism, personification and other figures of speech) idiomatic expressions

Writing:

- Write a variety of clear personal, formal, instructional, persuasive, argumentative, imaginative and visual representations that demonstrate connections to experiences, ideas, opinions and visual clues
- Clearly develop ideas, mood and setting by using effective supporting details, explanations, analysis, insights and sensory details
- Demonstrate sentence fluency through strong, well-constructed sentences that demonstrate a variety of lengths and patterns, with an increasingly fluid style, rhythm and flow

- Demonstrate effective word choice through the use of precise nouns, verbs, adjectives and modifiers, purposeful use of figurative and sensory language with increasing sophistication
- Demonstrate the effective use of tone and voice (first person, second person, omniscient narrator etc.) to suit the purpose and audience
- Use a format and/or organisation that is meaningful, logical, effective and appropriate to the purpose and audience with an appropriate beginning (e.g. salutation in a letter, address, indentation etc.) middle (subject line, paragraphing etc.) and ending (closing etc.)
- Demonstrate effective control over all aspects of coherence and cohesion (cohesive devices, referencing, substitution, sequence markers, establishing logical relationships, conjunctions, connectives etc.)
- Select and use various strategies before writing and representing, including establishing a purpose, identifying an audience, genre, and form and generating, selecting, developing, and organizing ideas from personal interest, prompts, texts, and/or research
- Select and use various strategies during writing and representing to express and refine thoughts, including analysing models of literature accessing multiple sources information consulting reference materials considering and applying feedback from discussions to revise ideas, organization, voice, word choice, and sentence fluency revising and editing
- Select and use various strategies after writing and representing to

- improve their work, including checking their work against established criteria revising to enhance writing traits (e.g., ideas, sentence fluency, word choice, voice, organization) editing for conventions (e.g., grammar and usage, capitalization, punctuation, spelling
- Use writing and representing to critique, express personal responses and relevant opinions, and respond to experiences and texts Write short pieces of continuous prose in response to questions by developing explanations, analysing the relationships in ideas and information, making generalizations, speculating about alternative viewpoints, providing supporting evidence and presenting personal opinions
- Use the features and conventions of express language accurately to meaning in writing and representing, including complete simple, compound, and complex sentences subordinate independent clauses correct subject-verb and pronoun agreement in sentences with compound subjects and effective use correct conventional punctuation Canadian spelling for familiar and frequently used words spelling unfamiliar words by applying strategies (e.g., phonic knowledge, use of common spelling patterns, dictionaries, thesaurus) legible writing appropriate to context and purpose

Grammar and Vocabulary:

- Identify and explain how syntactic and structural features convey meaning
- Use tenses (simple, continuous, perfect and perfect continuous) accurately to convey time and sequence of events

		 Use pronouns, referencing and substitution accurately to indicate clear relationships within and between sentence Identify and use a wide range of simple, compound and complex sentences with flexibility and accuracy to suit the purpose and format of the text Explore and use varied sentence structures to convey the same meaning Use punctuation and other structural clues to infer and convey meaning Select and use words (verbs, noun phrases, adjectives and adjective phrases, adverbs, modifiers) to convey precise meaning, nuances, intensity, mood, attitude, register, tone and opinion Identify and use synonyms and paraphrase effectively Identify and record how descriptive language is used in texts to convey meaning Use a wide range of vocabulary, including phrasal verbs and idiomatic expressions fluently and flexibly to convey precise meaning Demonstrate an awareness of style and collocation Demonstrate full control over spelling and word formation
HINDI	Chapter 6: Soor ke pad (Sahitya Sagar Padya bhag) Chapter 7: Vinay ke pad (Sahitya Sagar Padya bhag) Chapter 9: Chapter 9: Chalna hamara kaam he	 Reading and Comprehending Dictionary skills Listen critically to understand Asking questions to clarify meaning Discussion on main points of the story Writing short notes Develop understanding for different words Paragraph writing Understanding poetry

	Chapter 9: bhede aur bhediye Chapter 10: Do kalakar	 Essay writing Understanding the gist of poetry Understanding characters Descriptive writing Picture writing Writing character sketch Writing long answers Writing central idea Logical understanding Understanding proverbs Story writing Letter writing Unseen passage Sentence structure Synonyms Antonyms Noun and Pronoun Adjectives Proverbs and Idioms Tenses Correct use of karak chinha Reasoning, recalling
MATHS	Unit 1: Commercial Mathematics Chapter 1: GST Chapter 2: Banking	 Calculate tax including problems involving discounts, list price, profit, loss and cost price Calculate interest and maturity value of recurring deposit account using formula
	Unit 2: Algebra Chapter 4: Linear equations in one variable Chapter 5: Quadratic Equations Chapter 6: Ratio and Proportion Chapter 7: Factor Theorem-Factorization Chapter 8: Matrices	 Solve Linear inequation algebraically and writing the solution in set notation form Represent the solution on the number line Solve Quadratic equation by Factorisation, using formula Solve real life problems using this tool Find the nature of the roots using discriminant Apply the properties like componendo, dividendo, alternendo, invertendo and their combinations to solve problems

	Unit 5: Trigonometry Chapter 16: Trigonometrical Identities Chapter 17:Heights and	 Solve direct applications on proportions only Understand Factor/ Remainder Theorem Apply Factor/ Remainder Theorem to factorise an algebraic expression Explain different types of matrices Perform addition/subtraction/multiplication operations on matrices Solve/Prove simple algebraic trigonometric expressions using identities Solve 2-D problems involving angles of
	Unit 6: Statistics Chapter 18: Arithmetic Mean, Median, Mode and Quartiles Chapter 19: Histogram and Ogive Chapter 20: Probability	elevation and depression using/without using trigonometric tables. • Effectively display the information in data sets graphically in the form of a histogram and less than Ogive • Describe different ways to represent a data like mean, mode and median • Describe/apply the formulas to calculate mean, mode and median • Find mode from histogram and quartiles and median from ogive • Understand the difference between a certain and random event • Solve simple problems on single events using the formula of probability
PHYSICS	Unit 1: Force, Work, Power and Energy Chapter 1: Force Chapter 2: Work, Energy and Power Chapter 3: Machines	 Explain turning effect of force and apply it in real life applications Verify the principle of moment of force Find centre of gravity of regular/irregular bodies Observe uniform circular motion in surrounding Solve numerical problems on work, power and energy Describe different forms of energy in nature Describe machines as force multiplier,

	Unit 2: Light Chapter 4: Refraction of Light at plane Surfaces Chapter 5: Refraction through a lens	 in changing direction of the efforts Calculate mechanical advantage and velocity ratio of different types of simple machines Describe different types of pulley systems State laws of refraction Solve simple numerical problems based on speed, wavelength and frequency Find refractive index of given media Describe refraction through a glass prism Describe total internal reflection as a phenomenon Compare total internal reflection from a prism and reflection from a prism and reflection from a plane mirror. Experimentally verify refraction through a glass slab. Draw ray diagrams Describe action of a lens as a set of prism Formation of images with the help of ray diagrams Solve numerical problems using lens formula Explain the applications of lenses in real life
CHEMISTRY	Chapter 1: Periodic table and variations of properties Chapter 2: Chemical bonding	 Develop scientific method of thinking Develop the ability to synthesize, separate and characterize elements Develop the ability to accurately interpret numerical data Differentiate between periodic properties and variation of properties in a periodic table Compare relation between atomic number for light elements and atomic mass for light elements Understand new terms Draw structure of various compounds
	Chemical bonding	 Draw structure of various compounds Compare electrovalent, covalent and

	Chapter 3: Acid, Bases and salts	 coordinate bonds Understand characteristic properties of electrovalent and covalent compounds Differentiate between acids and bases given a chemical formula or property Compare and contrast acids and bases in terms of pH, electrolytes, hydrogen ion concentration, taste, and reactivity with metals Identify pH range of a solution based on indicator color (Table M) Recognize alternate acid-base theories (acids are proton donors, bases are proton acceptors) Explain the relationship between pH and hydrogen ion concentration Complete neutralization equations given reactants Identify and prepare different kinds of acids, bases and salts given neutralization equations Identify different types of salts
	Chapter 4: Analytic Chemistry	 Perform chemical tests to identify cations and anions. Solve problems based on chemical reactions
	Chapter 5: Mole concept and Stoichiometry	Develop the ability to accurately interpret numerical data
	Chapter 6: Electrolysis	Understand new termsUnderstand application of electrolysis
BIOLOGY	Chapter 8: The Circulatory System	 List Components of blood Differentiate between blood, tissue fluid and lymph Explain the adaptations in RBCs to increase their efficiency Explain the process of blood coagulation

and capillary Explain the compatibility of ABC blood groups and Rh factor Explain the physiology of blood circulation in human body Identify systole and diastole phase through changes and diagrams Name main blood vessels Examine blood smear under of microscope Chapter 9: The Excretory System Explain and draw external and internal structure of the kidney Label parts of the excretory system along with the blood vessels entering and leaving it Draw diagrams of various parts of excretory system with correct labelling and function of each part Draw and label structure of a kidney tubule nephron Explain the steps involved in urine formation ultra filtration, selective re-absorption and tubular secretion in relation to the composition of blood plasma and urine formed Identify and label various parts of the external structure of the brain and state their functions Diagrammatically explain reflex are showing the pathway from receptor to effector Differentiate between acquired and natural reflex Label the diagrams of eye and ear and state functions of various parts Explain the course of perception of sound in human ear	Chapter 9: The Excretory System Chapter 10: The Nervous System Chapter 9: The Excretory System and draw external and internal structure of the kidney Chapter 4: Chapter 9: The Excretory System and Internal Structure of the kidney Chapter 4: Chapter 9: The Excretory System Chapter 9: The Kidney Chapter 4: The Kidney Chapter 4: The Kidney Chapter 9: The		
 Identify and label various parts of the external structure of the brain and state their functions Diagrammatically explain reflex arc showing the pathway from receptor to effector Differentiate between acquired and natural reflex Label the diagrams of eye and ear and state functions of various parts Explain the course of perception of sound in human ear 	 Identify and label various parts of the external structure of the brain and state their functions Diagrammatically explain reflex arc, showing the pathway from receptor to effector Differentiate between acquired and natural reflex Label the diagrams of eye and ear 	I	 explain the compatibility of ABO blood groups and Rh factor explain the physiology of blood circulation in human body Identify systole and diastole phase through changes and diagrams Name main blood vessels examine blood smear under a microscope Explain and draw external and internal structure of the kidney Label parts of the excretory system along with the blood vessels entering and leaving it Draw diagrams of various parts of excretory system with correct labelling and function of each part Draw and label structure of a kidney tubule nephron explain the steps involved in urine formation- ultra filtration, selective re-absorption and tubular secretion in relation to the composition of blood
Chapter 11: • Appreciate the role of ear in	 Explain the course of perception of 	The Nervous System	 external structure of the brain and state their functions Diagrammatically explain reflex arc, showing the pathway from receptor to effector Differentiate between acquired and natural reflex Label the diagrams of eye and ear and state functions of various parts Explain the course of perception of sound in human ear

	Chapter 12: The Endocrine System	 Locate various endocrine glands in human body Draw the shape of various endocrine glands Enlist the hormones secreted by different glands along with their functions Explain the effects of hypo secretion and hyper secretion of different hormones Appreciate the feedback mechanism of endocrine glands
	Chapter 13: The Reproductive System	 Understand the developmental process of foetus to a fully grown baby Understand the reasons for identical and fraternal twins Draw well labelled diagrams of male and female reproductive system Explain the functions of different reproductive organs in male and female body Draw labelled diagram of sperm and egg cell Understand the functions of different parts of sperm and egg Understand the development of secondary sexual characteristics in their own body as well in the body of opposite sex and appreciate the changes Sequence the process of fertilization, implantation, gestation and parturition
HISTORY	Unit 1: The Indian National Movement (1857-1917) 1. The First War of Independence (1857) 2. Factors leading to the Growth of Nationalism and Foundation of the Indian National	 To find out various causes of Revolt of 1857 To know about various events of the war Analysis the nature, the result and impact of the war Discuss the importance of social reform movements during the 19th and 20th century raising awareness about prevalent social practices.

Congress Analyze the impact of the reform 3. Objective and movement on the Indian society. nationalism Methods of Struggle Define and identify of the Early factors giving rise to nationalism Nationalists • State the objective of the Indian 4. Second Phase of the National Congress Indian National • Discuss and comprehend the demands Movement: Partition of the moderates Appreciate the ideas of Nationalism of Bengal and other developments and Swadeshi 5. Factors leading to the • Identify the significance of the Home Formation of the Role Movement Muslim League Appreciate Gandhiji's contribution to Unit 2: the freedom struggle Mass Phase of the • recognize the impact of the Rowlatt National Movement Act and the Jalianwala Bagh Massacre on the freedom movement (1915-1947)Describe the Non-Cooperation the Civil disobedience National Movement: Movement. 1919-1934 Movement, the demand for Purna Swaraj and the Quit India Movement (Non-Cooperation Movement, Civil Discuss the impact of the mass Disobedience movements. Movement and other Analyze the objectives of Forward Forces at Work) Bloc and the INA Examine the various clauses of the 2. The Cripps Mission and the Quit India Independence Act Movement 3. Subhash Chandra Bose, Forward Block and the Indian National Army (INA) 4. Independence and the Partition of India **CIVICS** Unit 1: To understand the importance of the The Union Legislature legislature The Union Parliament To find the functions and powers of the Parliament of India To know the law making procedure; analyze how the Parliament controls the executive; and how the Parliament regulates itself

	Unit 2: The Union Executive 1. The Union Executive: The President and the Vice-President 2. The Union Executive: The Prime Minister, The Union Cabinet and the Council of Ministers.	 Discuss the qualifications, tenure, powers and functions and position of the President of India Discuss the powers and functions of the Vice-President India Describe the Union Council of Ministers, its composition and powers and functions Explain the powers and functions of the Prime Minister of India
GEOGRAPHY	Part I- Map Work Chapter 1: Interpretation of Topographical Maps	 Locate features with the help of a four figure or a six figure grid reference. Interpret the conventional symbols used on a topographical survey of India map Identify various natural and manmade features Identify different types of scale given on the map Measure distances and calculating area using the scale given therein Mark directions between different locations, using eight cardinal points. Identify settlement pattern, drainage pattern
	Chapter 2: Location, Extent and Physical Features (Map only) Part II- Geography of India Chapter 3: The Climate of India Chapter 4: Soils in India	 Locate, mark and name the geographical elements on the outline map of India Analyse various factors affecting the climate of India Compare different seasons of India Demonstrate mechanism of monsoon with the help of map Categorize types of soil based on its colour, texture, presence of minerals Relate different horizon of the soil with its fertility

	Chapter 6: Natural Vegetation of India Chapter 7: Water Resources Chapter 8: Mineral Resources Chapter 9: Conventional sources of energy Chapter 9: Non -conventional sources	 Assess types, causes and effects of soil erosion Explain different types of forests Describe the importance of forests Suggest different ways to conserve forest Enlist different sources of freshwater Differentiate between surface water and groundwater Analyse the reason for conservation of water and conservation practices (rainwater harvesting and its importance) Compare traditional and modern methods of irrigation Types of minerals: uses and distribution Conventional and non-conventional sources of energy: features, distribution, advantages and disadvantages.
COMPUTER	of energy	
APPLICATIONS	Chapter 2: History and development of Java	Features and working of javaLibraries and keywords used in java
	Chapter 3: Concept of data types in java	 Understanding tokens and data types used in java Type conversion and precedence of operators
	Chapter 4: Operators and Expressions in Java Chapter 5: General programming and decision making in java	 Types of operators Packages used for mathematical functions Input the data at command line by two methods

	 Decision making statements- if else and switch case Concept of fall through, break statement and continue statement Nested statements Scope of variable, testing and debugging Types of errors that can occur in programming
Chapter 6: Iteration through loops	 Fixed iterations- for loops and nested for loops Unfixed iterations- while loop and do-while loops Use of break and continue statements in while
Chapter 10: Basic Input/Output	 Use of scanner class How to read tokens from scanner class and methods used in scanner class Use of print writer class
Chapter 11: User defined function	 Creating User defined function Types of functions Pass by value and Pass by reference Actual and Formal parameters Pure function and Impure function Function Overloading. Recursive function
Chapter 12: Array	 Definition of an array. Types of array Declaration, Initialization and accepting data from a single dimensional array. Accessing the elements of single dimensional array

Paper 1: Still Life ART • Composition Perspective • 3D shapes Space and formation Object collected Proportion from campus Imagination Different objects Visualization composition Association of ideas • Creative and critical imagination Paper 4: Applied Art Poster making Illustration Book jacket • Knowledge of mediums designing Advert making • Logo designing and its stationary

Card designWrapper design