



SVKM J. V. Parekh International School

Academic Portion to be covered for the 1<sup>st</sup> term of the session 2019-20

Grade - IV

**ENGLISH**

Strands	Learning Expectations (CAIE CPP expectations)	Learning Experiences
Reading	<ul style="list-style-type: none"> <li>• Skim read to gain an overall sense of a text and scan for specific information.</li> <li>• Read widely and explore the features of different fiction genres.</li> <li>• Consider how a writer expresses his own point of view, e.g. how characters are presented.</li> <li>• Comment on a writer’s use of language and explain reasons for writer’s choices.</li> <li>• Identify unfamiliar words, explore definitions and use new words in context.</li>   <li>• Read and perform narrative poems.</li> <li>• Read poems by significant poets and compare style, forms and themes.</li> <li>• Investigate the origin and appropriate use of idiomatic phrases.</li> <li>• Begin to interpret imagery and techniques, e.g. metaphor, personification, simile, adding to understanding beyond the literal.</li> <li>• Discuss metaphorical expressions and figures of speech.</li> <li>• Comment on a writer’s use of language and explain reasons for writer’s choices.</li> </ul>	<p><b>Children will explore</b></p> <ul style="list-style-type: none"> <li>• <b>Descriptive Writing-</b> Understand and experiment with usage of descriptive vocabulary to create a vivid picture in the reader’s mind.</li> <li>• <b>Traditional Tales-</b> (Folk tales, Fairy tales and fables) understand the features, style of writing and how it depicts the culture of an era or a region. They will also analyze the point of view character in the story.</li> <li>• <b>Adventure and Mystery stories</b> Identify their key features and search for words that represent a specific idea in the story.</li> <li>• <b>Reader- <i>The Enchanted Horse</i></b> - Discuss and analyze the theme, characters and story elements, predict what happens next at every interval and learn new vocabulary.</li>   <li>• <b>Read and recite poems</b> giving characters of the poem a tone of voice. <ul style="list-style-type: none"> <li>➤ Recite poems as choral reading.</li> <li>➤ Discuss how moods and feelings have been created by poets by using imagery and figurative language.</li> </ul> </li> <li>• <b>Figurative Language –</b> <ul style="list-style-type: none"> <li>➤ Understand the difference between similes, onomatopoeias, metaphor and personification and solve variety of exercises based on them.</li> <li>➤ Apply imagery techniques while writing descriptions, poems, stories and play scripts.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Begin to interpret imagery and techniques, e.g. metaphor, personification, simile, adding to understanding beyond the literal.</li> <li>• Understand conventions of Standard English, e.g. agreement of verbs.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Tenses- Simple Present, Past and Future tense –</b> <ul style="list-style-type: none"> <li>➤ Understand the impact of the tenses on verbs (Subject and verb agreement)</li> <li>➤ verbal and written exercises based on identification, usage, maintaining continuity in one tense and conversion from one tense into another.</li> </ul> </li> </ul>
<p><b>Writing</b></p>	<ul style="list-style-type: none"> <li>• Map out writing to plan structure, e.g. paragraphs, sections, chapters.</li> <li>• Use imagery and figurative language to evoke imaginative response</li> <li>• Maintain a consistent viewpoint when writing.</li> <li>• Use a more specialized vocabulary to match the topic.</li> <li>• Recognize a range of less common letter strings in words which maybe pronounced differently.</li> <li>• Evaluate own and others writing.</li> <li>• Use dictionaries efficiently and carry out ICT spell checks.</li> <li>• Make notes for different purposes, using simple abbreviations and writing ‘in your own words’.</li> <li>• Practice fast, fluent and legible handwriting styles for different purposes.</li> <li>• Choose words and phrases carefully to convey feeling and atmosphere.</li> <li>• Collect synonyms and opposites and investigate shades of meaning.</li> <li>• Use a thesaurus to extend vocabulary and choice of words.</li> <li>• Use pronouns, making clear to what or to whom they refer.</li> <li>• Identify prepositions and use the term.</li> <li>• Extend understanding of the use of adverbs to qualify verbs, e.g. in dialogue.</li> </ul>	<p><b>Children will explore</b></p> <ul style="list-style-type: none"> <li>• <b>Descriptive writing</b>-Use the given word lists to help write descriptions of people using appropriate vocabulary words based on physical descriptions/attire.</li> <li>• <b>Traditional Tales</b> -Write out the different features of folk tales and write their own folktales based on these features.</li> <li>• <b>Story Writing –</b></li> <li>• Recognize the different elements of a story.</li> <li>• Identify the different types of stories (genres) and typical story themes.</li> <li>• Plan and make notes of key points as a structure for story writing.</li> <li>• Contain ideas within a paragraph and use a new paragraph to reflect a new idea.</li> <li>• Recognize whose point of view the story is written in, alter the point of view while rewriting a scene or story, alter the story by adding characters etc.</li> <li>• Adapt sentence construction to different text-types, purposes and readers.</li> <li>• Evaluate own and others writing.</li> <li>• <b>Parts of Speech</b>-Identify the eight parts of speech (Nouns, Verbs, Adjectives, Pronouns, Adverbs, Prepositions, Articles and Conjunctions), understand its usage in a sentence and compose sentences using them with clarity and impact.</li> </ul>

	<ul style="list-style-type: none"> <li>• Use apostrophes for both possession and shortened forms.</li>   <li>• Investigate spelling patterns for pluralization, e.g. -s, -es, -y/-ies, -f/-ves.</li>   <li>• Extend earlier work on prefixes and suffixes, recognizing that different spelling rules apply for suffixes which begin with vowels and those that begin with consonants.</li> <li>• Understand ways of creating opposites, eg. Un-, im- and comparatives, eg. -er, -est.</li> <li>• Learn spelling rules for words ending in -e and -y, e.g. take/taking, try/tries.</li> <li>• Know rules for doubling consonants and investigate patterns in the use of single and double consonants, e.g. -full/-ful.</li> <li>• Use known spellings to work out the spelling of related words.</li> <li>• Use effective strategies for learning new spellings and misspelt words.</li>   <li>• Understand grammatical homophones, e.g. they're, their, there.</li>   <li>• Identify word roots and derivations to support spelling and vocabulary, e.g. sign, signal, signature.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Apostrophes</b> – appropriate usage of apostrophe to show possession (different for singular and plural nouns) and contraction (omission of letters or numbers)</li>   <li>• <b>Singular and Plurals</b> – <ul style="list-style-type: none"> <li>➤ The rules for changing singular nouns into plurals.</li> <li>➤ Understand that some nouns are exceptions and change differently into plurals. E.g. Ox- Oxen, Child-Children.</li> </ul> </li>   <li>• <b>Prefixes/Suffixes</b> - <ul style="list-style-type: none"> <li>➤ Different prefixes and suffixes when added to a root word change the meaning of the word, sometimes to the opposite (E.g. un + happy = unhappy, big + er = bigger)</li> <li>➤ The rules for doubling consonants in certain spelling patterns.</li> <li>➤ Understand that different spelling rules apply for suffixes which begin with vowels and those that begin with consonants.</li> </ul> </li>   <li>• <b>Homophones</b> – differentiate between the confusing homophones-they're, their based on their appropriate usage.</li>   <li>• <b>Word Families</b> – Understand word structures and word families to extend their vocabulary and spelling skills. (e.g. many words grow from a root word e.g. sign, signal, signature.</li> <li>• <b>Use of Dictionary and Thesaurus</b>- to confirm the meanings or synonyms of words once contextual understanding has been achieved.</li> </ul>
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<b>Speaking and listening</b>	<ul style="list-style-type: none"> <li>• Shape and organize ideas clearly when speaking to aid listener.</li> <li>• Prepare and present an argument to persuade others to adopt a point of view.</li> <li>• Talk confidently in extended turns and listen purposefully in a range of contexts.</li> <li>• Describe events and convey opinions with increasing clarity and detail.</li> <li>• Recall and discuss important features of a talk, possibly contributing new ideas.</li> <li>• Ask questions to develop ideas and extend understanding.</li> </ul>	<p>Children will</p> <ul style="list-style-type: none"> <li>• Participate in collaborative work, present ideas and be sensitive to others ideas.</li> <li>• Listen and respond appropriately to other’s views and opinions.</li> <li>• Take turns in discussions, building on what others have said.</li> <li>• Take part in framing sentences for structural practice.</li> <li>• Discuss how moods and feelings have been created by writers to describe spaces and moods.</li> <li>• Discuss points of view and give reasons for choosing the point of view</li> <li>• Learn and recite poems as choral reading.</li> <li>• Recite poems giving characters of the poem a tone of voice.</li> <li>• Recognize the figurative language especially alliteration used in poetry.</li> <li>• Identify phrasal verbs.</li> </ul>
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### **Mathematics**

Strands	Learning Expectations (CAIE CPP expectations)	Learning Experiences
<b>Number and Number Calculations</b>	<ul style="list-style-type: none"> <li>• Read and write numbers up to 1 Million.</li> <li>• Know what each digit represents in five- and six-digit numbers.</li> <li>• Partition any number up to one million into thousands, hundreds, tens and units.</li> <li>• Multiply and divide any number from 1 to 10 000 by 10 or 100 and understand the effect.</li> <li>• Order and compare numbers up to a million using the &gt; and &lt; signs.</li> <li>• Recognise multiples of 5, 10 and 100 up to 1000.</li> <li>• Round four-digit numbers to the nearest 10, 100 or 1000.</li> </ul>	<p><b>Whole Numbers</b></p> <p><b>(Five and Six Digit Numbers)-</b></p> <p>Children will-</p> <ul style="list-style-type: none"> <li>• Make/Read/Write/Order/Compare four/five/six digit numbers with given numerals.</li> <li>• Explain the place value and value of the digits in the given numbers.</li> <li>• Use the expanded notation and record numbers.</li> <li>• Write numbers in Standard/Expanded and Word form.</li> <li>• Rounding numbers to the nearest 10s, 100s, 1000s, 10 000s and 100,000s (Example: to round to the nearest thousand look at the thousands place. e.g. <u>1</u> 704 – 2 000, if the next door</li> </ul>

	<ul style="list-style-type: none"> <li>• Recognise odd and even numbers and multiples of 5, 10, 25, 50 and 100 up to 1000.</li> <li>• Make general statements about sums, differences and multiples of odd and even numbers.</li> <li>• Position accurately numbers up to 1000 on an empty number line or line marked off in multiples of 10 or 100.</li> <li>• Estimate where three- and four-digit numbers lie on empty 0–1000 or 0–10 000 lines</li> </ul> <p><b>CALCULATIONS</b></p> <p>Mental strategies</p> <ul style="list-style-type: none"> <li>• Derive quickly pairs of two-digit numbers with a total of 100, e.g. <math>72 + \underline{\quad} = 100</math>.</li> <li>• Derive quickly pairs of multiples of 50 with a total of 1000, e.g. <math>850 + \underline{\quad} = 1000</math>.</li> <li>• Know multiplication for <math>2\times</math>, <math>3\times</math>, <math>4\times</math>, <math>5\times</math>, <math>6\times</math>, <math>9\times</math> and <math>10\times</math> tables and derive division facts.</li> <li>• Recognise and begin to know multiples of 2, 3, 4, 5 and 10, up to the tenth multiple.</li> <li>• Add three or four small numbers, finding pairs that equal 10 or 20.</li> <li>• Add three two-digit multiples of 10, e.g. <math>40 + 70 + 50</math>.</li> <li>• Add and subtract near multiples of 10 or 100 to or from three-digit numbers, e.g. <math>367 - 198</math> or <math>278 + 49</math>.</li> </ul>	<p>number is 5 or more then round up and if its 4 or less then round down)</p> <ul style="list-style-type: none"> <li>• Use of dice to create 3-digit, 4-digit, 5-digit and 6-digit numbers and place value game.</li> <li>• Use of dice to create numbers (3/4/5/ and 6digit numbers). Then apply Addition and subtraction operations on them, round off the answer to the nearest 10s, 100s, 1000s</li> <li>• Use of digit cards to compare, order, expand and write the word form of 4 digit/5digit and 6-digit numbers</li> </ul> <p><b>Addition:</b></p> <p>Children will:</p> <ul style="list-style-type: none"> <li>• Solve 4-digit/5-digit/6-digit addition sums</li> <li>• Use and associate the term “sum” with addition</li> <li>• Use known number facts to aid in addition problems</li> <li>• Use estimate (rounding off concept) to add numbers, to develop an understanding that rounding up eases out calculation</li> <li>• Use doubles and near doubles to aid addition.</li> <li>• Solve word problems.</li> </ul> <p><b>Subtraction:</b></p> <p>Children will:</p> <ul style="list-style-type: none"> <li>• Solve 4-digit/5-digit/6-digit subtraction sums</li> </ul>
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	<ul style="list-style-type: none"> <li>• Add any pair of two-digit numbers, choosing an appropriate strategy.</li> <li>• Subtract any pair of two-digit numbers, choosing an appropriate strategy.</li> <li>• Find a difference between near multiples of 100, e.g. 304 – 296.</li> <li>• Subtract a small number crossing 100, e.g. 304 – 8.</li> <li>• Multiply any pair of single-digit numbers together.</li> <li>• Use knowledge of commutativity to find the easier way to multiply.</li> <li>• Understand the effect of multiplying and dividing three-digit numbers by 10.</li> <li>• Derive quickly doubles of all whole numbers to 50, doubles of multiples of 10 to 500, doubles of multiples of 100 to 5000, and corresponding halves.</li> <li>• Recognise multiples of 6, 7, 8 and 9 up to the 10th multiple.</li> <li>• Know and apply tests of divisibility by 2, 5, 10 and 100.</li> <li>• Know squares of all numbers to <math>10 \times 10</math>.</li> <li>• Find factors of two-digit numbers.</li> <li>• Count on or back in thousands, hundreds, tens and ones to add or subtract.</li> </ul> <p>Addition and Subtraction</p> <ul style="list-style-type: none"> <li>• Add pairs of three-digit numbers.</li> <li>• Subtract a two-digit number from a three-digit number.</li> </ul>	<ul style="list-style-type: none"> <li>• Use and associate the term “difference” with subtraction.</li> <li>• Use digit cards to create numbers and then subtract them using the concept of rounding off.</li> <li>• Apply the inverse relationship of addition and subtraction to solve problems</li> </ul> <p><b>Multiplication:</b></p> <p>Children will:</p> <ul style="list-style-type: none"> <li>• Recall or work out multiplication facts up to <math>10 \times 12</math></li> <li>• List multiples of given number</li> <li>• Identify multiples of the given numbers</li> <li>• Estimate and check reasonableness of an answer in multiplication or division</li> </ul> <p><b>Division:</b></p> <p>Children will:</p> <ul style="list-style-type: none"> <li>• Write division number sentences to solve problems. Record remainders to division problems.</li> <li>• Use multiplication facts to obtain division facts.</li> <li>• Solve word problems involving multiplication and division.</li> <li>• Apply inverse operations to check answers.</li> <li>• Divisibility Tests of 2, 3, 4, 5, 6, 8, 9 and 10.</li> </ul>
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	<ul style="list-style-type: none"> <li>• Subtract pairs of three-digit numbers.</li> </ul> <p>Multiplication and Division</p> <ul style="list-style-type: none"> <li>• Double any two-digit number.</li> <li>• Multiply multiples of 10 to 90 by a single-digit number.</li> <li>• Multiply a two-digit number by a single-digit number.</li> <li>• Divide two-digit numbers by single digit-numbers (answers no greater than 20).</li> <li>• Decide whether to round up or down after division to give an answer to a problem.</li> <li>• Understand that multiplication and division are the inverse function of each other.</li> </ul>	<ul style="list-style-type: none"> <li>• Find factors using the factor rainbow.</li> </ul> <p><b>Prime numbers, composite numbers and square numbers-</b></p> <p>Children will learn about the prime numbers, composite numbers through using 100 square and revising the work on sieve of Erasmus, find all the prime numbers to 100.</p> <p>Find square numbers through marking the products on a square grid forming an array.</p> <p>For example - <math>3^2 = 3 \times 3 = 9</math> (An array of 3 rows and columns totalling up to 9).</p>
<p><b>Measure</b></p>	<p><b>TIME</b></p> <ul style="list-style-type: none"> <li>• Recognise and use the units for time (seconds, minutes, hours, days, months, years, decades and centuries).</li> <li>• Tell and compare the time using digital and analogue clocks using the 24-hour clock.</li> <li>• Read timetables using the 24-hour clock.</li> <li>• Calculate time intervals in seconds, minutes and hours using digital or analogue formats.</li> <li>• Use a calendar to calculate time intervals in days and weeks (using</li> </ul>	<p><b>Time</b></p> <p>Children will:</p> <ul style="list-style-type: none"> <li>• <b>Measure time in minutes and hours.</b> Read and analyse real life examples of time tables, daily routines, weekly, monthly, yearly events to understand the importance of time and its various units of measurement.</li> <li>• <b>Read 12 hour and 24 hour clocks</b> Read timings on analogue and digital clocks. Read and record timings in 12 hour and 24 hour clock notations and convert the time appropriately from one type into another.</li> <li>• Children will solve word problems involving time in the 24-hour clock notation.</li> </ul>

	<p>knowledge of days in calendar months).</p> <ul style="list-style-type: none"> <li>• Calculate time intervals in months or years.</li> </ul>	<ul style="list-style-type: none"> <li>• They will calculate the time intervals (elapsed time) using timeline.</li> <li>• <b>Calendars</b> Understanding, reading and interpreting calendars through real life events.</li> </ul>
<b>Geometry</b>		<b>Will be covered in Term 2.</b>
<b>Handling data</b>	<ul style="list-style-type: none"> <li>• Organising, categorising and representing data</li> <li>• Answer a question by identifying what data to collect, organising, presenting and interpreting data in tables, diagrams, tally charts, frequency tables, pictograms (symbol representing 2, 5, 10 or 20 units) and bar charts (intervals labelled in twos, fives, tens or twenties).</li> <li>• Compare the impact of representations where scales have different intervals.</li> <li>• Use Venn diagrams or Carroll diagrams to sort data and objects using two or three criteria.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• Solve given problems by collecting, organizing, representing and interpreting numerical data in simple lists and tables using frequency tables and tally charts and interpreting vertical bar charts, Venn diagrams, Carroll diagrams and Pictograms and plotting of vertical bar graph using a graph paper.</li> <li>• Participate in a group discussion wherein they will first interpret a bar chart with the vertical axis marked in multiples of 2. Using the same information, now they will mark the intervals in the multiples of 5, 10 or 20 and understand what difference it makes on representation.</li> </ul>
<b>Problem Solving</b>	<ul style="list-style-type: none"> <li>• Choose appropriate mental or written strategies to carry out calculations involving addition or subtraction.</li> <li>• Check the results of adding numbers by adding them in a different order or by subtracting one number from the total.</li> <li>• Check subtraction by adding the answer to the smaller number in the original calculation.</li> <li>• Check multiplication using a different technique, e.g. check <math>6 \times 8 = 48</math> by doing <math>6 \times 4</math> and doubling.</li> </ul>	<p>Children will</p> <ul style="list-style-type: none"> <li>• Create their own word problems involving the operations of addition, subtraction, multiplication and division.</li> <li>• Use their mental skills and abilities to carry out operations of addition/subtraction for given word problems to present them in the written format.</li> <li>• Explain the strategy used and also apply cross-checks to verify derived answers.</li> <li>• Use doubling to carry out multiplication operations</li> <li>• Comprehend that multiplication and division are inverse functions to check answers.</li> </ul>

	<ul style="list-style-type: none"> <li>• Check the result of a division using multiplication, e.g. multiply 4 by 12 to check <math>48 \div 4</math>.</li> <li>• Explain reasons for a choice of strategy when multiplying or dividing.</li> <li>• Choose strategies to find answers to addition or subtraction problems; explain and show working.</li> </ul>	
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## Science

Strands	Learning Expectations (CAIE - CPP Expectations)	Learning Experiences
Scientific Inquiry	<p><b><u>Ideas and evidence</u></b></p> <ul style="list-style-type: none"> <li>• Collect evidence in a variety of contexts</li> <li>• Test an idea or prediction based on scientific knowledge and understanding</li> </ul> <p><b><u>Plan investigative work</u></b></p> <ul style="list-style-type: none"> <li>• Suggest questions that can be tested and make predictions; communicate these</li> <li>• Design a fair test and plan how to collect sufficient evidence</li> <li>• Choose apparatus and decide what to measure</li> </ul> <p><b><u>Obtain and present evidence</u></b></p> <ul style="list-style-type: none"> <li>• Make relevant observations and comparisons in a variety of contexts</li> <li>• Measure temperature, time, force and length</li> <li>• Begin to think about the need for repeated measurements of, for example, length</li> </ul>	<ul style="list-style-type: none"> <li>• Experiments based on sound – sound travels through vibrations, sound travels better through air/solids.</li> <li>• Field Trip – Nehru Science Centre(planetarium)(tentative)</li> <li>• Experiments to observe the melting point of ice, experiments to investigate solubility, experiments to separate solids from liquids.</li> <li>• Watch audio visual clippings</li> <li>• Visit the biology lab</li> <li>• Conduct surveys.</li> </ul>

	<ul style="list-style-type: none"> <li>• Present results in drawings, bar charts and tables.</li> </ul> <p><b><u>Consider evidence and approach</u></b></p> <ul style="list-style-type: none"> <li>• Identify simple trends and patterns in results and suggest explanations for some of these</li> <li>• Explain what the evidence shows and whether it supports predictions. Communicate this clearly to others</li> <li>• Link evidences to scientific knowledge and understanding in some contexts</li> </ul>	
<b>Biology</b>	<p><b><u>Humans and animals</u></b></p> <ul style="list-style-type: none"> <li>• Know that humans (and some animals) have bony skeletons inside their bodies</li> <li>• Know how skeletons grow as humans grow, support and protect the body</li> <li>• Know that animals with skeletons have muscles attached to the bones</li> <li>• Know how a muscle has to contract (shorten) to make a bone move and muscles act in pairs</li> <li>• Explain the role of drugs as medicines</li> </ul>	<p>Children will</p> <ul style="list-style-type: none"> <li>➤ Show and tell the bones that make up the human skeleton.</li> <li>➤ Identify types of muscles and bones.</li> <li>➤ Illustrate and explain how muscles work in pairs.</li> <li>➤ Understand the functions of bones and muscles.</li> <li>➤ Distinguish between drugs which work as medicines and drugs which are harmful.</li> </ul>
<b>Chemistry</b>	<p><b><u>States of matter</u></b></p> <ul style="list-style-type: none"> <li>• Know that matter can be solid, liquid or gas</li> <li>• Investigate how materials change when they are heated and cooled</li> <li>• Know that melting is when a solid turns into a liquid and is the reverse of freezing</li> <li>• Observe how water turns into steam when it is heated but on cooling the steam turns back into water</li> </ul>	<p>Children will</p> <ul style="list-style-type: none"> <li>➤ Classify matter into solids liquids and gas.</li> <li>➤ Observe changes in material on heating and cooling.</li> <li>➤ Understand the water cycle.</li> <li>➤ Define terms like evaporation, freezing, condensation, dissolving.</li> </ul>
<b>Physics</b>	<p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>• Explore how sounds are made when objects, materials or air vibrate and learn to measure the volume of sound in decibels with a sound level meter</li> </ul>	<p>Children will</p> <ul style="list-style-type: none"> <li>➤ Conduct simple experiments to understand that sound travels through vibrations.</li> </ul>

	<ul style="list-style-type: none"> <li>• Investigate how sound travels through different materials to the ear</li> <li>• Investigate how some materials are effective in preventing sound from travelling through them</li> <li>• Investigate the way pitch describes how high or low a sound is and that high and low sounds can be loud or soft. Secondary sources can be used</li> <li>• Explore how pitch can be changed in musical instruments in a range of ways</li> </ul> <p><b><u>Forces and motion</u></b></p> <ul style="list-style-type: none"> <li>• Know that pushes and pulls are examples of forces and that they can be measured with forcemeters</li> <li>• Explore how forces can make objects start or stop moving</li> <li>• Explore how forces can change the shape of objects</li> <li>• Explore how forces, including friction, can make objects move faster or slower or change direction</li> <li>• Recognise friction (including air resistance) as force which can affect the speed at which objects move and which sometimes stops things moving</li> <li>• Recognise and use units of force, mass and identify the direction in which forces act</li> </ul>	<ul style="list-style-type: none"> <li>➤ Conduct and record observations to conclude whether sound travels better through solids or air</li> <li>➤ Understand the difference between volume and pitch.</li> <li>➤ Comprehend how pitch and volume is changed in different musical instruments.</li> </ul> <p><b><u>Force</u></b></p> <p>Children will explore the forces by recalling upon the real-life experiences. They will further explore the topic by carrying out various activities to understand the impact (movement / change of directions) of forces on various objects.</p> <p><b><u>Friction</u></b></p> <p>They will learn that ‘friction is a necessary evil’. Children will understand that without friction, force is dangerous through different outdoor activities and exploring the tyre grooves of different vehicles.</p> <p><b><u>Gravity</u></b></p> <p>They will learn that gravity is an attractive force that attracts all the objects towards Earth. They will understand that weight of an object is because of the gravitational force of Earth.</p> <p><b><u>Buoyancy/Up-thrust</u></b></p> <p>They will understand that whenever objects are immersed or floating in a fluid, they experience an upward force exerted by a fluid (liquid or gas). They will understand that when the weight of the body is greater than the force applied by the fluid the body sinks. They will also understand that when the weight of the body is equal to the force applied by the fluid the body float.</p>
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## Research Skill Development

Theme	Learning Objectives	Learning Engagements
<p><b>BEYOND</b> <b>Earth and Beyond</b></p> <ul style="list-style-type: none"> <li>• <b>What makes the earth so unique?</b></li> <li>• <b>Earth- then and now.</b></li> <li>• <b>Impact of the ever-changing earth on its geology and inhabitants.</b></li> </ul>	<p><b>Formulating questions</b></p> <ul style="list-style-type: none"> <li>• Formulate open ended questions about research topics by brainstorming with others.</li> <li>• Pose purposeful, open, realistic and investigative questions.</li> </ul> <p><b>Planning</b></p> <ul style="list-style-type: none"> <li>• Use topic webs to identify priorities for research, narrowing the topic.</li> <li>• Begin to plan research and outcomes based on questions formulated.</li> </ul> <p><b>Collecting Data</b></p> <ul style="list-style-type: none"> <li>• Pull facts from reliable non-fiction resources.</li> <li>• Begin to search for credible and relevant sources, both online and in the library, both independently and with teacher guidance.</li> </ul> <p><b>Recording Data</b></p> <ul style="list-style-type: none"> <li>• Take notes on relevant information.</li> </ul> <p><b>Organizing Data</b></p> <ul style="list-style-type: none"> <li>• Organize information logically using a variety of graphic organizers.</li> </ul> <p><b>Interpreting Data</b></p> <ul style="list-style-type: none"> <li>• Interpret graphic organizers and make statements about them.</li> </ul> <p><b>Presenting Research Findings</b></p> <ul style="list-style-type: none"> <li>• Present findings clearly, logically and accurately using a variety of presentation techniques.</li> </ul>	<ul style="list-style-type: none"> <li>• Children will discuss, take notes and record keepings to document their research.</li> <li>• Children will collect information using various print materials, internet research.</li> <li>• They will view documentaries, audio- visual clippings, various materials.</li> <li>• Children will skim and scan for the information related to the area of research.</li> <li>• Children will take notes by using the research questions and relevant information about Earth – then and now.</li> <li>• They will use appropriate medium to record information.</li> <li>• Children will visit the science centers to collect information.</li> <li>• Children will organize information logically, according to the purpose, and audience, further understanding the impact of ever-changing earth on its geology and inhabitants.</li> <li>• They will present their conclusion through class assembly and create awareness about helping our earth making it a better planet to live in.</li> </ul>
<p><b>GLOBAL</b> <b>The world around us</b></p> <ul style="list-style-type: none"> <li>• <b>Necessity of a civilization.</b></li> <li>• <b>Various systems followed within important river valley civilizations.</b></li> <li>• <b>Impact of these civilizations on the present world.</b></li> </ul>	<p><b>Planning</b></p> <ul style="list-style-type: none"> <li>• Begin to identify priorities and divide assignments into simple tasks.</li> <li>• Create a “to-do” list or timeline to outline the research process.</li> </ul> <p><b>Collecting Data</b></p> <ul style="list-style-type: none"> <li>• Pull facts from reliable non-fiction resources.</li> <li>• Begin to search for credible and relevant sources, both online and in the library, both independently and with teacher guidance.</li> <li>• Apply a range of resources to locate information, including maps, timelines, and graphs.</li> </ul> <p><b>Recording Data</b></p> <ul style="list-style-type: none"> <li>• Recall and take notes of relevant information.</li> </ul> <p><b>Organizing Data</b></p>	<ul style="list-style-type: none"> <li>• Children will discuss and understand the necessity of a civilization.</li> <li>• They will collect information using various print materials, internet research, view documentaries, audio- visual clippings about the various systems followed within important river valley civilization.</li> <li>• Children will skim and scan for the information and will use appropriate medium to record information.</li> <li>• Children will organize information logically, according to the purpose, and audience.</li> <li>• They will present the collected data and understand the impact of these civilizations on the present world.</li> <li>• Children will participate in a student led conference which will build a</li> </ul>

	<ul style="list-style-type: none"> <li>• Compare and Organize information logically in different forms (tables, charts, timelines and graphs).</li> </ul> <p><b>Interpreting Data</b></p> <ul style="list-style-type: none"> <li>• Evaluate and synthesize information based on collected data.</li> </ul> <p><b>Presenting Research Findings</b></p> <ul style="list-style-type: none"> <li>• Present findings clearly, logically and accurately using a variety of presentation techniques.</li> <li>• Present a bibliography.</li> </ul>	<p>sense of responsibility and accountability for their own learning.</p> <ul style="list-style-type: none"> <li>• Children will further show responsibility towards the society that they live in and adopt – a - cause to prevent the heritage structures from further damages and build civic sense amongst the people of the society to take care of the local and national heritage structures and surroundings. They will also peer coach the children of grade 3.</li> </ul>
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## Hindi

Strands	Learning Experiences
<b>Speaking and listening</b>	<ul style="list-style-type: none"> <li>• Children will listen to stories &amp; poems and they will be shown video clips related to this. They will solve questions based on them.</li> <li>• Children will participate in class discussions and listen to everyone's view.</li> </ul>
<b>Reading</b>	<ul style="list-style-type: none"> <li>• Children will read books from the library, newspapers, poems, stories lessons from the text book.</li> <li>• They will learn and explore many new words while reading.</li> </ul>
<b>Writing</b>	<ul style="list-style-type: none"> <li>• Children will do writing practice through stories and picture reading.</li> <li>• They will practice writing answers of the questions based on them.</li> <li>• Children will write numbers till 50.</li> <li>• Children will be provided work sheets and they will solve them.</li> </ul>
<b>Grammar and punctuation</b>	<ul style="list-style-type: none"> <li>• Children will get exposure to learn स्वर और उसकी मात्राएँ, लिंग, र के विभिन्न रूप, समानार्थी शब्द, वचन, वर्ण विच्छेद, विलोम शब्द, शुद्ध और अशुद्ध शब्द and their uses.</li> <li>• Children will be introduced to Noun. They will learn how to identify them.</li> <li>• Children will be able to make correct sentences in Hindi while using grammar and punctuation.</li> </ul>

## French

Strands	Learning experiences
➤ <b>Listening &amp; speaking</b>	<ul style="list-style-type: none"> <li>• Children will be encouraged through role play to enhance the quality of their language skills.</li> <li>• They will also learn about time, purchase and sale of clothes, asking for the price of the object, countries and nationalities through audio-visual clips.</li> <li>• More emphasis will be given on correct French pronunciations through role-plays and activities based on listening.</li> <li>• Topic presentation will be encouraged so as to be proficient in French.</li> </ul>
➤ <b>Reading</b>	<ul style="list-style-type: none"> <li>• Children will be exposed to various dialogues, rhymes and learning activities based on reading the given text.</li> </ul>

	<ul style="list-style-type: none"> <li>• Reading passages for the understanding of the topic will be a part of the learning engagement.</li> </ul>
➤ <b>Writing</b>	<ul style="list-style-type: none"> <li>• Writing simple sentences using appropriate grammar.</li> <li>• Children will be encouraged to write sentences on various topics covered from the text book using articles, prepositions, verbs and picture composition, usage of masculine/feminine words.</li> <li>• Children will read comprehensions and conjugate regular and irregulars verbs.</li> <li>• Children will able to write the time and describe their daily routine, nationalities of people according to the countries, describe the appearance and apparel of a person and short passages based on the above topic.</li> </ul>
➤ <b>Grammar &amp; Punctuation</b>	<ul style="list-style-type: none"> <li>• Use of verbs, prepositions and nouns in sentences and in passage writing.</li> <li>• Children will learn to identify and use them in their verbal and written work.</li> <li>• Regular “ir” verbs will be introduced.</li> </ul>

**Suggested Reading for children and parents: Grade IV**

<b>Recommended Series</b>	<b>Great Indian Classics From Amar Chitra Katha</b>
	<b>Panchatantra Tales from Amar Chitra Katha</b>
	<b>Visionaries from Amar Chitra Katha</b>
	<b>Harry Porter series by J.K. Rowling</b>
	<b>Percy Jackson series by Rick Riordan</b>
<b>Recommended Books</b>	<b>Five Children and It by Edith Nesbit</b>
	<b>Peter Pan by J. M. Barrie</b>
	<b>Treasure Island by Robert Louis Stevenson</b>
	<b>The Adventures of Tom Sawyer by Mark Twain</b>
	<b>Little Women by Louisa May Alcott</b>
	<b>The Jungle Book by Rudyard Kipling</b>
	<b>Malgudi School days by R.K. Narayan</b>
	<b>Gulliver's Travels by Jonathan Swift</b>
	<b>Robinson Crusoe by Daniel Defoe</b>
	<b>Anne of Green Gables by L. M. Montgomery</b>
	<b>Heidi by Johanna Spyri</b>
	<b>Shadow of the Minotaur by Alan Gibbons</b>
<b>Recommended children's books by the following authors:</b>	<b>Michael Morpurgo</b>
	<b>Helen Cresswell</b>
	<b>Rick Riordan</b>
	<b>J.K. Rowling</b>
	<b>Sudha Murthy</b>
	<b>R.K. Narayan</b>
	<b>Anushka Ravishankar</b>
<b>Recommended books for parents:</b>	<b>The Monk Who Sold His Ferrari- Robin Sharma</b>
	<b>Parenting with Love and Logic- Foster Cline</b>
	<b>The Secret- Rhonda Byrne</b>