

Curriculum Framework for Grade 2

Breakup of the Inquiry

Unit of Inquiry: Homelands

Duration: 6 weeks

Subject Focus: Social Studies

Theme: Where we are in place and time – An inquiry into the relationships between and the interconnectedness of individuals and civilizations from local to global perspectives

Central Idea

Earth's physical geography impacts human settlements and interactions.

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Lines of Inquiry

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|---|---|---|
| <ul style="list-style-type: none"> • Types of physical environment | <ul style="list-style-type: none"> • Different features that give a place its identity | <ul style="list-style-type: none"> • Ways of adapting to different places and situations |
|---|---|---|

<p>Key concepts</p> <ul style="list-style-type: none"> • Form • Causation • Change 	<p>Approaches to Learning</p> <p>Research skills</p> <ul style="list-style-type: none"> • Formulating questions • Observing • Planning • Presenting research findings <p>Thinking skills</p> <ul style="list-style-type: none"> • Acquisition of knowledge • Comprehension • Application • Analysis
<p>Related concepts</p> <ul style="list-style-type: none"> • Geography • Location • Diversity • Lifestyle • Adaptation 	

<p style="text-align: center;">English Integration</p> <ul style="list-style-type: none"> • Sentence/ Paragraph writing • Punctuations • Parts of speech – revisit • Descriptive writing • Dialogues (Telephonic Conversation 	<p style="text-align: center;">Math Integration</p> <ul style="list-style-type: none"> • Measurement - length • Venn diagram • Surveys • Cardinal directions (Mapping) • Time
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Breakup of the Inquiry

Unit of Inquiry: Games

Duration: 6 weeks

Subject Focus: Social studies/ PSPE

Theme: Who we are - An inquiry into nature of self.

Central Idea

People learn about themselves and others through play.

Lines of Inquiry

- How we learn through play
- The way play builds relationships
- Culture influencing play

Key concepts	Approaches to Learning
<ul style="list-style-type: none"> • Connection • Perspective • Reflection 	<p>Social skills</p> <ul style="list-style-type: none"> • Accepting responsibility • Respecting others • Cooperating • Resolving conflict • Group decision making <p>Self-management skills:</p> <ul style="list-style-type: none"> • Organization • Safety • Codes of behaviour • Informed choices
Related concepts	
<ul style="list-style-type: none"> • Fair play • Self-regulation • Belongingness 	

English Integration	Math Integration
<ul style="list-style-type: none"> • Sharing opinions and facts • Instructional writing • Autobiography • Presentations 	<ul style="list-style-type: none"> • Graphs • Surveys – Tally • Addition • Subtraction • Fractions

Curriculum Framework for Grade 2

Breakup of the Inquiry

Unit of Inquiry: Simple Machines

Duration: 6 weeks

Subject Focus: Science/PSPE

Theme: How the world works – An inquiry into how humans use their understanding of scientific principles

Central Idea

Simple machines operate in different ways to ensure tasks are performed efficiently and effectively.

Lines of Inquiry

- Features of a simple machine
- The ways in which simple machines are used
- The impact simple machines have had on society

Key concepts	Approaches to Learning
<ul style="list-style-type: none"> • Form • Function 	Thinking skills <ul style="list-style-type: none"> • Acquisition of knowledge • Comprehension • Application • Analysis
Related concepts	
<ul style="list-style-type: none"> • Efficiency • Mechanics 	Research skills <ul style="list-style-type: none"> • Formulating questions • Observing • Planning • Presenting research findings Self-management skills <ul style="list-style-type: none"> • Spatial awareness • Organization • Informed choices

English Integration	Math Integration
<ul style="list-style-type: none"> • Procedural writing • Recount experience • Picture Talk 	<ul style="list-style-type: none"> • 2D and 3D shapes • Symmetry • Measure and compare length

Curriculum Framework for Grade 2

Breakup of the Inquiry

Unit of Inquiry: Creativity

Duration: 6 weeks

Subject Focus: Social studies/Language/Art

Theme: How we express ourselves – An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values

Central Idea

People express their creativity in different forms.

Lines of Inquiry

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|--|--|--|
| <ul style="list-style-type: none"> • What creativity is | <ul style="list-style-type: none"> • The different ways people express themselves | <ul style="list-style-type: none"> • How we can express our uniqueness through creativity |
|--|--|--|

Key concepts	Approaches to Learning
<ul style="list-style-type: none"> • Form • Perspective 	<p>Thinking skills</p> <ul style="list-style-type: none"> • Acquisition of knowledge • Comprehension • Application
Related concepts	<p>Communication skills:</p> <ul style="list-style-type: none"> • Listening • Speaking • Reading • Writing • Viewing • Presenting
<ul style="list-style-type: none"> • Imagination • Interpretation • Artifacts 	

English Integration	Math Integration
<ul style="list-style-type: none"> • Story writing/Finishing a story • Poems (Acrostic poems) • Sharing personal experiences and opinions 	<ul style="list-style-type: none"> • 2D and 3D shapes – revisit • Patterns (Number/Shape) • Sequencing • Symmetry • Fractions

Curriculum Framework for Grade 2

Breakup of the Inquiry

Unit of Inquiry: Economic Systems

Duration: 6 weeks

Subject Focus: Social Studies/PSPE

Theme: How we organize ourselves – An inquiry into economic activities and their impact on human kind and environment.

Central Idea

Human interact with their environment and create communities to meet their needs.

Lines of Inquiry

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|---|---|--|
| <ul style="list-style-type: none"> • Producers and consumer of a working community | <ul style="list-style-type: none"> • Role of supply and demand | <ul style="list-style-type: none"> • Process of import-export |
|---|---|--|

Key concepts	Approaches to Learning
<ul style="list-style-type: none"> • Form • Function • Connection 	<p>Thinking skills</p> <ul style="list-style-type: none"> • Acquisition of knowledge • Comprehension • Application
Related concepts	Research skills:
<ul style="list-style-type: none"> • Production • Interdependence • Consumption 	<ul style="list-style-type: none"> • Formulating questions • Observing • Planning • Collecting data • Recording data • Organizing data • Interpreting data • Presenting research findings

English Integration	Math Integration
<ul style="list-style-type: none"> • Sharing personal experiences • Note taking • Role play 	<ul style="list-style-type: none"> • Data handling • Addition • Subtraction • Measurement – Capacity, Mass, Length (revisit) • Money

Curriculum Framework for Grade 2

Breakup of the Inquiry

Unit of Inquiry: Adaptation and habitat

Duration: 6 weeks

Subject Focus: Science/PSPE

Theme: Sharing the planet – An inquiry into communities and the relationships within and between them

Central Idea

People establish practices in order to sustain and maintain earth’s resources.

Lines of Inquiry

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> • Earth’s resources and habitats | <ul style="list-style-type: none"> • Human actions and their effects on resources | <ul style="list-style-type: none"> • Actions to restore the environment |
|--|--|--|

Key concepts	Approaches to Learning
<ul style="list-style-type: none"> • Causation • Reflection • Responsibility 	<p>Social skills</p> <ul style="list-style-type: none"> • Accepting responsibility • Respecting others • Cooperating • Group decision-making
Related concepts	Self-management skills:
<ul style="list-style-type: none"> • Resources • Conservation • Sustainability 	<ul style="list-style-type: none"> • Spatial awareness • Organization • Codes of behaviour • Informed choices
English Integration	Math Integration
<ul style="list-style-type: none"> • Descriptive writing – revisit • Presentation • Extempore 	<ul style="list-style-type: none"> • Bar graph • Pictograph • Organization of data

English Curriculum

Listening and Speaking

- Show confidence in speaking to a group
- Articulate clearly so that others can hear
- Show awareness of the listener by including relevant details
- Attempt to express ideas precisely, using a growing vocabulary
- Begin to be aware of the use of more formal vocabulary and tone of voice
- Explain plans and ideas, extending them in the light of discussion
- Listen and respond appropriately to other views and opinions
- Listen carefully and respond appropriately, asking questions to others
- Listen to a variety of oral presentations including stories, poems, reports and respond with increasing confidence and details
- Participate in a variety of dramatic activities e.g. role play, dramatization of familiar stories and poems
- Participate in telephonic conversations
- Participating in extempore, organizing ideas clearly and sharing to the larger audience
- Determine the meaning of new, unknown and multiple meaning words

Reading

- Apply knowledge of sight words effectively in reading and spelling
- Identify syllables and split familiar compound words into parts
- Secure the spelling of high frequency words and common irregular words
- Spell words with common prefixes and suffixes (e.g. un, dis, ful, ly)
- Build and use collections of interesting and significant words
- Discuss the meaning of unfamiliar words encountered in reading
- Using dictionary to find meanings of unfamiliar words

Writing

- Extend the use of a range of words and phrases to link sentences
- Write in clear sentences using full stops and capital letters
- Re-read own writing for sense and accuracy
- Use a variety of simple organizational devices (e.g. headings, captions)
- Read and respond to question words (e.g. what, where, when, who, why)
- Use question marks, exclamation marks and commas in lists and sentences
- Use prepositions efficiently
- Take account of the range of punctuation in reading aloud
- Use articles appropriately (a, an, the)
- Understand that verbs are necessary for meaning in a sentence

Curriculum Framework for Grade 2

- Develop consistency in the use of simple tenses
- Identify pronouns and understand their usage in sentences
- Ensure grammatical agreement of nouns and verbs in sentences
- Understand pluralization and the spellings of the same
- Maintain accurate use of capital letters and full stops in demarcating sentences
- Use contraction appropriately
- Use a widening range of connectives to link ideas in writing
- Understand adverbs add meaning to the verb and identify
- Is able to use degrees of comparison in sentences appropriately

Viewing and Presenting

- Display understanding through role play, discussions and illustrations
- Respond to visual messages and expresses feelings
- Understand and connects to the idea of visual experiences influence our behaviour

Math Curriculum

Number Sense

Numbers and the number system

- Recite numbers 100 to 500 and beyond
- Read and write numbers to at least 1000
- Count on and back in ones, tens and hundreds from two- and three-digit numbers
- Count on and back in steps of 2, 3, 4 and 5 to at least 50
- Understand what each digit represents in three-digit numbers and partition into hundreds, tens and ones
- Find 1, 10, 100 more/less than two- and three-digit numbers
- Multiply two-digit numbers by 10 and understand the effect
- Round two-digit numbers to the nearest 10 and round three-digit numbers to the nearest 100
- Place a three-digit number on a number line marked off in multiples of 100
- Place a three-digit number on a number line marked off in multiples of 10
- Compare three-digit numbers, use $<$ and $>$ signs, and find a number in between
- Order two- and three-digit numbers
- Give a sensible estimate of a number as a range (e.g. 30 to 50) by grouping in tens
- Find half of odd and even numbers to 40, using notation such as $13 \frac{1}{2}$
- Understand and use fraction notation recognising that fractions are several parts of one whole, e.g. $\frac{3}{4}$ is three quarters and $\frac{2}{3}$ is two thirds
- Begin to relate finding fractions to division
- Find halves, thirds, quarters and tenths of shapes and numbers (whole number answers)(Start with Pictorial representation)
- Calculation
- Mental strategies
- Know addition and subtraction facts for all numbers to 20
- Know the following addition and subtraction facts:
 - multiples of 100 with a total of 1000
 - multiples of 5 with a total of 100
- Know multiplication/division facts for 2 times, 3 times, 5times and 10 times tables
- Begin to know 4 times table
- Recognise two- and three-digit multiples of 2, 5 and 10
- Work out quickly the doubles of numbers 1 to 20 and derive the related halves
- Work out quickly the doubles of multiples of 5 (< 100) and derive the related halves
- Work out quickly the doubles of multiples of 50 to 500 (Teachers can take upto 1000)
- Choose appropriate mental strategies to carry out calculations
- Investigate a simple general statement by finding examples which do or do not satisfy it, e.g. when adding 10 to a number, the first digit remains the same
- Explain methods and reasoning orally, including initial thoughts about possible answers to a problem

Curriculum Framework for Grade 2

Addition and subtraction

- Add and subtract 10 and multiples of 10 to and from two- and three-digit numbers
- Add 100 and multiples of 100 to three-digit numbers
- Use the = sign to represent equality, e.g. $75 + 25 = 95 + 5$
- Add several small numbers
- Find complements to 100, solving number equations such as $78 + \dots = 100$
- Add and subtract pairs of two-digit numbers
- Add three-digit and two-digit numbers using notes to support
- Re-order an addition to help with the calculation, e.g. $41 + 54$, by adding 40 to 54, then 1
- Add/subtract single-digit numbers to/from three-digit numbers
- Find 20, 30, ... 90, 100, 200, 300 more/less than three-digit numbers
- Make sense of and solve word problems, single (all four operations) and two-step (addition and subtraction), and begin to represent them, e.g. with drawings or on a number line
- Check the results of adding two numbers using subtraction, and several numbers by adding in a different order
- Check subtraction by adding the answer to the smaller number in the original calculation
- Estimate and approximate when calculating, and check working
- Make a sensible estimate for the answer to a calculation, e.g. using rounding
- Consider whether an answer is reasonable
- Make up a number story to go with a calculation, including in the context of money
- Explain a choice of calculation strategy and show how the answer was worked out
- Explore and solve number problems and puzzles, e.g. logic problems
- Use ordered lists and tables to help to solve problems systematically

Multiplication and division

- Understand the relationship between halving and doubling
- Understand the effect of multiplying two-digit numbers by 10
- Multiply single-digit numbers and divide two-digit numbers by 2, 3, 4, 5, 6, 9 and 10
- Multiply tens numbers by 3 and 5
- Begin to divide two-digit numbers just beyond $10\times$ tables, e.g. $60 \div 5$, $33 \div 3$
- Understand that division can have left over (remainder)
- Understand and apply the idea that multiplication is commutative
- Understand the relationship between multiplication and division and write connected facts
- Check multiplication by reversing the order, e.g. checking that $6 \times 4 = 24$ by doing 4×6
- Check a division using multiplication, e.g. check $12 \div 4 = 3$ by doing 4×3

Shape and Space

- Identify, describe and draw regular and irregular 2D shapes including pentagons, hexagons, octagons and semi-circles
- Classify 2D shapes according to the number of sides, vertices and right angles
- Identify, describe and make 3D shapes including pyramids and prisms; investigate which nets will make a cube
- Classify 3D shapes according to the number and shape of faces, number of vertices and edges
- Draw and complete 2D shapes with reflective symmetry and draw reflections of shapes (mirror line along one side)
- Relate 2D shapes and 3D solids to drawings of them
- Identify 2D and 3D shapes, lines of symmetry and right angles in the environment
- Identify right angles in 2D shapes
- Recognize the relationships between different 2D shapes
- Identify the differences and similarities between different 3D shapes
- Identify simple relationships between shapes, e.g. these shapes all have the same number of lines of symmetry

Pattern and Function

- Recognizing new shape or number patterns and making number sequences
- Describe and continue patterns which count on or back in steps of 2, 3, 4, 5, 10, or 100

Measurement

Money

- Consolidate using money notation
- Use simple addition and subtraction facts with a total of 100 to find change

Length, mass and capacity

- Choose and use appropriate units and equipment to estimate, measure and record measurements
- Know the relationship between kilometers and meters and centimeters, kilograms and grams, liters and milliliters
- Read to the nearest division or half division, use scales that are numbered or partially numbered
- Use a ruler to draw and measure lines to the nearest centimeter
- Solve word problems involving measures

Time

- Suggest and use suitable units to measure time and know the relationships between them (second, minute, hour, day, week, month, year)
- Read the time on analogue and digital clocks, to the nearest 5 minutes on an analogue clock and to the nearest minute on a digital clock
- Begin to calculate simple time intervals in hours and minutes
- Read a calendar and calculate time intervals in weeks or days
- Begin to understand everyday systems of measurement in length, weight, capacity and time and use these to make appropriate measurements

Position and movement

- Use the language of position, direction and movement, including clockwise and anti-clockwise
- Find and describe the position of a square on a grid of squares where the rows and columns are labelled

Data Handling

Organizing, categorizing and representing data

- Answer a real-life question by collecting, organizing and interpreting data, e.g. investigating the population of mini-beasts in different environments
- Use tally charts, frequency tables, pictograms (symbol representing one or two units) and bar charts (intervals labelled in ones or twos)
- Use Venn or Carroll diagrams to sort data and objects using two criteria

Hindi Curriculum

Listening and Speaking

- Listen, read and write initial letter sounds
- Use knowledge of sounds to read and write vyanjan–swar– vyanjan words
- Know the names of letters of the alphabet and alphabetic order
- Speak using conventions and spelling
- Name classmates, teachers and familiar classroom and playground objects
- Use language to address their needs, express feelings and opinions
- Extend vocabulary from reading
- Use corresponding vocabulary for another language
- Describe personal experiences

Reading

- Read two/three letter words and short sentences
- Make connections between personal experiences and story book characters
- Listen attentively and respond to read aloud situations, make predictions and anticipate possible outcomes
- Use all the information available to make sense of what is read
- Re-tell stories, with appropriate use of story language
- Learn and recite simple poems
- Understand sound symbol relationships and recognize familiar sounds or symbols or words of the language community e.g. swar and vyanjan
- Read words with expression, accuracy, and fluency

Writing

- Participate in shared and guided writing, observing teacher model, asking question and offering suggestions
- Enjoy writing and value their own efforts
- Spell familiar common words accurately, drawing on sight vocabulary
- Show an awareness of sound-symbol relationships and begin to recognize the way that some familiar sounds can be recorded
- Compose and write a simple sentence, with appropriate maatra
- Create illustrations to match their own written text
- Locate information and record answers to questions (e.g. as lists, charts)

Viewing and Presenting

- Attend to visual information showing understanding through discussion, role play, illustration
- Talk about their own feelings in response to visual messages: show empathy for the way others might feel
- Use body language in role play to communicate ideas and feeling visually
- Use a variety of implements to practice and develop handwriting and presentation skill

Curriculum Framework for Grade 2

PSPE Curriculum

Unit – Movement Composition:		
Body Management	Loco motor Skills	Stability Skills
<ul style="list-style-type: none"> • Body coordination • Body control • Body form • Self-regulation 	<ul style="list-style-type: none"> • Balance • Speed and agility • Endurance • Power • Core strength 	<ul style="list-style-type: none"> • Twisting • Flexing • Stretching • Turning • Landing

Unit – Cooperative Games:			
Body Management	Loco motor Skills	Manipulative Skills	Team Building
<ul style="list-style-type: none"> • Body coordination • Body control • Self-regulation • Spatial Awareness 	<ul style="list-style-type: none"> • Balance • Speed and agility • Jumping • Bouncing • Striking • Stamina 	<ul style="list-style-type: none"> • Catching • Carrying • Throwing • Collecting 	<ul style="list-style-type: none"> • Team work • Competition • Respect

Unit – Jungle Gym:		
Body Management	Loco motor Skills	Stability Skills
<ul style="list-style-type: none"> • Body coordination • Body control • Body form 	<ul style="list-style-type: none"> • Balance • Jumping • Climbing • Rolling 	<ul style="list-style-type: none"> • Upper and lower strength • Landing • Climbing • Hanging • Swinging • Rotation • Extending • Tucking

Unit – Individual Pursuits (Skating):		
Body Management	Loco motor Skills	Manipulative Skills
<ul style="list-style-type: none"> • Body coordination • Body balance • Body control 	<ul style="list-style-type: none"> • Balance • Jogging • Running 	<ul style="list-style-type: none"> • Stride 1 • Stride 2 • T-break • Spin turn • Eagle turn • Simple jump

Visual Art Curriculum

Elements of Art

- line (types of lines)
- shapes (types of shapes)
- colour (colour wheel, primary/secondary colours, cool/warm colours, analogous colour scheme)
- pattern
- texture

Skills

- handling tools
- paper manipulation skills (cutting, tearing, origami, attaching)

Art forms

Life drawing	Craft
Memory drawing	<ul style="list-style-type: none"> • Paper-quilling
<ul style="list-style-type: none"> • Creating figures/characters 	<ul style="list-style-type: none"> • collage
<ul style="list-style-type: none"> • landscapes/scenes 	<ul style="list-style-type: none"> • designing (book cover, costume, wall etc.)
Picture drawing	<ul style="list-style-type: none"> • quilting
nature drawing	<ul style="list-style-type: none"> • puppet making
	<ul style="list-style-type: none"> • papier mache
	<ul style="list-style-type: none"> • print making (stamping, stencil, rubbing)
	<ul style="list-style-type: none"> • 3D modelling