## Breakup of the Inquiry

**Unit of Inquiry:** Body Systems and Diseases

**Duration:** 6 weeks **Subject Focus**: Science/ PSPE
**Theme:** Who we are- An inquiry into the nature of the self

**Central Idea**

The effective interactions between human body systems contribute to health and survival.

**Lines of Inquiry**

- Body systems and how they work
- Interconnectedness of body systems
- Impact of malfunction of a system

| Key concepts | Approaches to Learning |
|---|---|
| • Function<br>• Connection<br>• Responsibility | **Thinking skills**<br>• Acquisition of knowledge<br>• Comprehension<br>• Application<br>• Analysis |
| **Related concepts** | **Self-management skills**<br>• Healthy lifestyle<br>• Informed choices |
| • Biology<br>• Interdependence<br>• Systems | **Research skills**<br>• Observing<br>• Collecting Data and recording data<br>• Interpreting data |

| English Integration | Math Integration |
|---|---|
| • Sharing personal experiences and opinions<br>• Paragraph writing – organising and sequencing ideas<br>• Parts of speech- Revisit | • Data handling – Bar Graph, pictographs<br>• Number sense: use of negative numbers in context with temperature<br>• Measurement<br>-Non-standard measurement: hand span, foot span<br>-Standard measurement: centimetre, metre, inches, ounces, pounds, kilogram |

## Breakup of the Inquiry

**Unit of Inquiry:** Explorations

**Duration:** 6 weeks **Subject Focus**: Social Studies/ PSPE

**Theme:** Where are we in place and time - An inquiry into the discoveries, explorations and migrations of human kind

**Central Idea**

Explorations lead to discoveries, opportunities and new understanding

**Lines of Inquiry**

- Reasons for exploration (historical/personal)
- How exploration has taken place over time
- The consequences of exploration

| Key concepts | Approaches to Learning |
|---|---|
| • Form<br>• Causation<br>• Change | **Communication skills**<br>• Reading<br>• Writing<br>• Speaking<br>• Listening |
| **Related concepts** | **Research skills** |
| • Impact<br>• Exploration<br>• Navigation | • Interpretation<br>• Analysis<br>• Presenting research findings |

| English Integration | Math Integration |
|---|---|
| • Story writing – opening and ending of stories, planning longer stories<br>• Non-Fiction/ Factual stories<br>• Autobiography | • Date and Time – measure time intervals<br>• Time line – sequencing numbers on number line<br>• Data Handling – Frequency tables, Tally mark |

## Breakup of the Inquiry

**Unit of Inquiry:** Organisations

**Duration:** 6 weeks **Subject Focus**: Social Studies/ PSPE

**Theme:** How we organize ourselves- An inquiry into the structure and function of organisations

**Central Idea**

Systems need to be in place to maintain organisation in communities

**Lines of Inquiry**

- What an organisation is
- Different systems of organisations we use personally
- Different systems of organisations we use in our community
- Collection, storage and use of information for organisation

| Key concepts | Approaches to Learning |
|---|---|
| • Connection<br>• Function<br>• Responsibility | **Social skills**<br>• Cooperation<br>• Group decision making<br><br>**Self - Management skills**<br>• Organisation<br>• Codes of behaviour<br>• Time Management |
| **Related concepts** | |
| • Organisation<br>• Network<br>• Conformity | |

| English Integration | Math Integration |
|---|---|
| • Reading comprehension<br>• Report writing in simple Past tense – instructional and non-chronological reports<br>• Informal letter writing- introduction to elements of a letter | • Venn diagram – compare and contrast<br>• Data handling and survey |

## Breakup of the Inquiry

**Unit of Inquiry:** Buildings and Structures

**Duration:** 6 weeks **Subject Focus**: Science/ Numeracy

**Theme:** How the world works - how humans use their understanding of scientific principles

**Central Idea**

The design of building and structures depend upon environmental factors, human ingenuity and available material and resources

**Lines of Inquiry**

- Different building materials and their properties
- The structure of buildings and bridges
- The materials and shapes used in making stable, weight bearing structures

| Key concepts | Approaches to Learning |
|---|---|
| • Function<br>• Change<br>• Form | **Thinking skills**<br>• Acquisition of knowledge<br>• Analysis<br>• Application<br>• Synthesis |
| **Related concepts**<br>• Structure<br>• Properties of materials | **Research skills**<br>• Observing<br>• Organizing data<br>• Interpreting data |

| English Integration | Math Integration |
|---|---|
| • Facts and Opinions<br>• Note taking | • Patterns- visualize 3D objects from 2D nets<br>• Fractions – compare, recognize and order fractions<br>• Date and Time - Revisit |

## Breakup of the Inquiry

**Unit of Inquiry:** Performing Arts

**Duration:** 6 weeks **Subject Focus**: Arts/ Language

**Theme:** How we express ourselves - An inquiry into the ways in which we reflect on, extend and enjoy our creativity; our appreciation of the aesthetic.

**Central Idea**

The performing arts allow people to entertain and educate audiences.

**Lines of Inquiry**

| | | | |
|---|---|---|---|
| Different types of performing arts | Purpose of a performance | Interpretation of an art form | Cultures using varied performing arts |

| **Key concepts** | **Approaches to Learning** |
|---|---|
| • Form<br>• Perspective<br>• Reflection | **Communication skills**<br>• Reading<br>• Writing<br>• Speaking<br>• Listening |
| **Related concepts** | **Research skills** |
| • Techniques<br>• Performance<br>• Interpretation | • Interpretation<br>• Analysis<br>• Presenting research findings |

| **English Integration** | **Math Integration** |
|---|---|
| • Descriptive writing – describing about feelings, thoughts, events and experiences<br>• Folk tales<br>• Role Play and presentation<br>• Dialogues | • Patterns – Identify, describe, visualize, draw 2D shapes<br>• Venn diagram – compare and contrast<br>• Carroll diagram for recording data<br>Revisit number operations |

## Breakup of the Inquiry

**Unit of Inquiry:** Disaster Management

**Duration:** 6 weeks **Subject Focus**: Science/ Social Studies

**Theme:** Sharing the Planet- An inquiry into the rights and responsibilities in the struggle to share finite resources with other people and with other living things

**Central Idea**

Local and global communities share responsibilities to reduce the impact on the people affected by natural disasters.

**Lines of Inquiry**

| | | |
|---|---|---|
| The causes and impact of natural disasters | The response systems needed when a natural disaster occurs | Our personal responsibility and role as citizens in response to disasters |

| Key concepts | Approaches to Learning |
|---|---|
| • Causation<br>• Responsibility | **Research skills**<br>• Observing<br>• Collecting Data and recording data<br>• Interpreting data |
| **Related concepts** | **Self-Management skills** |
| • Earth and space<br>• Forces and energy | • Safety<br>• Codes of behaviour<br>• Informed choices |

| English Integration | Math Integration |
|---|---|
| • Dialogues – direct/ indirect speech, positives and negatives<br>• Report writing – Revisit | • Area and Perimeter – Measuring and calculating area and perimeter of rectilinear shapes drawn on square grid and rectangles and squares |

# English Curriculum

## Speaking and Listening

- Speak clearly and confidently in a range of contexts
- Practice to improve performance when reading aloud
- Know that spoken language varies according to the purpose and audience.
- Take turns in discussion, building on what others have said
- Listen and respond appropriately to other views and opinions
- Listen and remember a sequence of instructions
- Describe and share personal experiences
- Participate in a variety of dramatic activities, for example, role play, dramatization of familiar stories and poems
- Participate in telephonic conversations, extempore and elocution
- Use language to explain, inquire and compare

## Reading

- Read a range of story, poetry and information books
- Sustain the reading of books with chapters
- Note how text is organized in paragraphs and chapters
- Read play scripts and dialogue, with awareness of different voices
- Know different types of texts serve different purposes
- Read and comment on different books by the same author
- Consider words that make an impact (e.g. adjectives and powerful verbs)
- Begin to infer meanings beyond the literal (e.g. about motives and character)
- Identify the central message or gist of what has been read
- Understand and use the terms 'fact', 'fiction' and 'non-fiction'
- Scan a passage to find specific information and answer questions
- Locate information in non-fiction texts using contents page and index
- Consider ways that information is set out (e.g. lists, charts, bullet points)
- Read and follow instructions to carry out an activity
- Find information using IT sources
- Participate in collaborative learning experiences, acknowledging that people see things differently and are entitled to express their point of view
- Use effective strategies to tackle unfamiliar words
- Use analogy in working out the likely spelling of words
- Use and spell compound words according to grade level
- Extend vocabulary for homophones and homonyms
- Generate synonyms for high frequency words (e.g. big, little, good) and consider how the choice of words can heighten meaning
- Use independent spelling strategies (e.g. sounding out, visual skills)
- Use a dictionary to find the spelling and meaning of unknown words from the context
- Extend knowledge and use of spelling patterns (e.g. vowel phonemes, double consonants, and silent letters, common prefixes and suffixes)
- Take account of the full range of punctuation in reading aloud

## Writing

- Ensure consistency in the size and proportion of letters and the spacing of words
- Build up handwriting speed, fluency and legibility
- Use graphic organizers to plan writing (e.g. Mind maps, Graphic Organizers, pointers)
- Develop descriptions of settings in stories and write portraits of characters
- Use reading as a model for writing dialogue
- Begin to organize writing in paragraphs in extended stories
- Write first-person accounts and descriptions based on observation
- Choose and compare words to strengthen the impact of writing
- Write book reviews summarizing what the book is about
- Use IT to write, edit and present work
- Organize and sequence ideas
- Write routinely over extended and shorter time frames for a variety of purposes (Descriptive/Autobiography/Letters/Messages/Notes/Diary)
- Practice new spellings and write them correctly by identifying misspelt words in own writing
- Collect example of nouns, verbs and adjectives, and use the terms appropriately
- Understand that verbs are necessary for meaning in a sentence and develop consistency in the use of tenses
- Identify pronouns and understand their function in a sentence
- Ensure grammatical agreement of nouns, pronouns and verbs in using Standard English
- Understand pluralization and use the terms 'singular' and 'plural'
- Maintain accurate use of capital letters, full stops, question marks, exclamation marks, and commas in writing
- Learn the basic conventions of speech punctuation and use speech marks
- Use the apostrophe to mark contraction in omission to shorten words (e.g. can't, don't)
- Use a widening range of connectives to link ideas in writing
- Identify prepositions and conjunctions and use the terms when needed
- Use articles appropriately (a, an, the)
- Use Degrees of Comparison in sentences appropriately
- Understand adverbs add meaning to the verb and identify
- Understand simple Figures of speech
- Identify and use Simple and Compound sentences
- Identify the Subject and Predicate in a sentence

### Viewing and Presenting

- Realize that visual information reflects and contributes to the understanding of context
- Realize that text and illustrations in reference materials work together to convey information and can explain how this enhances understanding
- Use actions and body language to reinforce and add meaning to oral presentations, communicate ideas and feelings visually
- Attend to visual information showing understanding through discussion, role play, illustrations
- Discuss their own feelings in response to visual messages; listen to other responses, realizing that people react differently
- Discuss personal experiences that connect with visual images
- Observe and discuss familiar and unfamiliar visual messages
- Become aware of the use and organisation of visual effects to create a particular impact

# Math Curriculum Framework

## Number Sense

***Numbers and the number system***

- Read and write numbers up to 10 000
- Count on and back in ones, tens, hundreds and thousands from four-digit numbers
- Understand what each digit represents in a three- or four-digit number and partition into thousands, hundreds, tens and units
- Use decimal notation and place value for tenths and hundredths in context, e.g. order amounts of money; convert a sum of money such as $13.25 to cents, or a length such as 125 cm to metres; round a sum of money to the nearest pound
- Understand decimal notation for tenths and hundredths in context, e.g. length
- Find multiples of 10, 100, 1000 more/less than numbers of up to four digits, e.g. 3407 + 20 = 3427
- Multiply and divide three-digit numbers by 10 (whole number answers) and understand the effect; begin to multiply numbers by 100 and perform related divisions
- Recognise multiples of 5, 10 and 100 up to 1000
- Round three- and four-digit numbers to the nearest 10 or 100
- Position accurately numbers up to 1000 on an empty number line or line marked off in multiples of 10 or 100
- Estimate where three- and four-digit numbers lie on empty 0–1000 or 0–10 000 lines
- Compare pairs of three-digit or four-digit numbers, using the > and < signs, and find a number in between each pair
- Recognise and extend number sequences formed by counting in steps of constant size, extending beyond zero when counting back
- Recognise odd and even numbers
- Make general statements about the sums and differences of odd and even numbers
- Order and compare two or more fractions with the same denominator (halves, quarters, thirds, fifths, eighths or tenths)
- Relate finding fractions to division
- Find halves, quarters, thirds, fifths, eighths and tenths of shapes and numbers
- Describe and continue number sequences, e.g. 7, 4, 1, –2 ... identifying the relationship between each number
- Explore and solve number problems and puzzles, e.g. logic problems
- Investigate a simple general statement by finding examples which do or do not satisfy it
- Explain methods and reasoning orally and in writing; make hypotheses and test them out

***Calculation***

***Mental strategies***

- Derive quickly pairs of two-digit numbers with a total of 100, e.g. 72 + … = 100
- Derive quickly pairs of multiples of 50 with a total of 1000, e.g. 850 + … = 1000
- Identify simple fractions with a total of 1, e.g. $\frac{1}{4}$ + … = 1
- Know multiplication for 2×, 3×, 4×, 5×, 6×, 9× and 10× tables and derive division facts
- Recognize and begin to know multiples of 2, 3, 4, 5 and 10, up to the tenth multiple
- Add three or four small numbers, finding pairs that equal 10 or 20
- Add three two-digit multiples of 10, e.g. 40 + 70 + 50
- Add and subtract near multiples of 10 or 100 to or from three-digit numbers, e.g. 367 – 198 or 278 + 49
- Add any pair of two-digit numbers, choosing an appropriate strategy
- Subtract any pair of two-digit numbers, choosing an appropriate strategy
- Find a difference between near multiples of 100, e.g. 304 – 296
- Subtract a small number crossing 100, e.g. 304 – 8
- Multiply any pair of single-digit numbers together
- Use knowledge of commutativity to find the easier way to multiply
- Understand the effect of multiplying and dividing three-digit numbers by 10
- 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

***Addition and subtraction***

- Add pairs of three-digit numbers
- Subtract a two-digit number from a three-digit number
- Subtract pairs of three-digit numbers
- Choose appropriate mental or written strategies to carry out calculations involving addition or subtraction
- Check the results of adding numbers by adding them in a different order or by subtracting one number from the total
- Check subtraction by adding the answer to the smaller number in the original calculation
- Choose strategies to find answers to addition or subtraction problems; explain and show working

***Multiplication and division***

- Double any two-digit number
- Multiply multiples of 10 to 90 by a single-digit number
- Multiply a two-digit number by a single-digit number
- Divide two-digit numbers by single digit-numbers (answers no greater than 20)
- Decide whether to round up or down after division to give an answer to a problem
- Understand that multiplication and division are the inverse function of each other
- Begin to understand simple ideas of ratio and proportion, e.g. a picture is one fifth the size of the real dog. It is 25 cm long in the picture, so it is 5 × 25 cm long in real life
- Check multiplication using a different technique, e.g. check 6 × 8 = 48 by doing 6 × 4 and doubling
- Check the result of a division using multiplication, e.g. multiply 4 by 12 to check 48 ÷ 4
- Explain reasons for a choice of strategy when multiplying or dividing

## Shape and Space

*Shapes and geometric reasoning*

- Identify, describe, visualize, draw and make a wider range of 2D and 3D shapes including a range of quadrilaterals, the heptagon and tetrahedron; use pin boards to create a range of polygons. Use spotty paper (Isometric Paper) to record results.
- Classify polygons (including a range of quadrilaterals) using criteria such as the number of right angles, whether or not they are regular and their symmetrical properties
- Identify and sketch lines of symmetry in 2D shapes and patterns
- Visualise 3D objects from 2D nets and drawings and make nets of common solids
- Find examples of shapes and symmetry in the environment and in art
- Recognise the relationships between 2D shapes and identify the differences and similarities between 3D shapes
- Identify simple relationships between shapes, e.g. these polygons are all regular because ...

*Position and movement*

- Describe and identify the position of a square on a grid of squares where rows and columns are numbered and/or lettered
- Know that angles are measured in degrees and that one whole turn is 360° or four right angles; compare and order angles less than 180° (Use of Magnetic Compass)
- Devise the directions to give to follow a given path (Use of Protractor)

## Measurement

*Length, mass and capacity*

- Choose and use standard metric units and their abbreviations (km, m, cm, mm, kg, g, l and ml ) when estimating, measuring and recording length, weight and capacity
- Know and use the relationships between familiar units of length, mass and capacity; know the meaning of 'kilo', 'centi' and 'milli'
- Where appropriate, use decimal notation to record measurements, e.g. 1.3 m, 0.6 kg, 1.2 l
- Interpret intervals/divisions on partially numbered scales and record readings accurately
- Understand everyday systems of measurement in length, weight, capacity and use these to solve simple problems as appropriate
- Estimate and approximate when calculating, and check working
- Make up a number story for a calculation, including in the context of measures

*Time*

- Read and tell the time to nearest minute on 12-hour digital and analogue clocks
- Use a.m., p.m. and 12-hour digital clock notation
- Read simple timetables and use a calendar
- Choose units of time to measure time intervals
- Understand everyday systems of measurement in time and use it to solve simple problems as appropriate

*Area and perimeter*

- Draw rectangles, and measure and calculate their perimeters
- Understand that area is measured in square units, e.g. cm2
- Find the area of rectilinear shapes drawn on a square grid by counting squares

## Data handling

*Organizing, categorizing and representing data*

- Answer a question by identifying what data to collect, organizing, presenting and interpreting data in tables, diagrams, tally charts, pictograms (symbol representing 2, 5, 10 or 20 units) and bar charts (intervals labelled in twos, fives, tens or twenties)
- Compare the impact of representations where scales have different intervals
- Use Venn diagrams or Carroll diagrams to sort data and objects using two or three criteria
- Use ordered lists and tables to help to solve problems systematically

# Hindi Curriculum

## Listening and Speaking

- Listen and 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
- Use actions and body language to reinforce and add meaning to oral presentations
- Speaks clearly to report on a topic, tell a story, or recount an experience
- Understand and use specific vocabulary to suit different purposes
- Use language to explain, inquire and compare
- Listen carefully and respond appropriately, asking questions of others

## Reading

- Read grade-level texts with expression, accuracy, and fluency
- Identify and describe story settings and characters
- Predict story endings based on their own knowledge and experience
- Participate in collaborative learning experiences
- Read and follow simple instructions (e.g. in a recipe)
- Find answers to questions by reading a section of text
- Scan a page to find where information is located
- Read and interpret text by responding to simple questions

## Writing

- Engage confidently with the process of writing
- Use graphic organizers to plan writing for example mind maps
- Spell accurately the common words that can be read on sight
- Write sentences choosing simple words
- Create illustrations to match their own written text
- Organize ideas in a logical sequence e.g. write simple narratives with the beginning, middle and end
- Use feedback from teachers and other student to improve their writing
- Write routinely over short time frames for a variety of purposes

## Grammar and Punctuation

- Write in clear sentences using full stops
- Re-read own writing for sense and accuracy
- Use question marks

## Viewing & Presenting

- View visual information and show understanding by asking relevant question and discussing possible meaning
- Discuss their own feelings in response to visual messages
- Listen to other responses and react differently
- Discuss personal experiences that connect with visual images
- Select and use suitable shapes, colors, symbols and layout for presentation

# Spanish Curriculum

## Speaking and listening

- Speak clearly and chose words clearly
- Take turns in speaking
- Listen carefully to questions and instructions
- Converse with friends, teachers and other adults
- Consider view of others
- Gather details after listening
- Listen to others and respond appropriately
- Attempt to express ideas precisely, using a growing vocabulary
- Ask and answer questions to gain information

## Reading

- Read grade level texts with expression, accuracy and fluency
- Read and interpret text by responding to simple questions
- Find answers to questions by reading a section of the text
- Make connections between personal experiences and story book characters
- Show curiosity and ask questions about pictures or text
- Participate in guided reading situations, observing and applying reading behavior
- Use a dictionary to find the spelling and meaning of words

## Writing

- Write using appropriate vocabulary to express their own ideas and feelings
- Write sentences using grade level vocabulary
- Create illustrations to match their own written text
- Read their own writing to the teacher and to the classmates
- Show curiosity and ask questions about written language
- Participate in shared and guided writing

## Viewing and presentation

- Interpret and respond to range of visual texts
- Attend to visual information showing understanding through role plays, illustrations
- Relate to different contexts presented in visual texts
- Making personal connections to visual texts
- Observe and discuss illustrations using grade level vocabulary

## Language Convention and Punctuation

- Collect example of nouns, verbs and adjectives and use the terms appropriately
- Understand that verbs are necessary for meaning in sentence
- Identify pronouns and understand their function in a sentence
- Identify nouns, numbers, gender and their impact on sentences

## PSPE Curriculum

| **Unit – Health Related Fitness:** | | |
|---|---|---|
| Body Management | Loco motor Skills | Fitness Components |
| • Body coordination<br>• Body control<br>• Body from<br>• Self-regulation | • Balance<br>• Speed and agility<br>• Endurance<br>• Power<br>• Reflexes | • Cardiorespiratory endurance<br>• Muscular strength<br>• Core strength<br>• Flexibility |

| **Unit – Cooperative Games:** | | | |
|---|---|---|---|
| Body Management | Loco motor Skills | Manipulative Skills | Team Building |
| • Body coordination<br>• Body control<br>• Self-regulation<br>• Spatial Awareness | • Balance<br>• Speed and agility<br>• Jumping<br>• Bouncing<br>• Striking<br>• Stamina | • Catching<br>• Carrying<br>• Throwing<br>• Collecting | • Team work<br>• Competition<br>• Respect |

| **Unit – Games:** | | | |
|---|---|---|---|
| Loco motor Skills | Manipulative Skills | Stability Skills | Technical Skills |
| • Balance<br>• Jumping<br>• Running | • Catching<br>• Dribbling<br>• Carrying<br>• Bouncing<br>• Throwing<br>• Kicking | • Upper and lower strength<br>• Extending<br>• Turning | • Rules and regulations<br>• Team formations<br>• Positions within the team |

| **Unit – Individual Pursuits (Skating):** | | |
|---|---|---|
| Body Management | Loco motor Skills | Manipulative Skills |
| • Body coordination<br>• Body balance<br>• Body control | • Balance<br>• Jogging<br>• Running | • Stride 1<br>• Stride 2<br>• T-break<br>• Spin turn<br>• Eagle turn<br>• Simple jump<br>• Half turn jump<br>• Full jump |

# Visual Art Curriculum

**Elements of Art**

- line (types of lines)
- shapes (types of shapes)
- form
- colour (Colour schemes)
- pattern
- texture

**Skills**

- handling tools
- spatial awareness
- organisation
- time-management
- paper Manipulation Skills

**Art forms**

| **Composition** | **Craft** |
|---|---|
| • Character drawing | • Quilling |
| • Landscape | • Collage |
| • Stories | • 3D modelling |
| **Life drawing** | • Quilting |
| • Portraits | • papier mache |
| • Still life | • print making (stamping, stencil, rubbing) |
| • Nature drawing | |
| • Sketching | |