

EARLY CHILDHOOD EDUCATION

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# Language Arts

## SYLLABUS

Ministry of Education  
& Human Resource Development



## Language Arts Syllabus

The Language Arts Syllabus is divided into two sections - Level One and Level Two. In the first level teachers will provide the necessary experiences that provide the support for children to develop the ability to communicate effectively in speech and writing, in Standard English and to listen and read with understanding. Many of the strategies at this level will be emerging for most students. Those students that are operating at a level of independence for the first level will be exposed to the experiences listed at the second level as depicted in the table following.

The concepts and strategies of the first level form a critical prerequisite to the second level. Teachers will provide experiences that build on those of the first level carrying those experiences through to acceptable conventions. Hence, those strategies/activities that are mentioned in the first level and are repeated in the second level will be qualitatively enriching for the student to the point of independence. Also, at the second level, new strategies will be introduced that are expected to be carried through to the secondary level, thereby promoting continuity at the lower end of the educational continuum.

*Specific skill practice should be engaged in by providing realistic situations for the student to apply that skill.*

**TABLE 2 - THE RELATIONSHIP BETWEEN LEVELS FOR LANGUAGE ARTS**

	TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Level One</b>	Print Word Space Start Page turning End	<b>Develops effective reading strategies</b>	Co-reads predictable picture books with a more competent reader. Talks about a book that has been read.	Predictable picture books	Observation Checklist Anecdotal Records
<b>Level Two</b>	Print Word Space Start Page turning Sentence Beginning Middle End Prediction	<b>Develops effective reading strategies</b>	Co-reads predictable picture books with a more competent reader. Reads a predictable book. Talks about a book that has been read. Retells a story that he/she has read.	Predictable books Tape & Tape recorder	Observation Checklist Anecdotal Records

## Language Arts Syllabus

### Level One

**General Objective: The child develops effective listening and speaking skills.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Listening &amp; Speaking:</b> Attention Speech Discrimination Vocabulary: Rhymes Rhyming words Poems Comprehension Oral Reading	<b>Listens attentively to a speaker who uses Standard English structures and responds appropriately.</b>	<ul style="list-style-type: none"> <li>◆ Teacher develops routines in which each child listens attentively. These may involve listening to a variety of sounds (environmental, recorded, rhythmic, musical) for discrimination and identification.</li> <li>◆ Role plays in which the importance of listening is valued.</li> <li>◆ Responds to a Standard English speaker by attempting to use appropriate vocabulary and structures of Standard English.</li> <li>◆ Generates questions using approximate to appropriate Standard English structures.</li> <li>◆ Choral reading of:     Predictable books;     Nursery rhymes.</li> <li>◆ Participates in games that require attentive listening and responding in standard English.</li> <li>◆ Attempts to adjust volume of voice to match group size.</li> <li>◆ Listens while the teacher is talking or reading.</li> <li>◆ Listens while a peer is talking or reading</li> <li>◆ Responds to a speaker with an appropriate action (talking, following instructions, etc.).</li> </ul>	Tape recorder Tapes Props Predictable books Nursery rhymes Poems Word family songs Picture books Resource persons	Observation Portfolios Anecdotal Records Checklists

## Language Arts Syllabus

### Level One

**General Objective: The child develops effective listening and speaking skills.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Listening &amp; Speaking:</b> Attention Speech Discrimination Vocabulary: Rhymes Rhyming words Poems Comprehension Oral Reading	<b>Listens attentively to a speaker who uses Standard English structures and responds appropriately.</b>	<ul style="list-style-type: none"> <li>◆ Meaningfully converses with an adult and child speaker for increasingly longer periods.</li> <li>◆ Follows instructions sequentially, to complete a given task.</li> <li>◆ Begins to identify words that sound alike. Imitates and creates rhymes and rhyming words.</li> <li>◆ Sings word family songs.</li> <li>◆ Appreciates poetry that evokes enjoyment.</li> <li>◆ Imitates reading aloud.</li> <li>◆ Reads simple predictable texts aloud.</li> <li>◆ Interviews an expert in a particular area of interest.</li> <li>◆ Repeats the 'morning message.'</li> <li>◆ Listens to favourite stories being read.</li> <li>◆ Relates experiences.</li> </ul>	Tape recorder Tapes Props Predictable books Nursery rhymes Poems Word family songs Picture books Resource persons	Observation Portfolios Anecdotal Records Checklists

## Language Arts Syllabus

### Level One

**General Objective: The child develops strategies for effective reading and writing.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Pleasurable reading</b> Characters Moral of a story <b>Free writing</b> Journal Spelling Sentence Punctuation Handwriting	<b>Develops positive attitudes to reading and writing.</b>	<ul style="list-style-type: none"> <li>◆ Co-reads predictable picture books, concept books and trade books with the teacher.</li> <li>◆ Peruses books in class.</li> <li>◆ Listens to literature read aloud in class.</li> <li>◆ Makes meaningful predictions prior to reading.</li> <li>◆ Writes his/her books matching patterns of other books.</li> <li>◆ Designs and makes book covers based on stories/experiences.</li> <li>◆ Composes original stories using increasing approximations of conventional writing when composing.</li> <li>◆ Voluntarily chooses books to look at and pretend read.</li> <li>◆ Engages in pretend reading. Illustrates or represents books they have read or listened to.</li> <li>◆ Sees his/her speech written down.</li> <li>◆ Dramatizes stories they enjoy.</li> </ul>	Picture books Concept books Trade books Blank book covers Writing tools	Observation Portfolios Anecdotal Records Checklists Worksamples

# Language Arts Syllabus

## Level One

**General Objective: The child develops strategies for effective reading and writing.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Book Knowledge:</b> Book Cover Title/name Writer/author Illustrator Picture Print (including environmental print) Book Handling	<b>Demonstrates            knowledge about            books and print.</b>	<ul style="list-style-type: none"> <li>◆ Teacher introduces a picture book by initiating discussion on the topic of the book using the language associated with books (cover, title, etc.). Then, the book is explored page by page. Progressively, teacher introduces various features to pay attention to.</li> <li>◆ Teacher tactfully guides the attention of the student towards the concepts associated with the topic, through the pictures initially and then words, and sentences.</li> <li>◆ During book introduction teacher encourages children to identify:                Letters (initial, final) by name;                Letters by associated sounds</li> </ul> <p><b>NB: Be sure to make a distinction between letter names and letter sounds.</b></p> <ul style="list-style-type: none"> <li>◆ Imitates reading behaviours as modelled by the teacher during reading:                Holds the books right side up                Starts to read at the beginning of a set of printed text.                Follows the lines of text from left to right. Turns pages at the end of reading a page.</li> <li>◆ Shows that print contains meaning by:                Writing at least one sentence about each book that has been read and reads his/her writing to another.</li> </ul>	Picture books Concept books Trade books	Observation Portfolios Anecdotal Records Checklists

# Language Arts Syllabus

## Level Two

### General Objective: The child develops effective listening and speaking skills

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Listening &amp; Speaking:</b> Attention Speech Discrimination Vocabulary Comprehension Oral Reading	<b>Listens attentively to a speaker who use Standard English structures and responds appropriately.</b>	<ul style="list-style-type: none"> <li>◆ Teacher develops routines in which each child listens attentively. These may involve listening to a variety of sounds (environmental, recorded, rhythmic, musical) for discrimination and identification.</li> <li>◆ Develops routines, which prepare him/her to listen attentively.</li> <li>◆ Engages in role playing in which the importance of listening is valued.</li> <li>◆ Responds to a Standard English speaker by attempting to use appropriate vocabulary and structures of Standard English.</li> <li>◆ Generates questions using approximate to appropriate Standard English structures.</li> <li>◆ Participates in choral reading of: Predictable books; Nursery rhymes and poems.</li> <li>◆ Participates in games that require attentive listening and responding in standard English.</li> <li>◆ Adjusts volume of voice to match size of audience (small group, large group).</li> <li>◆ Listens while the teacher is talking or reading.</li> <li>◆ Listens while a peer is talking or reading.</li> <li>◆ Listens to various media (radio, audio tapes, film, television, computer).</li> <li>◆ Establishes routines for listening for a variety of purposes and listening to a variety of speakers.</li> </ul>	Tape recorder Tapes Props Predictable books Listening games Radio Film Television Computer & software for listening	Observation Portfolios Anecdotal Records Checklists Teacher made tests Cloze passages



## Language Arts Syllabus

### Level Two

**General Objective: The child develops effective listening and speaking skills**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Listening &amp; Speaking:</b> Attention Diction Audibility Intonation Stance Listening Comprehension Oral reading	<b>Listens attentively to speakers who use Standard English structures and responds appropriately.</b>	<ul style="list-style-type: none"> <li>◆ Engages in role playing around a theme or topic as a means for speaking with clarity to an audience.</li> <li>◆ Generates questions for interviewing a visitor to the class.</li> <li>◆ Interviews a classroom guest.</li> <li>◆ Responds appropriately to a Standard English speaker.</li> <li>◆ Chooses poems for choral speaking and recites them as a group member.</li> <li>◆ Introduces a book to the class and gives reasons for recommending it to the class.</li> <li>◆ Reads his/her favourite book to the class for discussion.</li> <li>◆ Shares or listens to a journal entry of his/her choice.</li> <li>◆ Tells or listens to a story shared by a class member.</li> <li>◆ Talks in small group situations.</li> <li>◆ Engages in sustained talk to a large group.</li> <li>◆ Relates personal experiences.</li> <li>◆ Responds to a speaker with an appropriate action (talking, following instructions, etc.).</li> <li>◆ Engages in meaningful conversation with an adult and child speaker for increasingly longer periods.</li> </ul>	Props Paper and Pencils Resource person Poems Books Journals Tape & tape recorder	Observation Portfolios Anecdotal records Checklists Teacher-made tests

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### Level Two

**General Objective: The child develops effective listening and speaking skills**

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<b>Listening &amp; Speaking:</b> Attention Diction Audibility Intonation Stance Listening Comprehension Oral reading	<b>Listens attentively to speakers who use Standard English structures and responds appropriately.</b>	<ul style="list-style-type: none"> <li>◆ Follows instructions sequentially, to complete a given task.</li> <li>◆ Recognizes and identifies words that sound alike.</li> <li>◆ Imitates and creates rhymes and rhyming words.</li> <li>◆ Sings word family songs.</li> <li>◆ Appreciates poetry that evokes enjoyment.</li> <li>◆ Begins reading aloud.</li> <li>◆ Read simple predictable texts aloud.</li> <li>◆ Interviews an expert in a particular area of interest.</li> <li>◆ Repeats the 'morning message.'</li> <li>◆ Participates in shared reading.</li> <li>◆ Listens to favourite stories being read.</li> <li>◆ Relates experiences.</li> </ul>	Props Paper and Pencils Resource person Poems Books Journals Tape & tape recorder	Observation Portfolios Anecdotal records Checklists Teacher-made tests

# Language Arts Syllabus

## Level Two

**General Objective: The child develops strategies for effective reading and writing.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Pleasurable reading</b> Characters Moral <b>Free writing</b> Journal Spelling Sentence Punctuation Handwriting	<b>Develops positive attitudes to reading and writing</b>	<ul style="list-style-type: none"> <li>◆ Co-reads predictable picture books, concept books and trade books with the teacher.</li> <li>◆ Peruses books in class. Listens to literature read aloud in class.</li> <li>◆ Makes meaningful predictions prior to reading.</li> <li>◆ Writes his/her books matching patterns of other books.</li> <li>◆ Designs and makes book covers based on stories/experiences.</li> <li>◆ Composes original stories using increasing approximations of conventional writing when composing.</li> <li>◆ Voluntarily chooses books to look at and pretend read.</li> <li>◆ Engages in pretend and real reading.</li> <li>◆ Illustrates or represents books they have read or listened to.</li> <li>◆ Sees his/her speech written down.</li> <li>◆ Dramatizes stories they enjoy.</li> </ul>	Picture books Concept books Trade books Blank book covers Writing tools	Observation Portfolios Anecdotal Records Checklists Work Samples

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### Level Two

**General Objective: The child develops strategies for effective reading and writing.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Book Knowledge:</b> Book Cover Title/name Writer/author Illustrator Picture Print (including environmental print) Book Handling	<b>Demonstrates            knowledge about            books and print.</b>	<ul style="list-style-type: none"> <li>◆ Teacher introduces a picture book by initiating discussion on the topic of the book using the language associated with books (cover, title, etc.). Then, the book is explored page by page. Progressively, teacher introduces various features to pay attention to.</li> <li>◆ Teacher tactfully guides the attention of the student towards the concepts associated with the topic, through the pictures initially and then words, and sentences.</li> <li>◆ During book introduction teacher encourages children to identify: letters (initial, final) by name; letters by associated sounds</li> </ul> <p><b>NB: Be sure to make a distinction between letter names and letter sounds.</b></p> <ul style="list-style-type: none"> <li>◆ Imitates reading behaviours as modelled by the teacher during reading:              Holds the books right side up.              Starts to read at the beginning of a set of printed text.              Follows the lines of text from left to right.              Turns pages at the end of reading a page.</li> <li>◆ Shows that print contains meaning by:              Writing at least one sentence about each book that has been read and reads his/her writing to another person.</li> </ul>	Picture books Concept books Trade books	Observation Portfolios Anecdotal Records Checklists

# Language Arts Syllabus

## Level Two

**General Objective: The child develops strategies for effective reading and writing.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Word</b> Ideas Inter- relations (word level; sentence level)	<b>Uses strategies for            understanding.</b>	<ul style="list-style-type: none"> <li>◆ Adjusts reading rate to texts.</li> <li>◆ Uses prior knowledge to make sense of text.</li> <li>◆ Corrects him-/her-self when an error is made.</li> <li>◆ Shows an awareness of characters by studying a character from a familiar story.</li> <li>◆ Discusses key concepts from text that was read.</li> <li>◆ Identifies the structure of informational texts as a means of understanding how ideas are related (cause and effect; problem and solution; fact and opinion).</li> <li>◆ Studies texts to draw conclusions and make interpretations.</li> <li>◆ Re-reading strategy.</li> <li>◆ Reading for retelling.</li> </ul>	Story books Informational texts/ Trade books	Observation Portfolios Anecdotal records Checklists Teacher made tests

## Language Arts Syllabus

### Level Two

**General Objective: The child develops strategies for effective reading and writing.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Process Writing</b> First Draft Re-write Final Draft Editing Editing Symbols Peer Editing Journal Spelling Sentence Paragraph Punctuation Handwriting	<b>Develops effective writing strategies.</b>	<ul style="list-style-type: none"> <li>◆ Creates stories by painting, drawing, and printing letters.</li> <li>◆ Draws a series of sequenced pictures that tell a story.</li> <li>◆ Accompanies sequenced pictures with text that is progressively conventional.</li> <li>◆ Dictates words, sentences and stories to a more competent writer.</li> <li>◆ Contributes to group compositions.</li> <li>◆ Uses invented spelling to write:                  simple sentences;                  simple texts with two or more sentences;                  a story with two or more paragraphs.</li> <li>◆ Approximates conventions of spelling.</li> <li>◆ Uses punctuation correctly (Capitalization, comma, full stop).</li> <li>◆ Brainstorming as a prewriting activity.</li> </ul>	Paper Writing tools Paints Crayons Computer Sentence strips	Observation Portfolios Anecdotal records Checklists Teacher made tests Work samples

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## Level One

**General Objective: The child develops strategies for effective reading and writing.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Sounds:</b> Same/Likeness Difference with sounds, objects, textures, pictures, letters (initial sounds, medial sounds, final sounds), words (e.g. Homophones) Sentences Paragraph Rhyming</p>	<p><b>The child acquires a high level of auditory and visual perception skills.</b></p>	<ul style="list-style-type: none"> <li>◆ Listens to a variety of sounds (environmental, recorded, rhythmic, musical, letter sounds) Stories, poems</li> <li>◆ Makes visual representations of these sounds.</li> <li>◆ Dictate stories that are written by the teacher.</li> <li>◆ Language experience writing</li> <li>◆ Participates in: Word Lottos Matching games</li> <li>◆ Imitates and creates rhythmic patterns by Tapping/Echoing.</li> <li>◆ Imitates and creates rhythmic patterns.</li> <li>◆ Sorts letters, words and sentences according to various attributes (e.g. initial, medial, final letters).</li> <li>◆ Builds stories.</li> <li>◆ Co-reads predictable picture books</li> <li>◆ Identifies words that are alike in sound but different in meaning (Homophones).</li> <li>◆ Follows instructions sequentially to complete a given task.</li> </ul>	<p>Sound Shakers Musical Instruments Tape Recorder &amp; Tapes, Computer Software Multimedia Packages Supporting Rhymes &amp; Jingles, Games (e.g. I Spy) Support materials for games Sorting, story building, etc. Selection of puzzles, riddles, Children's texts Classification games Word Banks Predictable books Cloze Passages Crossword Puzzles Word Finds/ Searches Riddles Command Cards</p>	<p>Observation Checklist Portfolios Anecdotal Records Teacher Made Tests</p>

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TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Letters</b>	<b>The child recognizes upper- and lower-case letters of the alphabet.</b>	<ul style="list-style-type: none"> <li>◆ Traces letters</li> <li>◆ Writes letters individually to form words</li> <li>◆ Forms letters</li> <li>◆ Identifies letters within continuous text.</li> </ul>	Plasticine Templates Textured letters, "Roll and Write" Feely bag Alphabet charts Puzzles, Cards	Observation Checklist Portfolios Anecdotal Records Teacher Made Tests
<b>Sounds:</b> Initial consonant sounds Final consonant sounds Medial consonant Letter sounds (Phonics) Blends Digraphs Long vowel sounds Short vowel sounds Colouring Circling Underlining	<b>The child associates letters with appropriate sound in words.</b>	<ul style="list-style-type: none"> <li>◆ Word Banks.</li> <li>◆ Identifies specific sounds from a variety of pictures and printed texts by:               <ul style="list-style-type: none"> <li>Colouring</li> <li>Circling</li> <li>Underlining</li> </ul> </li> <li>◆ Sorts and matches pictures according to specific consonant/vowel sounds.</li> <li>◆ Uses riddles, with the aid of objects and pictures to reinforce specific consonant or vowel sounds.</li> <li>◆ Uses games to list, words beginning with particular vowel and consonant sounds.</li> <li>◆ Reading predictable books.</li> <li>◆ Reading concept books.</li> </ul>	Objects Pictures Letter Charts Phonic Charts Flash Cards Predictable books Concept books	Observation Checklist Portfolios Anecdotal Records Teacher Made Tests



# Language Arts Syllabus

## Level One

**General Objective: The child develops strategies for effective reading and writing.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Combining sounds</b>	<b>The child links sounds with vowels.</b>	<ul style="list-style-type: none"> <li>◆ Articulates various sounds being modeled by the teacher during reading.</li> <li>◆ Builds word families emerging from text.</li> </ul>	Objects Pictures Letter Charts Phonic Charts Flash Cards	Observation Checklist Portfolios Anecdotal Records Teacher Made Tests
<b>Long vowel sounds Short vowel sounds</b>	<b>The child differentiates between long and short vowel sounds.</b>	<ul style="list-style-type: none"> <li>◆ Verbalizes long and short vowel sounds during reading and writing.</li> <li>◆ Classifies pictures according to sounds.</li> <li>◆ Compiles lists of words to reinforce long and short vowel sounds arising from books read.</li> </ul>	Audio tapes Cassette tape recorder with microphone Video tapes Video cassette recorder Language master Listening centres Multimedia packages Computer software Word Bank	Observation Checklist Portfolios Anecdotal Records Teacher Made Tests

## Language Arts Syllabus

### Level One

**General Objective: The child develops strategies for effective reading and writing.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Consonant digraphs:</b></p> <p>th as in thread ch as in church sh as in shoe wh as in whistle ng as in ring</p> <p><b>Vowel digraphs:</b></p> <p>Long</p> <p>a (ai as in pail) e (ee as in bee) i (ie as in pie) o (oo as in book) (oe as in toe) (oa as in soap) (ow as in blow) u (ue as in blue) (eu as in stew) (ui as in fruit)</p> <p>ar (as in car) or (as in born) er, ir, ur (as in her, sir, burn) ear (as in ear) au, aw, (as in caught, saw) oi, oy (as in boy, noise)</p>	<p><b>Recognizes specific combination of letters which produce one sound.</b></p>	<ul style="list-style-type: none"> <li>◆ Listens to self-recordings of texts related to long or short vowel sounds.</li> <li>◆ Articulates various sounds being modeled by the teacher.</li> <li>◆ Repeats family-word sounds.</li> <li>◆ Repeats rhymes and jingles to reinforces digraphs. Example: My thread is too thick.</li> <li>◆ Participates in games using consonant digraphs.</li> <li>◆ Articulates various sounds being modelled by the teacher during reading.</li> <li>◆ Sings family word sounds.</li> <li>◆ Repeats rhymes and jingles to reinforce digraphs.</li> </ul>	<p>Speech training rhymes. tongue twisters. riddles. Picture cards Words bingos Teacher-made games (e.g. Lucky dip game) Guessing games Rhyming words</p>	<p>Observation Checklist Portfolios Anecdotal Records Teacher Made Tests</p>

## Language Arts Syllabus

### Level One

**General Objective: The child develops strategies for effective reading and writing.**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Consonants blends:</b> bl, br, cl, cr, dr, fl, fr, gl, gr, pl, pr, sk, sc, sl, am, sn, sp, st, sw, tr, scr, spr, str, thr,</p>	<p><b>Identifies consonant blends in reading and writing.</b></p>	<ul style="list-style-type: none"> <li>◆ Articulates various sounds being modeled by the teacher during reading.</li> <li>◆ Sings and reads family word sounds in authentic texts.</li> <li>◆ Repeats rhymes and jingles to reinforce digraphs.</li> <li>◆ Participates in "Guessing game."</li> <li>◆ Compiles and reads aloud, in continuous text with consonant blends embedded.</li> <li>◆ Makes digraph charts.   'Sh'   shop shell   ship she</li> <li>◆ Uses tachistoscopes with consonant blends to assist in spelling and writing.</li> </ul>	<p>Speech training rhymes Tongue twisters Riddles Picture cards Word bingo Teacher-made games (e.g. Lucky dip game) Guessing games Rhyming words Charts Tachistoscopes Flash cards Journal books Chalkboard</p>	<p>Observation Checklist Portfolios Anecdotal Records Teacher Made Tests</p>
<p><b>Inflectional endings:</b> adding 's' adding 'es' changing 'y' to 'ies' changing 'f' to 'ves' 'ing' (with and without changing, e.g. 'come' to 'coming;' 'walk to walking') 'ed' <b>Root words</b> <b>Compound words</b></p>	<p><b>To develop an understanding of graphic knowledge for speaking and writing plurals, verb endings, prefixes, suffixes and possessive singular.</b></p>	<ul style="list-style-type: none"> <li>◆ Uses structural analysis to decode words during reading.</li> <li>◆ Uses structural analysis to spell words during writing.</li> </ul>	<p>Picture books Chapter books Trade books Paper Writing tools Computer</p>	<p>Observation Checklist Portfolios Anecdotal Records Teacher Made Tests</p>

## Language Arts Syllabus

### Level One

#### General Objective: The child develops an awareness of print

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Print</b> (including environmental print, newspapers, magazines, etc.)</p> <p><b>Directionality</b> (Left-Right; Top-Bottom; Between; Next to; Under; Beginning; Middle; End; Front; Back; First; Last; Start; Finish; Straight; Across)</p> <p><b>Creative writing</b></p> <p><b>Free writing</b></p> <p><b>Encoding</b></p>	<p><b>The child develops an interest in reading and writing</b></p>	<ul style="list-style-type: none"> <li>◆ Engages in Environmental/ Nature Walks.</li> <li>◆ Brings books for discussion.</li> <li>◆ Teacher shares interesting books with pupils.</li> <li>◆ Peruses large beginner and other books.</li> <li>◆ Makes books by children.</li> <li>◆ Matches letters/words/ Phrases/sentences</li> <li>◆ Builds pictograms.</li> <li>◆ Constructs experience charts, wall stories, friezes.</li> <li>◆ Creates class/individual readers of experiences.</li> <li>◆ Compiles Word Banks and Pictionaries, Dictionaries</li> <li>◆ Labels classroom objects</li> </ul>	<p>Reading-Activity Centre (Lottos, Link-a-letter, Supporting activities)</p> <p>Writing centres</p> <p>Language Master with Sentence Strips</p> <p>Flash Cards</p> <p>Class Library Books: Traffic Signs</p> <p>Logos</p> <p>Household Labels</p> <p>Magazines, Forms, Letters</p> <p>Newspapers</p> <p>Directories</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Anecdotal Records</p> <p>Teacher Made Tests</p>
<p><b>Print</b> (including environmental print, newspapers, magazines, etc.)</p> <p><b>Directionality</b> (Left-Right Orientation)</p> <p><b>Creative writing</b></p> <p><b>Free writing</b></p> <p><b>Encoding</b></p> <p><b>Journals</b></p>	<p><b>The child recognizes that print has meaning/makes sense.</b></p>	<ul style="list-style-type: none"> <li>◆ Designs a class telephone directory</li> <li>◆ Children bring books for discussion.</li> <li>◆ Teacher reads to pupils.</li> <li>◆ Reads with assistance large beginner and other books for specific concept development.</li> <li>◆ Makes books (e.g. "All about ..." books.</li> <li>◆ Constructs experience charts, friezes, etc.</li> <li>◆ Creates class/individual readers of experiences.</li> <li>◆ Writes ideas and reads them to others</li> </ul>	<p>Encyclopedia</p> <p>Software Programs (Reader Rabbit, Wiggle Works)</p> <p>Picture File</p> <p>Reading-Activity Centre</p> <p>Sentence/Phrase strips</p> <p>Class Library Books</p> <p>Traffic signs, logos</p> <p>Household labels</p> <p>Writing materials</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Anecdotal Records</p> <p>Teacher Made Tests</p>

# Language Arts Syllabus

## Level One

### General Objective: The child responds to meaning and ideas

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Print is talk written down</b> <b>Reading has purpose</b> <b>Journalling</b> <b>Book Handling</b> <b>Directionality</b> <b>Visual-motor coordination</b> <b>Cover/Book</b> <b>Title</b> <b>Author/Illustrator</b> <b>Spaces</b> <b>Lines</b> <b>Posture</b>	<b>The child recognizes that print has meaning/makes sense.</b>	<ul style="list-style-type: none"> <li>◆ Responds to books read as journal entries.</li> <li>◆ Interprets texts: to tell stories; to extract information; to identify objects within the pictures; for articulation.</li> <li>◆ Engages in journal writing.</li> <li>◆ Holds book at an appropriate distance from the eye during reading.</li> <li>◆ Turns pages from top with dominant hand.</li> <li>◆ Reads beginning at top left in a straight line.</li> <li>◆ Matches the spoken word to the printed word.</li> <li>◆ Notes spaces between words.</li> <li>◆ Distinguishes between a line and a sentence.</li> <li>◆ Creates texts from photographs of themselves and other children.</li> <li>◆ Engages in free writing.</li> <li>◆ Develops the routine for reader's workshop.</li> </ul>	Magazines, forms, letters,  Newspapers, directories,  Charts, encyclopedia  Writing centres, language master  Software Programs (Reader Rabbit, Wiggle Works)  Picture File Stencils  Laces and lacing cards  Objects in the environment with lines  Books  Poems, jingles, rhymes,  Games to establish directionality  Tapes and tape recorders  Photographs  Writing materials	Observation  Checklist  Portfolios  Anecdotal Records  Teacher Made Tests

## Language Arts Syllabus

### Level One

**General Objective: The child demonstrates an understanding of print through oral and written communication**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Literature response</b> Journaling Predicting outcomes Turn-taking	<b>Reads and responds personally and critically to literature.</b>	<ul style="list-style-type: none"> <li>◆ Reads for information.</li> <li>◆ Predicts outcomes and reads to confirm or reject predictions.</li> <li>◆ Reads to verify a point made during discussion.</li> <li>◆ Applies information from other sources.</li> <li>◆ Discusses personal reactions to the ideas or information from the reading.</li> </ul>	Books Poems, jingles, rhymes, Games to establish directionality Tapes and tape recorders Photographs Writing materials	Observation Checklist Portfolios Anecdotal Records Teacher Made Tests

### Level Two

**General Objective: The child demonstrates an understanding of print through oral and written communication**

<b>Story telling</b> Author/writer Main idea Visual representation Theme Synthesis	<b>To develop an understanding of ideas expressed verbally and in print</b>	<ul style="list-style-type: none"> <li>◆ Tells real or imagined stories.</li> <li>◆ Composes real or imagined stories.</li> <li>◆ Retells a story read independently.</li> <li>◆ Dramatizes his/her favourite section of a story or book.</li> <li>◆ Tell the main idea in:                  stories told by the teacher;                  news related by their peers;                  dramatic play and miming activities.</li> <li>◆ Illustrates the main idea.</li> <li>◆ Provides titles for selected pictures.</li> <li>◆ Composes stories or informational text from a series of self-constructed pictures.</li> </ul>	Materials for dramatic play Plasticine Play dough Clay Pictures (bold and colourful; on a specific theme) Newspaper clippings Sentence strips Titles and advertisements Children's art	Observation Checklist Portfolios Anecdotal Records Teacher Made Tests
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# Language Arts Syllabus

## Level Two

**General Objective: The child demonstrates an understanding of print through oral and written communication**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Visual representation</b> <b>Sequence</b> <b>Problem resolution</b> <b>Critical thinking</b> <b>Evaluating</b> <b>Resolving</b>	<b>To develop an understanding of ideas expressed verbally and in print</b>	<ul style="list-style-type: none"> <li>◆ Matches pictures or newspaper articles with related sentences.</li> <li>◆ Matches titles with advertisements.</li> <li>◆ Produces titles for selected pictures.</li> <li>◆ Describes or tells what their drawings are about.</li> <li>◆ Illustrates the central theme of a story listened to.</li> <li>◆ Draws a series of pictures to illustrate the plot of a story.</li> <li>◆ Records the sequence of a given story.</li> <li>◆ Retells a story read independently.</li> <li>◆ Dramatizes his/her favourite section of a story or book.</li> <li>◆ Reading stories to decide on scenes for dramatization.</li> <li>◆ Tell the central theme of puzzles and pictures.</li> <li>◆ Engages in solving riddles.  For example: Children take it to the beach. They play in the sand with it. It is round. It has holes in it. What is it?</li> <li>◆ Practices critical thinking.</li> <li>◆ Plays thinking game. (I am thinking of... what is it?)</li> </ul>	Newspaper clippings  Sets of pictures with familiar objects/events.  Story books  Pre-recorded story tapes  Children's literature  Materials for dramatic play centre  Actual objects such as sieve, watering can, spade, bucket	Observation  Checklist  Portfolios  Anecdotal Records  Teacher Made Tests

## Language Arts Syllabus

### Level Two

**General Objective: The child demonstrates an understanding of print through oral and written communication**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Riddle</b> <b>Main Idea</b> <b>Theme</b> <b>Summary</b> <b>Event</b>	<b>To develop an understanding of ideas expressed verbally and in print</b>	<ul style="list-style-type: none"> <li>◆ Listens to a riddle told by the teacher and solve this by identifying the correct object from among a set of three.</li> <li>◆ Formulates riddles as a part of a small group.</li> <li>◆ Formulates riddles individually.</li> <li>◆ Listen to a riddle told by the teacher or peer and solve this by identifying the correct picture from among a set of four.</li> <li>◆ Relates the main idea in: Stories told by the teacher and by students.</li> <li>◆ News related by peers.</li> <li>◆ Dramatic play and miming activities.</li> <li>◆ Illustrates the main idea.</li> <li>◆ Illustrates the central theme of a story listened to.</li> <li>◆ Names with reason the central theme of puzzles and pictures</li> <li>◆ Matches titles with advertisements.</li> <li>◆ Composes an advertisement based on a theme.</li> <li>◆ Reads short stories written by teacher with students' assistance and identifies the main idea by:               <ul style="list-style-type: none"> <li>Selecting given titles</li> <li>Generating titles for his/her own writing</li> </ul> </li> </ul>	Sets of pictures with familiar objects/events. Materials for dramatic play centre Children's art and models Plasticine, play dough, clay Newspaper clippings Sentence strips Story books Pre-recorded story tapes	Observation Checklist Portfolios Anecdotal Records Teacher Made Tests



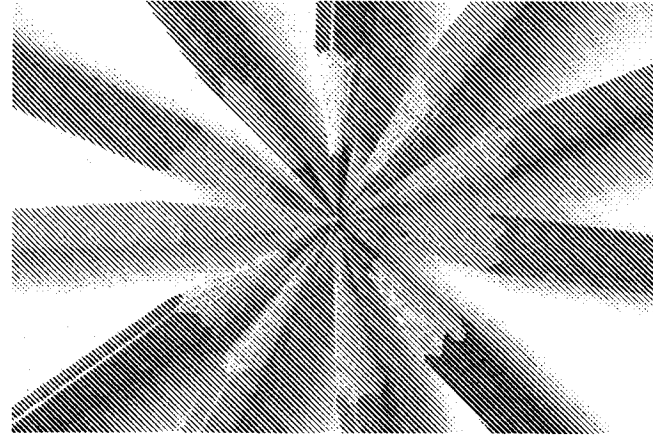
# Language Arts Syllabus

Level one &amp; Level Two

**General Objective: The child develops and demonstrates penmanship**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Modelling</b> <b>Left</b> <b>Right</b> <b>Top</b> <b>Bottom</b> <b>Pattern:</b> Lines Curves Diagonal Vertical Horizontal <b>Clockwise</b> <b>Anticlockwise</b> <b>Baseline</b> <b>Space</b> <b>Ascenders</b> <b>Decenders</b> <b>Uppercase</b> <b>Lowercase</b> <b>Size</b> <b>Steadiness</b> <b>Thickness</b> <b>Syllabication</b>	<b>To transcribe legibly and neatly using letters and numerals to effectively communicate a message.</b>	<ul style="list-style-type: none"> <li>◆ Prints name correctly</li> <li>◆ Forms letters/numerals correctly.</li> <li>◆ Writes letters/numerals correctly.</li> <li>◆ Writes using cursive style (in the later years).</li> <li>◆ Traces letters and numerals in sand in the air (sky writing)</li> <li>◆ Drawing: Using crayons Tracing in sand</li> <li>◆ Forms lines without lifting writing instrument.</li> </ul>	Writing paper Writing instruments	Observation Checklist Portfolios Rubrics Anecdotal Records Teacher Made Tests Attainment Targets





EARLY CHILDHOOD EDUCATION

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# Mathematics

**SCOPE &  
SEQUENCE**

Ministry of Education  
& Human Resource Development



CONCEPTS/SKILL CLASS

1.0 EARLY MATHEMATICAL EXPERIENCES (PRACTICAL ACTIVITIES ONLY)				
	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7

1.0.1	Manipulating objects	✓	✓	✓
1.0.2	Sorting	✓	✓	✓
1.0.3	Classifying	✓	✓	✓
1.0.4	Problem solving	✓	✓	✓
1.0.5	Estimating	✓	✓	✓
1.0.6	Reasoning	✓	✓	✓
1.0.7	Counting	✓	✓	✓
1.0.8	One-to-one correspondence	✓	✓	✓
1.0.9	Decision making	✓	✓	✓
1.0.1.0	Volume: holds more/holds less	✓	✓	✓
1.0.1.1	Conservation of area	✓	✓	✓
1.0.1.2	Measurement: heavy, light, long, short, etc	✓	✓	✓
1.0.1.3	Likenesses and differences	✓	✓	✓
1.0.1.4	Mapping	✓	✓	✓
1.0.1.5	Graphing	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Scope & Sequence**

CONCEPTS/SKILL	CLASS			
	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>2.0 NUMBER CONCEPTS ALL CONCEPTS TO BE INTRODUCED THROUGH PROBLEM SOLVING</b>				
<b>2.1 SETS</b>				
2.1.1 Classifying objects/ numbers into group/sets		◆	✓	✓
2.1.2 Matching objects: as many as		◆	✓	✓
2.1.3 One-to-One correspondence: Matching members of one set with the members of another set		◆	✓	✓
2.1.4.5 Count the number of objects in a given set / Matching equal sets		◆	✓	✓
2.1.6 More than, less than, equal to		◆	✓	✓
2.1.7 Making equal and unequal sets		◆	✓	✓
2.1.8 Arranging sets as 1 more or 1 less		◆	✓	✓
2.1.9 The empty set		◆	✓	✓
<b>2.2 NUMERATION AND NOTATION</b>				
2.2.1 Rote counting in ones to 50		◆	✓	✓
2.2.2 Rote counting in twos to 100			◆	✓
2.2.3 Rote counting in fives to 100				◆
2.2.4 Rote counting in tens to 100				◆
2.2.5 Read and write numbers		◆	✓	✓
2.2.6 Associate number symbols with number names		◆	✓	✓
2.2.7 Making sets of objects showing numbers up to 10		◆	✓	✓
2.2.8 Making sets of objects showing numbers up to 100			◆	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Scope & Sequence**

CONCEPTS/SKILL	CLASS			
	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
2.2.9 Ordering numbers			◆	✓
2.2.1.0 Identify the "number before" or the "number after" in a sequence of numbers			◆	✓
2.2.1.1 Up to the 5th		◆	✓	✓
2.2.1.2 Ordinals up to 10th			◆	✓
2.2.1.3 Ordinals up to 31st			◆	✓
2.2.1.4 Collective words e.g. pair, dozen		◆	✓	✓
2.2.1.5 Symbols > < = to show comparison		◆	✓	✓
<b>2.3 NUMBER RELATIONS AND OPERATIONS</b>				
2.3.1 The property of zero		◆	✓	✓
2.3.2 Place value: tens, ones			◆	✓
2.3.3 Place value: hundreds			◆	✓
2.3.4 Expanded notation				◆
2.3.5 The number line			◆	✓
2.3.6 Combining sets		◆	✓	✓
2.3.7 Partitioning sets		◆	✓	✓
2.3.8 Simple addition		◆	✓	✓
2.3.9 Addition of tens and ones			◆	✓
2.3.1.0 Addition of hundreds, tens and ones				◆
2.3.1.1 Multiplication without regrouping				◆
2.3.1.2 Multiplication with regrouping				◆

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

# Mathematics

## Scope & Sequence

CONCEPTS/SKILL	CLASS			
	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
2.3.1.3 Multiplication as repeated addition				◆
2.3.1.4 Division as sharing				◆
2.3.1.5 Subtraction as taking away		◆	✓	✓
2.3.1.6 Subtraction as comparing Use of the minus sign ( - )			◆	✓
2.3.1.7 Use of the multiplication sign ( x )				◆
2.3.1.8 Subtraction as the inverse of addition		◆	✓	✓
<b>3.0 FRACTIONS</b>				
3.0.1 The concept of a whole		◆	✓	✓
3.0.2 The concept of a half		◆	✓	✓
3.0.3 The concept of a quarter			◆	✓
3.0.4 Halving sets of objects			◆	✓
3.0.5 Halving objects				✓
3.0.6 Finding a $\frac{1}{4}$ of a set by fair sharing				◆
3.0.7 Finding a $\frac{1}{4}$ of an object				◆
<b>4.0 PROBLEM SOLVING</b>				
4.0.1 Solving word problems using problem solving strategies			◆	✓
4.0.2 Solving problems involving $>$ $<$			◆	✓
4.0.3 Solving problems involving time			◆	✓
4.0.4 Problem solving involving measurement			◆	✓
4.0.5 Problem solving involving shopping			◆	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill



# Mathematics

## Scope & Sequence

CONCEPTS/SKILL	CLASS			
	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>5.0 MEASUREMENT (CONCEPTS TO BE INTRODUCED THROUGH PRACTICAL AND PROBLEM SOLVING ACTIVITIES)</b>				
<b>5.1 LENGTH</b>				
5.1.1 Comparing lengths and heights		◆	✓	✓
5.1.2 Measuring using non - standard		◆	✓	✓
5.1.3 Estimate and measure lengths using non - standard		◆	✓	✓
5.1.4 Estimate and measure lengths using standard units				◆
5.1.5 Use of tangrams to cover regular and irregular shapes		◆	✓	✓
5.1.6 Use of squares to cover regular and irregular shapes		◆	✓	✓
5.1.7 Measure perimeter of objects/shapes with non-standard units		◆	✓	✓
5.1.8 Choose the appropriate unit to measure length of objects/distances				◆
<b>5.2 CAPACITY</b>				
5.2.1 Compare capacity of various containers more, less	◆	✓	✓	✓
5.2.2 Estimate, compare and measure capacity using non-standard units		◆	✓	✓
5.2.3 Estimates, compare and measure capacity using standard units ( litre, ½ litre, ¼ litre)				◆
<b>5.3 MASS</b>				
5.3.1 Compare and the mass of objects (heavy, light)		◆	✓	✓
5.3.2 Estimate and measure the mass of objects using standard units (kilogramme, gramme).				

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

## Mathematics Scope & Sequence

CONCEPTS/SKILL	CLASS			
	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>5.4 TIME</b>				
5.4.1 Time today, yesterday, tomorrow, etc.	◆	✓	✓	✓
5.4.2 Time – day, week, month, year		◆	✓	✓
5.4.3 Time notation			◆	✓
5.4.4 Time in relation – daily activities	◆	✓	✓	✓
5.4.5 Tell time by hour, half hour and quarter hour using the analog clock			◆	✓
5.4.6 Use the calendar			◆	✓
<b>6.0 MONEY</b>				
6.0.1 Local currency 1¢ 5¢ 10¢ 25¢ \$1.00				
6.0.2 Addition fact to 10 using 1¢ coins			◆	✓
6.0.3 Subtraction facts to 10 using 1¢ coins			◆	✓
6.0.4 Combinations of coins up to \$1.00				◆
6.0.5 Counting money			◆	✓
6.0.6 Making change after purchasing items				◆
6.0.7 Shopping with amounts up to \$5.00				◆
6.0.8 Recognition of bills				◆
6.0.9 Equivalence of coins up mto \$5.00				◆

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Scope & Sequence**

CONCEPTS/SKILL	CLASS			
	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>7.0 GEOMETRY</b>				
7.0.1 Identify two-dimensional (2-D) shapes (square, rectangle, circle, triangle)		◆	✓	✓
7.0.2 Draw plane shapes (square, circle, triangle, rectangle)		◆	✓	✓
7.0.3 Classify 2-D shapes according to common attributes (sides)		◆	✓	✓
7.0.4 Identify three-dimensional (3-D) shapes (cubes, cuboids, cylinder, cone, sphere)		◆	✓	✓
7.0.5 Classify common attributes of 3-D shapes		◆	✓	✓
7.0.6 Identify open and closed shapes				◆
<b>8.0 STATISTICS</b>				
8.0.1 Classify objects according to common attributes (colour, shape, texture etc).	◆	✓	✓	✓
8.0.2 Collect data using observation, interviews and questionnaires.	◆	✓	✓	✓
8.0.3 Construct graphs using concrete materials	◆	✓	✓	✓
8.0.4 Construct tables, pictographs and bargraphs				◆
8.0.5 Interpret tables, pictographs, bargraphs and pie charts				◆

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill





EARLY CHILDHOOD EDUCATION

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# Mathematics

## ATTAINMENT TARGETS

Ministry of Education  
& Human Resource Development



EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>1.0</b>	<b>EARLY MATHEMATICAL EXPERIENCES (PRACTICAL ACTIVITIES ONLY)</b>				
1.0.1	Manipulate sets of objects	◆	✓	✓	✓
1.0.2	Sort objects into groups	◆	✓	✓	✓
1.0.3	Learn number words	◆	✓	✓	✓
1.0.4	Learn about simple shapes	◆	✓	✓	✓
1.0.5	Develop the concepts of many and few	◆	✓	✓	✓
1.0.6	Classify objects according to size, shape, colour	◆	✓	✓	✓
1.0.7	Identify objects, pictures that are the same	◆	✓	✓	✓
1.0.8	Identify likenesses and differences in objects and pictures	◆	✓	✓	✓
1.0.9	Explore aspects of volume through water and sand play	◆	✓	✓	✓
1.0.10	Engage in problem solving with spatial relationships in block play, etc.	◆	✓	✓	✓
1.0.11	Engage in mathematical reasoning through sand and water play, etc.	◆	✓	✓	✓
1.0.12	Engage in decision making skills (while playing in the housekeeping area, and manipulating puzzles etc.)	◆	✓	✓	✓
1.0.13	Engage in counting while being involved with varying manipulatives, etc.	◆	✓	✓	✓
1.0.14	Match objects one-to-one	◆	✓	✓	✓
1.0.15	Explore aspects of area by covering varying surfaces	◆	✓	✓	✓
1.0.16	Explore the passing of time in everyday experiences	◆	✓	✓	✓
1.0.17	Use pictographs to represent information (favourite colour, birthdays etc. boys in class, girls in class etc.)	◆	✓	✓	✓
1.0.18	Develop concept of time through practical activities and everyday experiences (today, tomorrow, yesterday etc.)	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

		CLASS			
		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>2.0 NUMBER CONCEPTS</b>					
<b>2.1 SETS</b>					
2.1.1	Classify objects/numbers into groups/sets 0 - 10		◆	✓	✓
2.1.2	Classify objects/numbers into groups/sets 0 - 100			◆	✓
2.1.3	Match the members of one set with the members of another set (one-to-one correspondence)		◆	✓	✓
2.1.4	Count the number of objects in a given set		◆	✓	✓
2.1.5	Develop the concept of the "empty set"		◆	✓	✓
2.1.6	Compare sets that are equal, unequal and equivalent (same as, less than, more than, equal)		◆	✓	✓
<b>2.2 NUMERATION AND NOTATION</b>					
2.2.1	Count in ones 1 – 10	◆	✓	✓	✓
2.2.2	Count in ones 1 – 50		◆	✓	✓
2.2.3	Count in ones 1 - 100			◆	✓
2.2.4	Count in twos 2 - 100			◆	✓
2.2.5	Count in fives to 100				◆
2.2.6	Count in tens to 100				◆
2.2.7	Read number names		◆	✓	✓
2.2.8	Write number names		◆	✓	✓
2.2.9	Associate number symbols with number names		◆	✓	✓
2.2.1.0	Match number symbols to the number of elements in a group/set		◆	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill



EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

		CLASS			
		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
2.2.1.1	Order numbers			◆	✓
2.2.1.2	Use the collective noun that represents a number (pair, couple, double, triple, decade, half dozen, century)			◆	
2.2.1.3	Identify the "number before" or "number after" in sequence of numbers			◆	✓
2.2.1.4	Read, write and use the ordinal numbers 1 <sup>st</sup> to 5 <sup>th</sup>		◆	✓	✓
2.2.1.5	Read, write and use the ordinal numbers 1 <sup>st</sup> to 10 <sup>th</sup>			◆	✓
2.2.1.6	Read, write and use the ordinal numbers 1 <sup>st</sup> to 31 <sup>st</sup>				◆
2.2.1.7	Use symbols to show comparison (> < =)		◆	✓	✓
<b>2.3</b>	<b>NUMBER RELATIONS AND OPERATIONS</b>				
2.3.1	Recognise and use the property of zero		◆	✓	✓
2.3.2	Bundle material in groups of ten			◆	✓
2.3.3	Build numbers 10 through 20 by bundling straws, etc.			◆	✓
2.3.4	Build numbers up to 100 by bundling				◆
2.3.5	State the place value of any digit in a two digit number (Tens and Ones)			◆	✓
2.3.6	State the place value of any digit in a three digit number (Hundreds, tens, ones)				◆
2.3.7	Use expanded notation to demonstrate number worth				◆
2.3.8	Use the number line for comparing numbers			◆	✓
2.3.9	Use the number line for sequencing numbers			◆	✓
2.3.10	Use the number line for skip counting			◆	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
2.3.11	Use the number line for addition			◆	✓
2.3.12	Use the number line for subtraction			◆	✓
2.3.13	Recognise and use the property of 1			◆	✓
2.3.14	Combine sets			◆	✓
2.3.15	Partition sets			◆	✓
2.3.16	Perform addition without regrouping			◆	✓
2.3.17	Perform addition with regrouping				◆
2.3.18	Perform subtraction without regrouping			◆	✓
2.3.19	Perform subtraction with regrouping				◆
2.3.20	Sort objects into groups for building early multiplication concept				◆
2.3.21	Perform multiplication without regrouping				◆
2.3.22	Perform multiplication with regrouping				◆
2.3.23	Perform division with or without a remainder (practical activities and pictorial representations only)				◆
2.3.24	Use mathematical language (left, right, before, after, same as, fewer than, big, small, little, empty, full, holds more, more less, top, bottom, over, under)	◆	✓	✓	✓
2.3.25	Use the vocabulary associated with mathematical operations (add the sum of plus, sum, more, less, take away, make less, minus, subtract, difference, equal to, etc)			◆	✓
2.3.26	Use the vocabulary associated with mathematical operations (multiply, product, divide, etc)				◆

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

		CLASS			
		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
2.4.27	Demonstrate addition as the inverse of subtraction starting with everyday practical activities			◆	✓
2.4.28	Demonstrate multiplication as repeated addition				◆
2.4.29	Build and use addition tables (number bonds)			◆	✓
2.4.30	Build and use multiplication tables				◆
2.4.31	Demonstrate multiplication as the inverse of division				◆
2.4.32	Demonstrate the commutative property of multiplication				◆
2.4.33	Identify patterns (colours, shapes, lines, number, coins)		◆	✓	✓
2.4.34	Classify numbers as odd or even				◆
2.4.35	Write multiples of numbers				◆
2.4.36	Perform addition horizontally using single digit numbers			◆	✓

**3.0 FRACTIONS**

3.0.1	Identify the whole and parts of the whole		◆	✓	✓
3.0.2	Define a fraction in relation to the whole		◆	✓	✓
3.0.3	Create halves and quarters by folding, shading and cutting paper			◆	✓
3.0.4	Compare unit fractions in relation to the whole			◆	✓
3.0.5	Combine fractional parts to make the whole			◆	✓
3.0.6	Identify and name fraction (half, quarter, three-quarters)				◆
3.0.7	Solve simple word problems involving fractions				◆

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>4.0</b>	<b>PROBLEM SOLVING</b>				
4.0.1	Use patterns to solve problems			◆	✓
4.0.2	Use estimation techniques to help solve problems	◆	✓	✓	✓
4.0.3	Use critical thinking skills to solve mathematical problems, starting with everyday concepts	◆	✓	✓	✓
4.0.4	Use concrete objects and drawings to model problems			◆	✓
4.0.5	Use tangrams for conservation of area		◆	✓	✓
<b>5.0</b>	<b>MEASUREMENT</b>				
<b>5.1</b>	<b>LENGTH</b>				
5.1.1	Compare lengths and heights of objects		◆	✓	✓
5.1.2	Use the appropriate vocabulary (taller than, shorter than, larger, shorter)		◆	✓	✓
5.1.3	Measure lengths of objects using non-standard units (hand span, footstep, pencil etc.)		◆	✓	✓
5.1.4	Measure lengths using standard units of measurement (centimetre, metre, kilometre)				◆
5.1.5	Choose the appropriate unit to measure lengths of objects and distances				◆
5.1.6	Recognize the kilometre as a unit of measure for long distances (distance markers in journeying)				◆
5.1.7	Estimate the lengths of various objects/distances				◆
5.1.8	Measure perimeter of objects/shapes with non-standard units		◆	✓	✓
5.1.9	Demonstrate concept of area using non-standard units		◆	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

# Mathematics

## Attainment Targets

PUPILS SHOULD BE ABLE TO:

CLASS

		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
5.1.1.0	Calculate the area of regular and irregular shapes by counting squares		◆	✓	✓
<b>5.2</b>	<b>CAPACITY</b>				
5.2.1	Compare capacity of various standard and non-standard containers (measuring spoons, cups)		◆	✓	✓
5.2.2	Use non-standards units to estimate volume (holds more, holds less)		◆	✓	✓
5.2.3	Choose the appropriate standard unit for capacity of liquids (litre, half litre)			◆	✓
5.2.4	Solve simple word problems involving capacity			◆	✓
<b>5.3</b>	<b>MASS/WEIGHT</b>				
5.3.1	Use appropriate vocabulary to compare mass of objects (heavy, light)	◆	✓	✓	✓
5.3.2	Measure mass using non-standard units (e.g. hefting)		◆	✓	✓
5.3.3	Estimate the weight of objects using non-standard units		◆	✓	✓
5.3.4	Measure the mass of objects using the appropriate standard unit			◆	✓
5.3.5	Solve simple problems involving mass			◆	✓
5.3.6	Choose the appropriate standard unit of measure (teaspoon, tablespoon, scale)			◆	✓
5.3.7	Understand the concept of equal weight (heavy, light)	◆	✓	✓	✓
<b>5.4</b>	<b>TIME</b>				
5.4.1	Recognise the passing of time through lived experiences (bedtime, school begins, break time, lunch time, school ends)	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
5.4.2	Differentiate between time of the day (morning, afternoon, evening, night)	◆	✓	✓	✓
5.4.3	Name the days of the week, months of the year in sequence			◆	✓
5.4.4	Understand the terms related to time (short hand, minute hand, long hand, hour hand)				◆
5.4.5	Tell time by hour, half hour and quarter hour using the analog clock			◆	✓
5.4.6	Develop the skills needed for time notation (recording time)			◆	✓
5.4.7	Demonstrate an awareness of movement as it relates to time (fast, slow, speed limits with explanation)		◆	✓	✓
5.4.8	Use digital clock to read the time			◆	✓
5.4.9	Estimate time intervals (long time, short time, yesterday, tomorrow, last week, weekend, today, last month, last year)			◆	✓
5.4.10	Match time on a clock to an event (lunch time)			◆	✓
5.4.11	Identify the calendar as a means of telling birthdays, festivals, vacation, names of the days of the week, months of the year		◆	✓	✓
5.4.12	Read dates from calendar			◆	✓
<b>6.0 MONEY</b>					
6.0.1	Recognise local currency		◆	✓	✓
6.0.2	Recognise relationships between the values of different coins			◆	✓
6.0.3	Use coins and notes in money transactions with and without change			◆	✓
6.0.4	Investigate the equivalence of coins and bills			◆	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
6.0.5	Solve simple problems with money (shopping sums)			◆	✓
<b>7.0 GEOMETRY</b>					
7.0.1	Identify two-dimensional (2-D) shapes (circle, square, triangle, rectangle )		◆	✓	✓
7.0.2	Recognise the likenesses and differences between shapes to associate objects with shapes		◆	✓	✓
7.0.3	Draw plane shapes (square, circle, triangle, rectangle) using templates			◆	✓
7.0.4	Classify 2-D shapes according to common attributes				
7.0.5	Identify solid three-dimensional (3-D) shapes (cube, cuboid, cylinder, cone, sphere)				◆
7.0.6	Classify three-dimensional shapes according to common attributes (sides, corners, faces)				◆
7.0.7	Estimate the height, length and width of 3D shapes				◆
7.0.8	Identify plane shapes as seen in the faces of cubes, cuboids and cylinders				◆
7.0.9	Identify open and closed figures				◆
<b>8.0 STATISTICS</b>					
8.0.1	Classify objects according to attributes (colour, shape, texture, etc)	◆	✓	✓	✓
8.0.2	Collect data using observation, interviews and questionnaires	◆	✓	✓	✓
8.0.3	Use concrete materials to construct graphs	◆	✓	✓	✓
8.0.4	Construct tables, pictographs and bargraphs				◆

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Mathematics**  
**Attainment Targets**

**PUPILS SHOULD BE ABLE TO:**

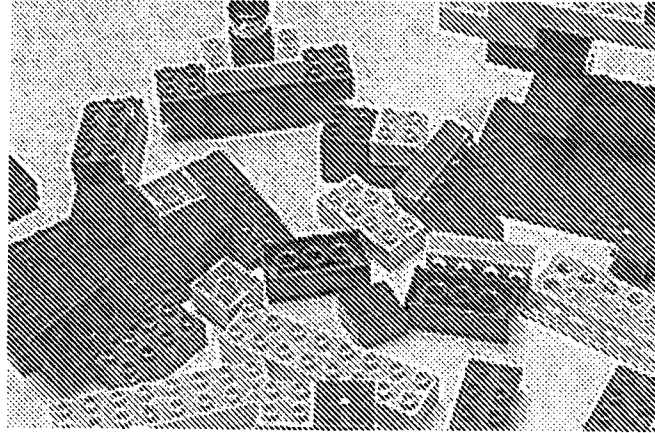
**CLASS**

	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
8.0.5 Interpret tables, pictographs and bargraphs				◆
8.0.6 Use data to make decisions				◆
8.0.7 Classify data			◆	✓
8.0.8 Interpret given pie charts (more than, less than, smallest, least like etc.)				◆

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill





EARLY CHILDHOOD EDUCATION

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# Mathematics

## SYLLABUS

Ministry of Education  
& Human Resource Development



# Mathematics Syllabus

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Classification:</b> Seeing likeness and differences	<b>Discovers and develops mathematical concepts through play activities</b>	<ul style="list-style-type: none"> <li>◆ Measuring experiences, ordering, sorting</li> <li>◆ Discussions e.g. reasons for sorting</li> <li>◆ Drawing and painting</li> <li>◆ Modeling plasticine and dough</li> <li>◆ Sorting according to attributes</li> </ul>	Water and Sand Play home and dress up areas Blocks : Various shapes Colours and sizes. Charts : Days of the week, Birthday Weather Calendar Classroom clock Bulletin boards Pictures, Puzzles Centres of Interest Mathematical Corner Plasticine, Play dough Manipulatives.	Observation Checklist Portfolios Teacher Student Conferencing Anecdotal Records Teacher made test Performance tasks

# Mathematics

## Syllabus

### Sorting

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p>Size - big, small, (etc)</p> <p>Colour - red, blue (etc)</p> <p>Texture - smooth, rough (etc)</p>	Sorts materials according to various attributes	<ul style="list-style-type: none"> <li>◆ Sorts miscellaneous materials found in the environment               <ul style="list-style-type: none"> <li>-Likenesses</li> <li>-Differences</li> </ul> </li> </ul>	<p>Seeds, blocks, crayons, shells, Beads, bottle caps (etc), unifix cubes, large beads, attribute buttons, jumbo laces, counting blocks, number picture matching puzzles, attribute blocks, number tiles, triple fit puzzles</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Teacher Student Conferencing</p> <p>Anecdotal Records</p> <p>Teacher made test</p> <p>Performance tasks</p>
<p>Space - big, small large, little long, short, wide</p> <p>Shape - circle, round square, heart, triangle etc.</p> <p>Volume - full, empty, half, a little etc.</p> <p>Colour - red, blue, green, yellow, white, black</p>	Uses and finds meaning in number language	<ul style="list-style-type: none"> <li>◆ Observation of surroundings and pictures</li> <li>◆ Discussions using appropriate language</li> <li>◆ Making booklets</li> <li>◆ Activities to encourage understanding of space, shape etc</li> <li>◆ Water and sand play etc.</li> </ul>	<p>Water and Sand Play home and dress up areas</p> <p>Blocks : Various shapes Colours and sizes.</p> <p>Charts : Days of the week, Birthday Weather Calendar. Classroom clock</p> <p>Bulletin boards</p> <p>Pictures,</p> <p>Puzzles</p> <p>Centres of Interest</p> <p>Mathematical Corner</p> <p>Plasticine,</p> <p>Play dough</p> <p>Manipulatives.</p>	

# Mathematics

## Syllabus

### Sorting

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Language - alike, go together, belong</b>	Uses language associated with classification	<ul style="list-style-type: none"> <li>◆ Matching for colour, shape etc. e.g. Silver key to match one silver button Blue pencil to match one blue square bead</li> <li>◆ Choosing partners to walk with, work sheets for matching activities</li> <li>◆ Job Sheets: Use Flannel board for story-telling e.g.  Red Riding Hood - pictures of basket, girl, strip of card with the words (belongs to). Pupils place card to show the basket belongs to Red Riding Hood  The Three Pigs - pictures (kind of houses, pigs) Strip of card with the words (built his house of)</li> <li>◆ Use mapping activities. Give activities to show that: If a set or group contains as many objects as another set, they are equal.</li> </ul>	<p>Manipulative materials</p> <p>Flannel graph Picture books Story books</p>	<p>Observation Checklist Portfolios Teacher Student Conferencing Anecdotal Records Teacher made test Performance tasks</p>

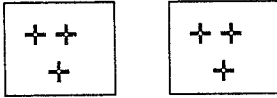

# Mathematics Syllabus

## Sorting

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>One to one correspondence</b>	Sorts materials into specific quantities/ sets	<ul style="list-style-type: none"> <li>◆ Matches objects/pictures to show one to one correspondence</li> <li>◆ Finds partner from among a group of socks</li> <li>◆ Sort objects into groups</li> </ul>	A variety of stories including: Goldilocks And The Three Bears Three Little Pigs Baa Baa Black Sheep	Observation Checklist Portfolios Conferencing Teacher made test Performance tasks
<b>Equal Sign</b>	Develops an awareness of one-to-one correspondence	<ul style="list-style-type: none"> <li>◆ Give pupils practice in using the equal sign.</li> </ul>		
<b>Identifying numerals from 1 to 5</b>	Identifies the numerals 1 to 5	<ul style="list-style-type: none"> <li>◆ Incidental teaching through activities e.g. stories, charts, puzzles, matching activities and rhymes.</li> </ul>	Labelling of objects with the numeral, Rhyme - Figure 1 Charts, Bulletin Boards, Sandpaper figures.	
<b>Associating a numeral with its name</b>	Uses numbers to describe a set	<ul style="list-style-type: none"> <li>◆ Using sets of objects and pictures, pupils may be asked to:               <ol style="list-style-type: none"> <li>a) match the numeral to the appropriate set.</li> <li>b) Use the appropriate name for a set.</li> <li>c) Select sets according to numerals shown.</li> <li>d) Match numeral to name (Integrate with Language Arts.)</li> </ol> </li> </ul>	Picture cards, Charts, Bulletin board, Matching cards, Puzzles	
<b>Sequence of numbers</b>	Develops an awareness of number sequence	<ul style="list-style-type: none"> <li>◆ Listening to rhymes, finger-plays and songs Repeating rhymes etc. e.g.</li> <li>◆ The Beehive: (One, two, three, four, five Once I caught a fish alive) (Two, four, six, eight Mary at the cottage gate) (One, two, buckle my shoe)</li> </ul>		

# Mathematics Syllabus

## Sets

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Create sets</b></p> <p><b>Equal sets - same</b> <b>Unequal sets</b></p> <p><b>Equivalent sets</b></p> <p><b>More than</b> <b>Less than, many</b> <b>Few as many as</b></p>	Recognises and defines sets	<p>◆ Practical activities involving concrete and symbolic representation of sets</p> <p>Forms equal sets</p>  <p>NB: Two sets are equal if they contain exactly the same elements</p> <p>Forms equivalent sets</p>  <p>◆ Make a numeral (2, 3, 4, 5, ...10) on a card. Have the children use paper clips, staples, hole punches, paper reinforcement, clothespins, or other to create sets: five staples on a "5" card, 8 holes punched on an "8" card, and so on (stone, 1987)</p>	<p>Numerical Cards</p> <p>Counting frames</p> <p>Number ladders</p> <p>String numbers</p> <p>Number tiles</p> <p>Number charts</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Teacher Student</p> <p>Conferencing</p> <p>Anecdotal Records</p> <p>Teacher made test</p> <p>Performance tasks</p>

# Mathematics

## Syllabus



### Sets

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Counting and thinking in groups</b>  <b>Language - empty, nothing, none, zero</b>		<ul style="list-style-type: none"> <li>◆ Provide activities, which encourage children to develop the ability to see and count as "three", "four", etc. without counting from 1, 2, 3, -to reach the end number</li> <li>◆ Use pairing, sorting and the pegboard for grouping and identifying sets.</li> <li>◆ Activities and exercises which make the pupils: Match objects to numerals</li> </ul>	Pegboard Interlocking cubes Matching cards.	Observation Checklist Portfolios Teacher Student Conferencing Anecdotal Records Teacher made test Performance tasks
<b>Counting Sets and groups</b>	To introduce pupils to the empty set	<ul style="list-style-type: none"> <li>◆ Give activities in which the objects counted are moved physically as the number word is spoken. Set out groups according to patterns. Count and draw patterns (use actual objects, later use pictorial representations) Number puzzles</li> </ul>	Seeds, blocks, crayons, shells, Beads, bottle caps (etc), unifix cubes, large beads, attribute buttons, jumbo laces, counting blocks, number picture matching puzzles, attribute blocks, number tiles, triple fit puzzles	
<b>Equal, the same as, as many as, is equal to</b>	Uses language associated with symbols	<ul style="list-style-type: none"> <li>◆ Provide various exercises and opportunities for pupils to use language</li> <li>◆ The members match one to one therefore they are equivalent. Discuss other pairs of equivalent sets</li> </ul>		



# Mathematics Syllabus

## Sets

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Signs used for comparing</b> <b>&gt; more than</b> <b>&lt; less than</b>	Uses symbols to show comparisons Compares set	<ul style="list-style-type: none"> <li>Activities involving pairing and matching Activities involving the use of the signs <math>&gt;</math> <math>&lt;</math></li> </ul>		Observation Checklist Portfolios Conferencing Teacher made test Performance tasks
<b>Ordering numbers</b> <b>1 - 5</b> <b>1 - 10</b> <b>1 - 20</b>	To provide experiences for ordering numbers	<ul style="list-style-type: none"> <li>Use the Number Line  <math display="block">0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6</math>            Pupils order sets as they build up or decrease by 1. Exercises e.g.         </li> </ul>	Number Line Footsteps 	
<b>Language - before, after, between, comes next.</b> <b>Adding 1 more to - 1, 2, 3, 4, 5</b> <b>Making sets 1 less</b>	To provide experiences in making sets as: a. One more b. One less	<ul style="list-style-type: none"> <li>Which comes next? Which number is missing? Have discussions about real life situations, which involve more and less.</li> </ul>	Rhyme - Ten in a bed, Stories, Games	
<b>Identifying &gt;more than &lt; less than</b> <b>Language - more, less, big, bigger, greater, small</b>	Uses the signs for more than and less than-	<ul style="list-style-type: none"> <li>Encourage pupils to say mathematical sentences using the signs.            E.g. <math>6 &gt; 3</math> ... 6 is greater/more than 3  <math>3 &lt; 4</math> ... 6 is less than/smaller than 6         </li> </ul>	Toys, ruler, number blocks, skittles, numeral cards, seeds, etc. Game: SPINNING TOP	
<b>Writing and using the signs</b>		<ul style="list-style-type: none"> <li>Provide activities for pupils to practice identifying sets of greater or smaller numbers and using the signs to show which are more or less. Encourage pupils to count, compare and find the differences</li> </ul>		

# Mathematics

## Syllabus

### Sets

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Combining sets</b> <b>Using concrete materials</b> <b>Using pictorial representation</b> <b>Language - and, make, add, in, all, together, are equal, plus</b>	To introduce addition	<ul style="list-style-type: none"> <li>◆ Use a variety of concrete materials to enable pupils to understand the joining of sets to make a bigger set.</li> <li>◆ Use real life situations as stories and problems.</li> <li>◆ A unit of work or centre of interest will provide ample opportunities.</li> <li>◆ Use pictures and drawings to make pictorial representation write the number sentence e.g. 2 and 1 are 3</li> <li>◆ Introduce the plus sign and the equal sign.</li> </ul>	Unifix cubes, large beads, attribute buttons, jumbo laces, counting blocks, number picture matching cards, attribute blocks, number tiles, triple fit puzzle	Observation Checklist Portfolios Conferencing Teacher made test Performance tasks

# Mathematics Syllabus

## Numerals

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Directional positioning of numerals</b>	Identifies numerals to 100 1 - 10 1 - 20 1 - 50 1 - 100	<ul style="list-style-type: none"> <li>◆ Recite number rhymes associated with number formation</li> <li>◆ On a piece of plastic canvas, paste or draw numerals. This material should be large enough for a child to carry out the following instructions:  "Place your feet on the numeral 4" or "put your hand on the numeral 6". If the children are older, add instructions involving the right foot, left foot, right and, left hand, elbow, knee etc.</li> </ul>		
<b>Number and number names</b>	Associates numerals with their names to hundreds	<ul style="list-style-type: none"> <li>◆ Traces sand paper figures</li> <li>◆ Models figures with plasticine</li> <li>◆ Cut face cards in half (make the cutting line different on the separate cards, so that only the correct halves will fit together). Then the cards are matched together as puzzles.</li> <li>◆ A variety of number puzzles can be made matching the numeral or symbol to objects and the written name of the numeral to either objects or the numeral symbol.  These can be constructed and geared to the developmental levels of the children.</li> <li>◆ Write numerals in sand</li> <li>◆ Uses stencils to form numbers</li> </ul>		
<b>Conservation of numbers</b>	Reads, writes and uses numbers up to 100		Unifix cubes, large beads, attribute buttons, jumbo laces, counting blocks, number picture matching cards, attribute blocks, number tiles, triple fit puzzle	Observation Checklist Portfolios Conferencing Teacher made test Performance tasks

# Mathematics

## Syllabus

### Numerals

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Ordinals</b>	Reads, writes and uses ordinal numbers up to 31 <sup>st</sup> position	<ul style="list-style-type: none"> <li>◆ Select two pages from a calendar. Leave the numerals of one intact, and separate the numerals of the other. The single numerals are then matched to those on the Whole page.</li> <li>◆ Draw around number templates</li> <li>◆ Numeral jigsaws</li> <li>◆ Make a classroom directory with child's name, address, and telephone number. Put this list by the toy telephone so that the children can practice dialing numbers.</li> <li>◆ Select sets according to numerals shown</li> <li>◆ Matches numerals to name</li> <li>◆ Use of counting bars</li> <li>◆ Counting frames</li> <li>◆ Allow children to select a given set of objects in different patterns</li> <li>◆ Children queue for school activities i.e. visit to bathroom, going to games etc.</li> <li>◆ Teacher encourages the use of language such as 1<sup>st</sup> 2<sup>nd</sup>, 3<sup>rd</sup> to 31<sup>st</sup> position</li> </ul> <p>Activities involving putting sets of objects together</p>	Numerals commercial and teacher made bulletin boards Number charts Sand paper figures Picture matching cards Picture dominoes Peg boards Number tray	Observation Checklist Portfolios Conferencing Teacher made test Performance tasks

# Mathematics Syllabus

## Numerals

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Compositions of number</b>	Combines sets	000 00 00000 3 and 2 make	A Number line Coloured number strips	
<b>Ordering numbers</b>	Orders numbers	<ul style="list-style-type: none"> <li>◆ Uses the Number Line</li> <li>◆ Each child orders sets as he builds up or decrease by 1</li> <li>◆ Order materials in sizes and numbers from little to big and vice versa</li> <li>◆ Allow children to identify the 'number before' or the 'number after'</li> </ul>	Skittles A variety of number rhymes and jingles including: Ten Brown Buns In the Bakers Shop, Mother Duck Went Out To Play, One Little Finger	

# Mathematics

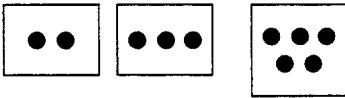
## Syllabus

### Numerals

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Odd numbers</b>  <b>Even number</b>	Classifies numbers as odd or even	<ul style="list-style-type: none"> <li>◆ Place 6 counters on the desk. Ask students to put them into pairs.</li> <li>◆ Place 9 counters on the desk. Ask children to put them in pairs.</li> <li>◆ Ask children to tell what they have noticed.</li> <li>◆ All even numbers make pairs</li> <li>◆ All odd numbers have one left over.</li> </ul>	Counters	

# Mathematics Syllabus

## NUMERALS

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Combines sets</b> <b>Addition (totals 10 or less)</b> <b>The Plus sign (+)</b> <b>Add 1 digit numbers vertically and horizontally to make totals of 20 or less</b>	Combines sets  Memorises addition facts up to 20	<ul style="list-style-type: none"> <li>◆ Uses a variety of concrete materials while joining sets of objects together</li> <li>◆ Simple oral problem solving activities e. g.</li> <li>◆ Natasha had 3 lollipops Kimberley gave her one more. How many Lollipops did she have altogether.</li> </ul> <p>Use real-life situations to form problems</p> <p>Use pictorial representations in combining sets e.g.</p> <p>(a) ◆◆ and ◆◆◆ makes ◆◆◆◆</p> <p>(b) </p> <p>2 and 3 make</p> <ul style="list-style-type: none"> <li>◆ Skip counting in ones</li> <li>◆ Skip counting in twos</li> <li>◆ Skip counting in fives and tens</li> <li>◆ Use of number line</li> <li>◆ Teacher draws large number line on the floor</li> </ul> <p>Child takes three steps and then two more. Class orally repeats the number sentence to correspond with activities done by the child</p>	<b>Use Rhymes</b> Ten in a Bed One night Ago When We Were All In Bed  Number lines Numeral cards Manipulative materials  Number line Number strips Skittles Number dominoes Large wooden dice Number bond charts Place value charts	Observation Checklist Portfolios Conferencing Teacher made test Performance tasks

# Mathematics Syllabus

## Addition

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Addition: vertical and horizontal</b>  <b>Column addition</b>  <b>Equal, sum, total, and, plus, altogether, in all</b>	<p>Adds 1-digit numbers vertically and horizontally with totals up to 18</p> <p>Uses language associated with addition</p>	<ul style="list-style-type: none"> <li>◆ Number sentence: e.g. <math>3 + 2 = 5</math> Three steps and two steps make five steps <math display="block">\begin{array}{r} 3 \\ + 2 \\ \hline 5 \end{array}</math></li> <li>◆ Use of work cards, work books to add numbers</li> <li>◆ Problem solving activities involving addition of 1 digit numbers with totals up to 18</li> <li>◆ Use of concrete materials to add 3 numbers vertically and horizontally</li> <li>◆ Using this practical approach teacher and child builds up number combinations</li> <li>◆ Use of skittles to assist with combining sets</li> <li>◆ Manipulates dominoes to make number combinations</li> <li>◆ Use of dice with numerals one to six to make number combinations</li> <li>◆ Use of number sentence board</li> <li>◆ Activities to build number bonds of numbers up to and including 10.</li> <li>◆ Activities may also be extended to aid in the addition of two digit numbers:</li> </ul>	<p>NB: Make skittles by filling pet bottles with sand and painting them. Attach one numeral to each bottle</p> <p>Store in six pack crates</p> <p>Pep bottles Work cards Work books Manipulatives Counting frame, etc.</p>	<p>Observation Checklist Portfolios Conferencing Teacher made test Performance tasks</p>



# Mathematics Syllabus

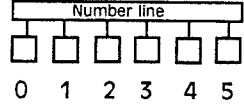
## Addition

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT		
<b>Collective words:</b> <b>Half-dozen</b> <b>Dozen</b> <b>Pair</b> <b>Couple</b> <b>Double</b> <b>Triple;</b> <b>triplet</b> <b>Decade</b> <b>Half-century</b> <b>Century</b> <b>Millennium</b>	<p>Recognises numberwords and number symbols</p> <p>Uses the collective noun that represents a number</p>	<ul style="list-style-type: none"> <li>◆ Adding without regrouping</li> <li>◆ Adding with regrouping</li> <li>◆ Three-digit numbers with and without regrouping</li> <li>◆ Use of arrow graphs to reinforce addition facts</li>   <li>◆ Teacher Made Puzzles e.g. cut face cards in half (make the cutting lines different on the separate cards, so that only two correct halves will fit together). Then the cards are matched together as puzzles. (A variety of number puzzles can be made for matching numerals to objects the written name of the numeral to either objects or the numeral. These can be constructed and geared to the developmental levels of the children.)</li> </ul> <div style="border: 1px solid black; width: fit-content; margin: 10px auto; padding: 5px;"> <table style="border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px 10px;">10</td> <td style="border: 1px solid black; padding: 2px 10px;">decade</td> </tr> </table> </div> <ul style="list-style-type: none"> <li>◆ Uses stencils to form numerals</li> <li>◆ Draws around number templates</li> </ul>	10	decade	<p>Number puzzles</p> <p>Used calendars</p> <p>Numeral cards</p> <p>Number matching cards</p> <p>Stencils</p> <p>Flannel graph</p> <p>Magnetic board</p> <p>Templates</p> <p>Teacher made textured Numeral tiles</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Conferencing</p> <p>Teacher made test</p> <p>Performance tasks</p>
10	decade					

# Mathematics

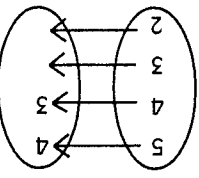
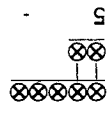
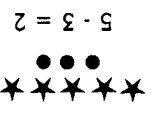
## Syllabus

### Subtraction

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Subtraction: (from totals 10 or less)</b> <b>The minus sign (-)</b> <b>Aspects of subtraction</b> <b>(a) taking away</b>	Partitions sets Subtracts from totals of 10 or less	<ul style="list-style-type: none"> <li>◆ Rhymes and songs involving Subtraction Ten green bottles Ten on the bed Five currant buns Five little ducks etc.</li> <li>◆ Use everyday life experiences to perform subtraction operations e.g.</li> <li>◆ Shelly had 5 sweets, she ate 1, how many sweets were left?</li> <li>◆ Teacher calls 5 children to the front of the class. Teacher asks 2 children to go back to their seats. How many are left at the front of the class?</li> <li>◆ This activity is recorded as <math>5-2=3</math></li> <li>◆ Use manipulatives concrete materials to solve subtraction problems</li> <li>◆ Use of skittles for subtraction</li> <li>◆ Use of dice</li> <li>◆ Use of number line</li> <li>◆ Use of bead bars</li> </ul>	Rhymes and songs Variety of materials Bead/bars Abacus  Number line: Number line can be made from different materials, card, wood etc   Number line made from Strip of wood, Cup hooks, Numeral cards Skittles Number line Bead bars Arrow graphs	Observation Checklist Portfolios Conferencing Teacher made test Performance tasks  Observation Checklist Portfolios Conferencing

Mathematics  
Syllabus

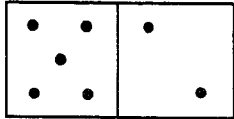
Subtraction

ASSESSMENT	SUGGESTED RESOURCES	SUGGESTED ACTIVITIES	OBJECTIVES	TOPICS/ CONCEPTS
<p>Observation Checklist Portfolios Conferring Teacher made test Performance tasks</p>	<p>Skittles Number line Bead bars Arrow graphs Teacher made charts —1</p>  <p>Arrow graph Balls, hats, Pepbottles Chalkboard Subtraction cards Bottle caps Straws Juice cartons Missing addend Strips</p>	<p>◆ Use arrow graphs to reinforce subtraction facts</p> <p>◆ Uses work cards</p> <p>◆ Questioning e.g. has 5 dolls and two teacups. Pose the question: How many more dolls are there than teacups?</p> <p>◆ Through the process of matching, the child will develop the concept that the above question involves subtraction. The mathematical statement to the above question is recorded as follows:</p>  <p>◆ Teacher places 5 stars and three circles on the table. Children are asked, How many more stars are there than circles? Child matches stars with circles solves the problem.</p> 	<p>◆ Memorises subtraction facts up to 10</p>	<p>Subtraction: (from totals 10 or less) (b) Comparing</p>

# Mathematics

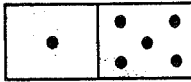
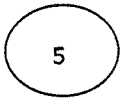
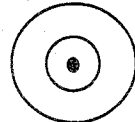
## Syllabus

### Subtractions

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Aspects of Subtraction</b> <b>(b) Comparing</b> <b>Subtraction as the Inverse of addition (missing addends)</b>	Link subtraction with addition	<ul style="list-style-type: none"> <li>◆ Use dominoes and domino patterns for comparing</li> </ul>  <p>Child compares two sets of dots by pairing to discover the difference between 5 and 2</p> <ul style="list-style-type: none"> <li>◆ Questioning: Teacher displays a set of 7 juice cartons and 3 straws Teacher asks questions such as: Are there as many straws as there are cartons? How many more straws are needed so that there are the same number as the cartons?</li> <li>◆ Teacher and pupils record and read the above information on a sentence board e.g., 3 and how many more make 7? <math>3 + () = 7</math></li> <li>◆ Teacher explains to class that a blank space is used to indicate that we are trying to find the number that must be added to 3 to make 7</li> </ul>	Peppobottles Chalkboard Subtraction cards Bottle caps Straws Juice cartons Missing addend strips	Observation Checklist Portfolios Conferencing Teacher made test Performance tasks

# Mathematics Syllabus

## Subtraction

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Subtraction as the inverse of addition (missing addends)</b>		<ul style="list-style-type: none"> <li>Children match straws to juice cartons to arrive at the answer</li> <li>Using domino patterns ask the following questions:           <div style="text-align: center;">  </div> </li> <li>How many dots must be added to the smaller number so that there are as many as the larger number  <math>1 + ( ) = 5</math> </li> <li>Makes use of patterns to arrange sets of addition and subtraction e.g.  <math>1+1=2</math>   <math>2+1=3</math>   <math>3+1=4</math>  <math>1+2=3</math>   <math>2+2=4</math>   <math>3+2=5</math>  <math>1+3=4</math>   <math>2+3=5</math>   <math>3+3=6</math> </li> <li>Practice in making up number stories           <div style="text-align: center;">  </div> </li> </ul>	Addition Wheel Cut out two circles one a quarter inch smaller than the other Use paper fastener to join at the centre (wheel can be used for any activity)  Unifix blocks Lego blocks Egg cartoons Counters etc.	Observation Checklist Portfolios Conferencing Teacher made test Performance tasks
<b>Patterning</b>	Identifies and uses patterns for problem solving			
<b>Commutative property for addition e.g.</b> $7+3=10$ $3+7=10$	Manipulates patterns which emphasize the commutative property of addition			

# Mathematics

## Syllabus

### Place Value

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Place Value</b>  <b>Bundling</b>  <b>The Structure of Numbers</b>	Understanding the idea of place value  Records numbers using column headings.  Uses zero as a place holder.  Records numbers without column headings	<ul style="list-style-type: none"> <li>◆ Question children about the position of digits in numbers. E.g. In the number 13 which digit is on the left which digit is on the right, which digit is a number of tens.</li> <li>◆ Child uses spike abacus and beads to represent various numbers requested by the teacher.</li> <li>◆ Self correcting flash cards</li> <li>◆ Child uses self correcting flash cards to verify numbers represented</li> <li>◆ Bean Bag Hop Scotch Draw on huge piece of card One place value mat Write a set of numbers on the place value mat e.g. Provide children with numeral cards and two bean bags. (1 red for tens and 1 black for ones). Child selects a number from a pile of cards. He throws bean bags onto the place value mat to represent the number selected. If bean bags land on the correct representation of that number, child will hop scotch on the mat to the said number.</li> </ul>	Place Value mat	Observation Checklist Portfolios Conferencing Teacher made test Performance task

# Mathematics Syllabus

## Place Value

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT																								
<b>Place Value</b>  <b>Bundling</b>  <b>The Structure of Numbers</b>	Understanding the idea of place value  Records numbers using column headings.  Uses zero as a place holder.  Records numbers without column headings	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>TENS</th> <th>ONES</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>1</td> </tr> <tr> <td>0</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>0</td> <td>3</td> </tr> <tr> <td>2</td> <td>1</td> </tr> </tbody> </table>	TENS	ONES	3	1	0	2	1	2	0	3	2	1	Numeral cards Place value charts Circular display boards (discarded circular cardboard from publishers e.g. Nation publishing, Advocate publishing, Ensopac etc) Make your own wheel : Cut out two wheels one slightly smaller than the other. Add the pairs of numbers together. Turn the wheel. Add the new pairs together Parking Lot Game Triple sorting tray Made from match boxes or quarter litre cartons Tens Ones Number Word <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>TENS</th> <th>ONES</th> <th>NUMBERS</th> <th>WORD</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>5</td> <td>25</td> <td></td> </tr> <tr> <td>1</td> <td>0</td> <td>10</td> <td>Ten</td> </tr> </tbody> </table>	TENS	ONES	NUMBERS	WORD	2	5	25		1	0	10	Ten	Observation Checklist Portfolios Teacher made test Conferencing Performance task
TENS	ONES																											
3	1																											
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# Mathematics

## Syllabus

### Place Value

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Explain notation</b></p> <p><b>Vocabulary associated with place value: tens, ones, hundreds, bundles, digits</b></p>		<p>Game: "Find Your Partner"</p> <ul style="list-style-type: none"> <li>◆ Teacher provides sets of paired cards which represent the following data e.g.</li> <li>◆ Numeral, Pictorial Representation words associated with place value</li> </ul> <div style="text-align: center;"> </div> <ul style="list-style-type: none"> <li>◆ Each child randomly selects a card from a bag or other container</li> <li>◆ At a given signal (eg. blow of whistle, clap of hands etc). Children set about finding their partner by pairing and matching cards.</li> <li>◆ He uses straws pencils, strips of card tooth picks etc. to group the number into tens and ones, to determine the right answer</li> <li>◆ Parking Lot Game Children park cut out cars with pictorial representations of place value</li> <li>◆ Teacher made cards focusing on numbers through 15; 15 through 20; 20 through 30 up to 99 can be used</li> </ul>	<p>Circular display boards (discarded circular cardboard from publishers e.g. Nation publishing, Advocate publishing, Ensepac etc)</p> <p>Make your own wheel Cut out two wheels one slightly smaller than the other. Add the pairs of numbers together. Turn the wheel. Add the new pairs together</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Teacher made test</p> <p>Conferencing</p> <p>Performance tasks</p>



# Mathematics Syllabus

## Place Value

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT																							
<p><b>Building numbers 10 to 15 and beyond</b></p> <p><b>Investigating place value in numbers up to 99.</b></p> <p><b>Combining numbers involving addition without regrouping</b></p>		<ul style="list-style-type: none"> <li>◆ Practical work using concrete objects e.g. Use triple sorting tray to sort numbers 10 to 15 like this Put out 10 counters Write the number Add 1 more to next row Count and write the new numbers Do this until you reach the last row</li> <li>◆ For practice and reinforcement:</li> <li>◆ Use a variety of teacher/made concrete and semi concrete activities Let children work in pairs One child displays a numeral card e.g. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>15</td></tr></table></li> <li>Second child counts out 15 straws and makes a bundle of 10 and 5 ones</li> <li>◆ Children collaborate and record the number presented.</li> <li>◆ Second child displays a numeral card e.g. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>23</td></tr></table> and the other child puts out 2 bundles of 10 and 3 ones. Children work in pairs to combine the bundles of tens and ones to find the total.</li> </ul> <p>e.g.</p> <table style="margin-left: 20px;"> <tr> <td>1 tens</td> <td>5 ones</td> <td>15</td> </tr> <tr> <td>2 tens</td> <td>3 ones</td> <td>+ 23</td> </tr> <tr> <td colspan="2" style="border-top: 1px solid black;">3 tens</td> <td style="border-top: 1px solid black;">8 ones</td> </tr> <tr> <td colspan="2"></td> <td style="border-top: 1px solid black;">38</td> </tr> </table>	15	23	1 tens	5 ones	15	2 tens	3 ones	+ 23	3 tens		8 ones			38	<p>Parking Lot Game Triple sorting tray Made from match boxes or quarter litre cartons</p> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Tens</th> <th>Ones</th> <th>Number and Number word</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>5</td> <td></td> </tr> <tr> <td>1</td> <td>6</td> <td>16 sixteen twelve</td> </tr> </tbody> </table> <p>Numerals cards one to 99. Yogurt cups, quarter litre milk, Juice boxes etc. Labeled tens, ones</p> <p>Match sticks straws, polar sticks, strips of cards etc. rubber bands or string</p>	Tens	Ones	Number and Number word	2	5		1	6	16 sixteen twelve	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Teacher made test</p> <p>Conferencing</p> <p>Performance tasks</p>
15																											
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1	6	16 sixteen twelve																									

# Mathematics Syllabus

## Addition

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Addition of tens and ones without regrouping</b>		<ul style="list-style-type: none"> <li>◆ Use of Work Cards e.g.</li> <li>◆ How many tens and ones Tens            and            ones</li> <li>◆ How many fingers altogether? e.g. Count them. Write how many are shown in each set.</li> </ul>	Teaching Mathematics in Primary Schools  D. Paling, Oxford Caribbean Primary Mathematics  Integrated Mathematics for Primary Schools	Observation Checklist Portfolios Teacher made test Conferencing Performance task

# Mathematics Syllabus

## Addition

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT															
<p><b>Number 10 - 18 24 - 48 to 81 to 100</b></p> <p><b>Problem solving: numbers up to 100</b></p>	Grouping in tens numbers above 10 one less/one more	<table border="1"> <thead> <tr> <th></th> <th>Tens</th> <th>Ones</th> <th>Numeral</th> <th>Number Names</th> </tr> </thead> <tbody> <tr> <td>0000000000 0</td> <td></td> <td></td> <td>11</td> <td>eleven</td> </tr> <tr> <td>0000000000 00000</td> <td>1</td> <td>5</td> <td>15</td> <td>fifteen</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>◆ Activities involving circling the numbers in the tens place; or in the ones place</li> <li>◆ Use of Groups</li> <li>◆ Building up numbers from 10 through 100</li> <li>◆ Activities to reinforce concept of one less one more with two digit numbers</li> <li>◆ Use concrete materials and pictorial representation to develop and reinforce the concepts of 10 less and ten more with numbers above 10.</li> <li>◆ Teacher discussion and demonstration</li> <li>◆ Practical activities involving bundling</li> <li>◆ Problem solving of everyday situations</li> </ul>		Tens	Ones	Numeral	Number Names	0000000000 0			11	eleven	0000000000 00000	1	5	15	fifteen	<p>Teaching Mathematics in Primary Schools</p> <p>D. Paling, Oxford Caribbean Primary Mathematics</p> <p>Integrated Mathematics for Primary Schools</p>	
	Tens	Ones	Numeral	Number Names															
0000000000 0			11	eleven															
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# Mathematics Syllabus

## Addition

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT																								
<b>Addition of 2-digit to 1-digit numbers without regrouping</b>	Add two or more 2 - digit numbers	<table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Tens</td> <td style="text-align: center;">Ones</td> <td style="text-align: center;">Tens</td> <td style="text-align: center;">Ones</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">5</td> <td style="text-align: center;">6</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">+</td> <td style="text-align: center;">3</td> <td style="text-align: center;">+</td> <td style="text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> </tr> </table>	Tens	Ones	Tens	Ones	2	5	6	1	+	3	+	4	-----	-----	-----	-----	Teaching Mathematics in Primary Schools D. Paling, Oxford Caribbean Primary Mathematics									
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-----	-----	-----	-----																									
<b>Addition of 2-digit to 2-digit numbers without regrouping</b>	Understand the idea of regrouping	<table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">T</td> <td style="text-align: center;">O</td> <td style="text-align: center;">T</td> <td style="text-align: center;">O</td> <td style="text-align: center;">T</td> <td style="text-align: center;">O</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">6</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">+4</td> <td style="text-align: center;">5</td> <td style="text-align: center;">+2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">+5</td> <td style="text-align: center;">9</td> </tr> <tr> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> </tr> </table>	T	O	T	O	T	O	3	2	6	3	4	0	+4	5	+2	1	+5	9	-----	-----	-----	-----	-----	-----	Integrated Mathematics for Primary Schools	
T	O	T	O	T	O																							
3	2	6	3	4	0																							
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<b>Addition of 2-digit to 1-digit numbers with regrouping</b>		<table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">T</td> <td style="text-align: center;">O</td> <td style="text-align: center;">T</td> <td style="text-align: center;">O</td> <td style="text-align: center;">T</td> <td style="text-align: center;">O</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">6</td> <td style="text-align: center;">8</td> <td style="text-align: center;">4</td> <td style="text-align: center;">4</td> <td style="text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">+</td> <td style="text-align: center;">7</td> <td style="text-align: center;">+</td> <td style="text-align: center;">9</td> <td style="text-align: center;">+</td> <td style="text-align: center;">8</td> </tr> <tr> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> </tr> </table>	T	O	T	O	T	O	3	6	8	4	4	6	+	7	+	9	+	8	-----	-----	-----	-----	-----	-----		
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3	6	8	4	4	6																							
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T	O	T	O	T	O																							
2	8	2	8	5	9																							
+1	9	+1	2	+3	4																							
-----	-----	-----	-----	-----	-----																							
		<ul style="list-style-type: none"> <li>◆ Teacher discussion and demonstration</li> <li>◆ Practical activities involving bundling of tens</li> <li>◆ Use of every day situations for problem solving</li> <li>◆ Use of workcards for reinforcement</li> </ul>																										

# Mathematics Syllabus

## Subtraction

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Subtraction of 1 digit from 2-digit numbers without regrouping</b>	Perform subtraction with and without regrouping	$\begin{array}{r} T \ 0 \\ 3 \ 5 \\ - \ 4 \\ \hline \end{array}$ $\begin{array}{r} T \ 0 \\ 5 \ 7 \\ - \ 7 \\ \hline \end{array}$ $\begin{array}{r} T \ 0 \\ 4 \ 6 \\ - \ 8 \\ \hline \end{array}$	Teaching Mathematics in Primary Schools D. Paling Oxford Caribbean Primary Mathematics Integrated Mathematics for Primary Schools	Observation Checklist Portfolios Teacher Made Test Conferencing Performance task
<b>Subtraction of 2 digits from 2-digit numbers without regrouping</b>		$\begin{array}{r} T \ 0 \\ 4 \ 3 \\ - 3 \ 1 \\ \hline \end{array}$ $\begin{array}{r} T \ 0 \\ 5 \ 7 \\ - 3 \ 0 \\ \hline \end{array}$ $\begin{array}{r} T \ 0 \\ 6 \ 8 \\ - 2 \ 3 \\ \hline \end{array}$		
<b>Subtraction of 2 digits from 2-digit numbers with regrouping</b>		$\begin{array}{r} T \ 0 \\ 9 \ 3 \\ - \ 6 \\ \hline \end{array}$ $\begin{array}{r} T \ 0 \\ 7 \ 0 \\ - \ 9 \\ \hline \end{array}$ $\begin{array}{r} T \ 0 \\ 8 \ 1 \\ - \ 4 \\ \hline \end{array}$		

# Mathematics Syllabus

## Subtraction

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Subtraction of 2 digit from 2 digit numbers with regrouping</b>	Subtract with regrouping	$\begin{array}{r} T \quad O \\ 4 \quad 1 \\ -1 \quad 6 \\ \hline \end{array}$ $\begin{array}{r} T \quad O \\ 3 \quad 2 \\ -2 \quad 5 \\ \hline \end{array}$ $\begin{array}{r} T \quad O \\ 2 \quad 4 \\ -1 \quad 7 \\ \hline \end{array}$	Teaching Mathematics in Primary Schools D Paling, Oxford Caribbean Primary Mathematics Integrated Mathematics for Primary Schools	
<b>Place value involving hundreds</b>	Understand the use of place value in subtraction	<ul style="list-style-type: none"> <li>◆ Preliminary activities, stationery, field trips to supermarkets. Engage students in activities which require them to investigate items that are packaged in quantities of 10's, 25's, 50's, 100's. E.g. table napkins, plastic cups, straws, pampers, plastic forks, matches etc.</li> <li>◆ Practical activities in bundling up to hundreds.</li> <li>◆ Use of manipulatives (abacus, unifix blocks, place value blocks etc) to represent numbers e.g. 21, 12, 105, 358 36, 63, 501, 583</li> <li>◆ Use of work cards to reinforce concept of place value involving hundreds.</li> </ul>		

# Mathematics Syllabus

## Subtraction

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT	
<p><b>Place value:</b></p> <p><b>Expanded Notation</b></p>	Write in figures the given expanded numbers	<p>◆ Write the number described in each situation</p> <p>(a) <table border="1" style="margin-left: 20px;"> <tr> <td style="padding: 5px;">           3 in the ones place            2 in the tens place            T 0            = <input style="width: 30px; height: 20px;" type="text"/> </td> </tr> </table></p> <p>b) Sort the numbers in the correct boats/houses</p> <p>(c) Use work cards/work sheets including the following basic activities and instructions:</p> <p>◆ Write the following in numerals e.g.            2 tens 6 ones <input style="width: 30px; height: 20px;" type="text"/></p> <p>8 hundreds, 2 tens, 4 ones <input style="width: 40px; height: 20px;" type="text"/></p>	3 in the ones place 2 in the tens place T 0 = <input style="width: 30px; height: 20px;" type="text"/>	<p>Teaching Mathematics in Primary Schools</p> <p>D. Paling, Oxford Caribbean Primary Mathematics</p> <p>Integrated Mathematics for Primary Schools</p>	
3 in the ones place 2 in the tens place T 0 = <input style="width: 30px; height: 20px;" type="text"/>					

# Mathematics

## Syllabus

### Addition

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT								
<b>Expanded Notation</b>	Write figures in expanded form	<p>◆ Write the following in expanded form</p> <p>e.g. <math>26 = \boxed{20 + 6}</math></p> <p><math>52 = \boxed{\phantom{00 + \phantom{00}}}</math></p> <p><math>315 = \boxed{\phantom{000 + \phantom{00} + \phantom{00}}}</math></p> <p><math>135 = \boxed{\phantom{000 + \phantom{00} + \phantom{00}}}</math></p> <p><math>200 + 2 + 20 = \boxed{\phantom{000 + \phantom{00} + \phantom{00}}}</math></p> <p>◆ Give the value of the underlined digits:</p> <p><math>1\underline{3}</math>; <math>9\underline{1}</math>; <math>\underline{3}11</math></p> <p>◆ Add the following</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">300</td> <td style="text-align: right;">5</td> </tr> <tr> <td style="text-align: right;">40</td> <td style="text-align: right;">20</td> </tr> <tr> <td style="text-align: right;"><u>+ 6</u></td> <td style="text-align: right;"><u>+200</u></td> </tr> <tr> <td style="text-align: right;">_____</td> <td style="text-align: right;">_____</td> </tr> </table>	300	5	40	20	<u>+ 6</u>	<u>+200</u>	_____	_____	<p>Teaching Mathematics in Primary Schools</p> <p>D. Paling, Oxford Caribbean Primary Mathematics</p> <p>Integrated Mathematics for Primary Schools</p>	
300	5											
40	20											
<u>+ 6</u>	<u>+200</u>											
_____	_____											



# Mathematics Syllabus

## Addition

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Addition of 3-digit to 1-digit numbers without regrouping</b>	Add without regrouping	<ul style="list-style-type: none"> <li>◆ Order of numbers</li> <li>◆ Make these numbers greater by 10</li> <li>◆ Make these numbers greater by 1</li> <li>◆ Make these numbers greater by 100</li> <li>◆ Teacher discussion and demonstration</li> <li>◆ Practical activities involving bundling</li> <li>◆ Problem solving of everyday situations</li> <li>◆ Use of work cards for reinforcement</li> </ul> $\begin{array}{r} \text{H T O} \\ 2 \ 4 \ 0 \\ + \ 6 \\ \hline \end{array}$ $\begin{array}{r} \text{H T O} \\ 3 \ 0 \ 5 \\ + \ 6 \\ \hline \end{array}$	Teaching Mathematics in Primary Schools  D.Paling, Oxford Caribbean Primary Mathematics  Integrated Mathematics for Primary Schools	

# Mathematics Syllabus

## Addition

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Addition of 3-digit numbers to 2-digit numbers without regrouping.</b>	Add without and with regrouping	$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 3 \quad 5 \quad 1 \\ + \quad 2 \quad 6 \\ \hline \end{array}$ $\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 4 \quad 2 \quad 5 \\ + \quad 0 \quad 4 \\ \hline \end{array}$	Teaching Mathematics in Primary Schools D. Paling, Oxford Caribbean Primary Mathematics	
<b>Addition of 3-digit numbers to 3-digit numbers without regrouping</b>		$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 1 \quad 5 \\ +4 \quad 0 \quad 1 \\ \hline \end{array}$ $\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 1 \quad 6 \\ +0 \quad 4 \quad 3 \\ \hline \end{array}$	Integrated Mathematics for Primary Schools	
<b>Addition of 2-digit and 2-digit numbers with regrouping in both tens and ones columns</b>		$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ \quad \quad 2 \quad 8 \\ + \quad 8 \quad 2 \\ \hline \end{array}$ $\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ \quad \quad 6 \quad 6 \\ + \quad 5 \quad 6 \\ \hline \end{array}$		
<b>Addition of 3-digit and 3-digit numbers with regrouping</b>		$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 8 \quad 6 \\ +2 \quad 4 \quad 7 \\ \hline \end{array}$ $\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 4 \quad 3 \quad 5 \\ +1 \quad 4 \quad 5 \\ \hline \end{array}$		

# Mathematics Syllabus

## Subtraction

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Subtraction of 3-digit from 3-digit numbers without regrouping</b></p> <p><b>Subtraction of 3-digit from 3-digit numbers with regrouping</b></p>	Subtract without and with regrouping	<ul style="list-style-type: none"> <li>◆ Teacher Discussion and Demonstration</li> <li>◆ Practical activities involving bundling</li> <li>◆ Problem solving of everyday situations</li> <li>◆ Use of work cards for re-inforcement</li> </ul> $\begin{array}{r} \text{H T O} \quad \text{H T O} \\ 646 \quad 639 \\ -231 \quad -407 \\ \hline \end{array}$ $\begin{array}{r} \text{H T O} \quad \text{H T O} \quad \text{H T O} \\ 519 \quad 583 \quad 904 \\ -347 \quad -135 \quad -481 \\ \hline \end{array}$ <p><b>Multiplication</b> Combining equal groups of 2, 3 and 4</p> <ul style="list-style-type: none"> <li>◆ Teacher Discussion and Demonstration</li> <li>◆ Practical activities involving grouping</li> <li>◆ Problem solving of everyday situations</li> </ul>	<p>Place Value block Unifix blocks Abacus</p> <p>Integrated Mathematics for Primary Schools Bk 2</p> <p>Caribbean Primary Mathematics Bk 2</p>	

# Mathematics Syllabus

## Multiplication

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT									
<b>Multiplication</b>	Reinforce concepts of multiplication	<p>◆ Use of work cards for re-enforcement</p> <table border="1"> <tr> <td></td> <td>1 bicycle has <input type="checkbox"/> wheels 1 set of 2 wheels = <input type="checkbox"/></td> </tr> <tr> <td></td> <td>1 tricycle has <input type="checkbox"/> wheels 1 set of 3 wheels = <input type="checkbox"/></td> </tr> <tr> <td></td> <td>1 car has <input type="checkbox"/> wheels 1 set of 4 wheels = <input type="checkbox"/></td> </tr> <tr> <td></td> <td>1 hand has <input type="checkbox"/> fingers 1 set of 5 fingers = <input type="checkbox"/></td> </tr> </table> <p>◆ Repeat the pattern using 2 sets e.g.</p> <table border="1"> <tr> <td>2 tricycle have <input type="checkbox"/> wheels 2 set of 3 wheels = <input type="checkbox"/></td> </tr> </table>		1 bicycle has <input type="checkbox"/> wheels 1 set of 2 wheels = <input type="checkbox"/>		1 tricycle has <input type="checkbox"/> wheels 1 set of 3 wheels = <input type="checkbox"/>		1 car has <input type="checkbox"/> wheels 1 set of 4 wheels = <input type="checkbox"/>		1 hand has <input type="checkbox"/> fingers 1 set of 5 fingers = <input type="checkbox"/>	2 tricycle have <input type="checkbox"/> wheels 2 set of 3 wheels = <input type="checkbox"/>	Counters Egg Boxes Sorting Tray Counting Sticks Interlocking cubes	
	1 bicycle has <input type="checkbox"/> wheels 1 set of 2 wheels = <input type="checkbox"/>												
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# Mathematics Syllabus

## Multiplication

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Multiplication as repeated addition of the same number e.g.</b></p> <p><math>2+2=4</math></p> <p><math>2+2+2=6</math></p> <p><math>2+2+2+2=8</math> etc.</p> <p><b>Multiplication sign (x)</b></p> <p><b>Use language associated with multiplication sets, groups, pairs - add times, multiply, repeat, add, equal</b></p>	<p>Understands the idea of multiplication and its various aspects</p> <p>Demonstrates multiplication as repeated addition</p>	<ul style="list-style-type: none"> <li>◆ Use of unifix blocks to show repeated addition</li> <li>◆ Use of Lego blocks to show repeated addition</li> <li>◆ Use of egg boxes and egg crates to demonstrate repeated addition</li> <li>◆ Use of children to demonstrate, repeated addition e.g., ask 4 children to stand in front of class</li> <li>◆ Ask first child to raise both arms. Communicate with children to establish notion of one set of two.</li> </ul> <p>Second child raises 2 arms 2 sets of 2 Third child raises 2 arms 3 sets of 2 etc.</p> <ul style="list-style-type: none"> <li>◆ Record statement for each group of 2. Hence:</li> </ul> <p>1 child = 1 set of 2 2 children = 2 sets of 2 3 children = 3 sets of 2 4 children = 4 sets of 2 <math>2+2+2+2=8</math> <math>2 \times 4=8</math></p> <ul style="list-style-type: none"> <li>◆ Repeat with feet, eyes, ears, shoes etc.</li> </ul>	<p>Egg boxes, egg crates, drink crates, six pack crates Unifix blocks, lego blocks, sorting trays interlocking cubes, number rods, calculators, number lines, counting stick</p> <p>Peg boards and pegs</p> <p>Materials which allow for repeated addition e.g. Animals 4 legs Vehicles 4 wheels Stools 3 legs Tripods 3 legs Spectacles 2 lenses Pairs e.g. socks, ribbons, shoes etc.</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Conferencing</p> <p>Teacher made test</p> <p>Performance tasks</p>

# Mathematics

## Syllabus

### Division

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Division as sharing</b></p> <p><b>-Knows what is fair sharing</b></p> <p><b>-Sharing equally</b></p> <p><b>-Shares with remainder</b></p> <p><b>Language associated with sharing and division:</b></p> <p><b>share divide, groups, remainder equal, odd; even; same amount; equally</b></p> <p><b>Finds half of even numbers up to 18</b></p>	<p>Understands the idea of division and its various aspects</p>	<p>0 1 2 3 4 5 6 7 8</p> <ul style="list-style-type: none"> <li>◆ Use pegboard and other manipulatives to build up multiples of two</li> <li>◆ Teacher engages the children in several practical simple everyday sharing problems e.g.  Shaka has six lego blocks. He shares them with Kyle and Ryan so that each of them have the same amount. How many does each boy have?</li> <li>◆ Practical activities to demonstrate fair sharing e.g.  Pupils place twelve blocks on a meat tray.  They share the blocks into different sets.  Use card plates, share the blocks into 2 equal sets.  Question how many are in each group?</li> </ul>	<p>Interlocking cubes</p> <p>Number rods</p> <p>Counters,</p> <p>margarine tubs,</p> <p>yogurt cups,</p> <p>vegetable trays,</p> <p>matches,</p> <p>calculators boxes</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Conferencing</p> <p>Teacher made test</p> <p>Performance tasks</p>

# Mathematics

## Syllabus

### Division

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Division as Sharing</b></p> <p><b>-Knows what is fair sharing</b></p> <p><b>-Sharing equally</b></p> <p><b>-Shares with remainder</b></p> <p><b>Language associated with sharing and division:</b>  <b>share divide, groups, remainder equal, odd; even; same amount; equally</b></p> <p><b>Finds half of even numbers up to 18</b></p>	<p>Understands the idea of division and its various aspects</p>	<ul style="list-style-type: none"> <li>◆ Repeat this activity for other amounts up to 18</li> <li>◆ Share bottle caps equally into 2 ice-cream containers</li> <li>◆ Share match sticks equally into 3 match boxes.</li> <li>◆ Share large seeds into 4 containers etc.</li> <li>◆ Record the activity like this 12 makes 2 sets of 6</li> <li>◆ Activities involving sharing with a remainder</li> <li>◆ Use paper plates (or other container) to share an uneven number of counters etc. e.g.15 counters makes 2 sets of 7 remainder 1 counter etc.</li> </ul>	<p>Interlocking cubes</p> <p>Number rods</p> <p>Counters,</p> <p>margarine tubs,</p> <p>yogurt cups,</p> <p>vegetable trays,</p> <p>match,</p> <p>calculators boxes</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Conferencing</p> <p>Teacher made test</p> <p>Performance task</p>

# Mathematics Syllabus

## Division

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Division as Sharing</b>		<ul style="list-style-type: none"> <li>◆ Pupils use rods or sticks or interlocking cubes or lego blocks to investigate which amounts can be divided into halves</li> <li>◆ Worksheet activities used counters to share the number equally 4 is ( )+( ) 6 is ( )+( ) 8 is ( )+( ) 10 is ( )+( ) 12 is ( )+( )</li> </ul>		Observation Checklist Portfolios Conferencing Teacher made test Performance tasks
<b>Place Value</b>	Understanding the idea of place value	◆ Finger counting games	Tens and ones tally boxes	
<b>Bundling</b>	Records numbers using column headings.	◆ Distribute two sets of number symbols cards to each child. Teacher or leader engages the children in a finger game as indicated below.	Tens and ones Spike abacus with beads	
<b>The Structure of Numbers</b>	Uses zero as a place holder. Records numbers without column headings	Leader opens and closes hands several times to indicate any number, example Open and close hands 4 times to represent 40 Child holds up two cards in one hand to show the number acted out. Example 4 0. Repeat this activity to indicate numbers such as 25, 47 where sets of ten are combined with sets of fewer numbers.	A Spin Wheel can be used for teaching as well as testing place value.  NB: An Abacus can be made from pieces of wood (oasis or thick foam dowel, pep bottle covers/beads)	



## Division

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Division equal sharing</b>		<ul style="list-style-type: none"> <li>◆ Discussion and Demonstration of practical every day situations involving sharing.</li> <li>◆ Practical activities involving sharing</li> <li>◆ Oral and written problems involving sharing.</li> <li>◆ Use of work cards for reinforcement.</li> <li>◆ Share one banana equally among 2 children.</li> <li>◆ Oral and written problems involving sharing</li> <li>◆ e.g. John had 10 marbles. He shared them equally among his five friends. How many did each friend get?</li> <li>◆ 5 friends got ____ marbles each 10 is ____ sets of 2</li> </ul>	Class room shop   Counters, cubes, marbles, yogurt, margarine containers, paper plates, paper clips, legos shapes, blocks, pegs, peg board etc	
<b>Language associated with division</b>				
<b>Share, divide, among, between, each, halving, remainder, sets, groups, equal, quarters.</b>				

# Mathematics

## Syllabus

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Unequal sharing</b>	<p>Develops the concept of equal sharing to perform division tasks</p> <p>Develops the concept of division with remainders.</p> <p>Shows understanding of the concept of division</p>	<ul style="list-style-type: none"> <li>◆ Shares using one to one correspondence e.g. I have 6 sweets. I have 3 friends. How many will each friend get?</li> <li>◆ Pupils share one sweet at a time to each child. Problem solving involving the sharing of coins e.g. Jason had 14 cents. He shares the money with 2 friends. How much money did Jason and his friends receive?</li> <li>◆ Use rods, sticks, cakes etc to find which amounts can be halved and which cannot. Record sets of odd and even numbers.</li> <li>◆ Use cubes and three paper plates to find out which amounts will share equally between the plates leaving no remainder and which will have a remainder. e.g. 15 cubes makes 3 sets of 5 17 cubes makes 3 sets of 5 and 2 remainder</li> <li>◆ Draw a picture to show division .e.g. <math>14 \div 2</math> and then write the answer.</li> <li>◆ Use counters to find the answer to <math>15 \div 2</math></li> <li>◆ Use the number line to divide <math>12 \div 3 =</math></li> </ul>	<p>Manipulatives concrete and semi-concrete materials</p> <p>Workcards</p> <p>Workbooks</p> <p>Counters</p> <p>Number line</p>	

# Mathematics Syllabus

## Multiplication

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>The commutative property</b>	Develops the concept of the commutative property of multiplication	<p>e.g. continued</p> <ul style="list-style-type: none"> <li>◆ Ron has 4 bunches of bananas. There are 3 bananas in each bunch. How many bananas has he in all?</li> </ul> <p>Kim has 3 bunches of bananas. There are four bananas on each bunch. How many bananas has she in all?</p> <p>(Emphasize the point that <math>4 \times 3</math> gives the same product as <math>3 \times 4</math>) i.e</p> <p><math>4 \times 3 = 12</math> <math>3 \times 4 = 12</math></p> <ul style="list-style-type: none"> <li>◆ Use work cards/work sheets including the following basic activities and instructions:</li> <li>◆ Encircle the correct statement in each of the following.</li> <li>◆ Write the number sentence to show: 2 sets of 3 or <math>2 \times 3</math> 3 sets of 2 or <math>3 \times 2</math></li> <li>◆ Draw to show the following: 5 sets of 3 and 3 sets of 5</li> <li>◆ Use matrices to develop the commutative property of multiplication.</li> </ul>	<p>Workbooks</p> <p>Work-cards</p> <p>Manipulatives</p> <p>Number line</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Teacher made test</p> <p>Conferencing</p> <p>Performance task</p>
<b>Multiplication using the number line</b>	Uses the number line to solve multiplication problems	<p>Use of the number line to demonstrate multiplication.</p> <p>(Remember always start at Zero)</p>		

# Mathematics

## Syllabus

### Multiplication

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Multiplication</b>	Builds & uses multiplication tables	<ul style="list-style-type: none"> <li>◆ Activities involving multiplication by 2</li> <li>◆ Building multiplication tables for sets of 2               <ul style="list-style-type: none"> <li>1 set of 2 = 2      1 x 2 = 2</li> <li>2 sets of 1 = 2    2 x 1 = 2</li> <li>2 sets of 2 = 4    2 x 2 = 4 etc</li> </ul> </li> <li>◆ Building number tables for sets of 3, 5, 10</li> <li>◆ In one box there are 12 crayons.</li> <li>◆ How many crayons are there in 3 boxes</li> </ul>	Egg crates Drink crates Teacher made Trays Matrices Work cards Work books	Observation Checklist Portfolios Teacher made test Conferencing Performance task

# Mathematics Syllabus

## Multiplication

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Multiplies 2-digit by 1 digit number with regrouping</b>		<ul style="list-style-type: none"> <li>◆ On each tray there are 26 cups. How many cups are there in 3 trays</li> </ul> $\begin{array}{r} \text{T} \quad \text{O} \\ 2 \quad 6 \\ \times \quad 3 \\ \hline \end{array}$ <ul style="list-style-type: none"> <li>◆ Multiplying by five to ten</li> <li>◆ Counting in fives to tens</li> </ul> $5 + 5 = 2 \text{ five} =$ $2 \times 5 = 10$ $10 + 10 + 10 = 3 \text{ ten} =$ $3 \times 10 = 30$ <ul style="list-style-type: none"> <li>◆ Use fingers, toes, petals etc to build up multiplication facts.</li> </ul>		

# Mathematics

## Syllabus

### Fractions

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>The Whole</b> <b>Half and quarter</b>	Identifies the whole and parts of the whole  Combine fractional parts to make the whole  Shares objects & sets of objects into quarters & halves.	Practical activities/Discussion <ul style="list-style-type: none"> <li>◆ Discuss how to find out <math>\frac{1}{2}</math> of different shapes; objects, sets</li> <li>◆ Divide class in <math>\frac{1}{2}</math> - count to verify.</li> <li>◆ Demonstrate the difference between cutting in half and cutting in two</li> <li>◆ Discuss and demonstrate how to find <math>\frac{1}{4}</math> of shapes, objects, Groups of objects.</li> <li>◆ Engage children in paper folding activities</li> <li>◆ Engage children in shading and colouring activities</li> <li>◆ Use of inset fraction puzzles</li> </ul>	beads, counters, cubes unifix blocks, coins	

# Mathematics Syllabus

## Fractions

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Quarters</b>	Discovers that objects/quantities can be divided into equal parts	<ul style="list-style-type: none"> <li>◆ Cuts fruit e.g. orange into 2 equal parts.</li> <li>Discussion: The concept of half That 2 halves make a whole (use flannel board)</li> <li>◆ Let pupils experiment with dividing materials in half – quarter, eight e.g., sheets of paper, ribbon.</li> <li>◆ While halving objects pupils say "one half" of-</li> <li>◆ Give paper for pupils to cut into halves, quarters</li> <li>◆ Experiment with various ways of doing this</li> <li>◆ Folding paper and Cutting the paper horizontally, vertically and diagonally</li> <li>◆ Use the Flannel board.</li> <li>◆ Make sets of parts of circular and rectangular shapes to be put together to form wholes.</li> </ul>	Paper, ribbon and oddments for folding and cutting. Scissors. Flannel Graph	Observation Checklist Teacher Made Test Portfolios Conferencing Anecdotal Records Performance task

# Mathematics

## Syllabus

### Fractions

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
Halves  Quarters	Discovers that objects and quantities can be divided into halves and quarters	<ul style="list-style-type: none"> <li>◆ Provide work sheets for students to colour halves, quarters of pictures. Let children</li> <li>◆ Engage children in activities similar to those provided below;</li> <li>◆ Separate a set of counters into halves, quarters.</li> <li>◆ Share half a cookie with a friend</li> <li>◆ Pour milk into 4 cups to show a quarter.</li> <li>◆ Share a set of crayons to 2 or 4 pupils.</li> <li>◆ Cut sandwiches into halves/quarters</li> <li>◆ Use these and other activities to show quarters (50 cent piece = quarter dollar) (a 25 cent piece = quarter dollar)</li> </ul>		Observation Checklist Teacher Made Test Portfolios Conferencing Anecdotal Records Performance task



## Mathematics Syllabus

### Measurement

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Basic concepts of length, height and size</b></p> <p><b>Vocabulary for measurement; long, short, longer than, tall, taller than, as long as, high, higher, highest</b></p>	<p>Compares materials and objects of differing lengths and heights</p> <p>Develops and uses vocabulary associated with heights and lengths</p>	<ul style="list-style-type: none"> <li>◆ Compares heights of self, peers, windows, doors and other objects within the environment</li> <li>◆ Compares familiar objects in the environment; lengths of pencils, crayons, paper, ribbons, string, self etc.</li> </ul>	<p>Materials in the environment and the various learning centres</p> <p>Cuisinaire Rods, Stern Rods, Ribbons, Laces, Straw, Plasticine, Lego blocks, pictures of objects, materials for making comparison, measuring strips, charts showing comparison of heights, skipping ropes of varying lengths, hula hoops</p>	<p>Observation</p> <p>Portfolios</p> <p>Projects</p> <p>Conferencing</p> <p>Check lists</p> <p>Teacher Made Test</p> <p>Anecdotal Records</p> <p>Performance task</p>
<p><b>There are similarities and differences in length, height and size</b></p>	<p>Measures to compare and match materials of same and different lengths and heights</p>	<ul style="list-style-type: none"> <li>◆ Estimates lengths.</li> <li>◆ Observes and estimates lengths of varying objects.</li> <li>◆ Measures height and length of various objects using hand-spans, footsteps and other non -standard units of measure.</li> </ul>		
<p><b>Lengths and heights can be estimated</b></p>		<ul style="list-style-type: none"> <li>◆ Makes queues, and rows for comparison and practice in use of appropriate vocabulary.</li> </ul>		

# Mathematics Syllabus

## Measurement

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Conservation of length and height</b>	Compares lengths and heights using non-standard units of measure	<ul style="list-style-type: none"> <li>◆ Constructs towers and other buildings from blocks, sticks bricks, cotton spools, tissue paper rolls and other discarded materials</li> </ul>	Rulers of different lengths, measuring tapes, thread, beads, spools, paper rolls, straw, ribbons, string, wire playdough, various materials in the environment.	Observation Portfolios Projects Checklists Conferencing Teacher Made Test Anecdotal Records Performance task
	Identifies the metric rule, measure tape, ruler as standard units of measurement	<ul style="list-style-type: none"> <li>◆ Uses practical measuring, involving the use of the body – hands, foot lengths.</li> <li>◆ Uses measures including straws, string, ribbon, sticks, wire, threads beads, compares lengths of different objects, creating booklets using language for measurement (big and little).</li> </ul>	Pictures and old magazines  Straws Sticks String Books	
<b>The ruler and measuring tape, metric tape, are standard units used for measuring, length and height</b>	Uses standard measures to measure given lengths	<ul style="list-style-type: none"> <li>◆ Identifies, discusses and handles rulers and other standard units of measure.</li> </ul>	Metric rules Metric Tapes	

# Mathematics Syllabus

## Weight

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Vocabulary associated with weight. Light, lighter, heavy, heavier, solid, more than, less than, same as, kilogram, gram</b></p>	<p>Measures mass using non-standard units</p> <p>Uses appropriate vocabulary to compare mass of objects</p>	<ul style="list-style-type: none"> <li>◆ Discusses environmental weighing activities/at home, Clinic, school, when shopping</li> <li>◆ Participates in activities using scales and balances, filling containers with sand and other materials, and balancing same.</li> </ul>	<p>Sand-tray, water tray, paddling pool, pictures of various types of scales, measuring spoons, measuring cups, jars of different sizes, hollow blocks, objects from the environment with different weights, Outdoor equipment – sea-saw, balance board, stepping-stones.</p>	<p>Observation</p> <p>Checklists</p> <p>Portfolios</p> <p>Conferencing</p> <p>Teacher Made Test</p> <p>Anecdotal Records</p> <p>Performance task</p>
<p><b>Weight can be compared with other weights.</b></p>	<p>Estimates the weight of object using non-standard units</p>	<p>Weighs and balances activities associated with everyday experiences;</p>	<p>Plasticine, play-dough, improvise scales and balances, sand-bags</p>	
<p><b>Weight can be estimated</b></p>		<ul style="list-style-type: none"> <li>◆ Role plays weighing dolls at clinic and hospital</li> <li>◆ Weighing ingredients for cooking in dramatic play area</li> <li>◆ Shopping activities involving measurement</li> </ul>		
<p><b>Conservation of mass.</b></p>	<p>Recognises the constancy of mass.</p>			
<p><b>Standard units of measurements; measuring spoons, scale, kilograms, grams</b></p>	<p>learns names of measuring equipment.</p>	<p>Lifts and rearranges furniture in the classroom to make comparison of heavy, heavier, light, lighter</p>		

## Mathematics Syllabus

### Time

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Perception of time</b>	Demonstrates an understanding of time through daily activities	<ul style="list-style-type: none"> <li>◆ Discusses time periods</li> <li>◆ Illustrates time periods</li> <li>◆ Singing of rhymes, songs</li> </ul>	Rhymes and songs Games Pictures/books Charts related to children's activities at school Large classroom clock Teacher made clock	Observation Checklists Portfolios Conferencing Teacher Made Test Anecdotal Records Performance task
<b>Morning</b>		<ul style="list-style-type: none"> <li>◆ Getting up, breakfast, time for School, break time (etc.)</li> </ul>		
<b>Afternoon</b>		<ul style="list-style-type: none"> <li>◆ Matches time on a clock to an event: Lunch time, return to class (etc), prayers, dismissal</li> </ul>		
<b>Evening</b>		Dinner, family time, watch television, Sesame Street, etc.		
<b>Night</b>		Dinner time, bed time		

# Mathematics Syllabus

## Time

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Today</b> <b>Tomorrow</b> <b>Yesterday</b> <b>Next Week</b> <b>Days of the Week</b> <b>Next Month</b> <b>Next Year</b> <b>Months of the Year</b>	Develops an understanding of the passing of time	<ul style="list-style-type: none"> <li>◆ Notes days/months on the Calendar</li> <li>Celebrates special events               <ul style="list-style-type: none"> <li>-Birthdays</li> <li>-Easter</li> <li>-Christmas</li> </ul> </li> <li>◆ Makes gifts cards for special events</li> <li>◆ Observes, describes and represents the order of events</li> </ul>	Days of the week chart  Months of the year charts  Birthday chart/ Pictogram  Calendar paper, card	

# Mathematics

## Syllabus

### Time

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>A deadline</b> <b>A short time</b> <b>A long time</b>	Completes a task in a given period	<ul style="list-style-type: none"> <li>◆ Fixes blocks, puzzles etc.</li> <li>◆ Spends time on tasks in learning centres</li> <li>◆ Engages in cooking, playing activities (etc)</li> </ul>	Blocks, games, (etc.) Materials found in learning centres	Observation Checklists Portfolios Conferencing
<b>Hour</b> <b>Half hour</b> <b>Quarter Hour</b> <b>Day, Week, Month, Century, Year</b> <b>Minute hand – Long</b> <b>Hour hand – Short</b> <b>Soon, Later, Early, Late, a while</b>	Develops and uses vocabulary associated with time Measures the passing of time using timing device	<ul style="list-style-type: none"> <li>◆ Practices hands on experiences with the clock</li> <li>◆ Sets the clock to a given time</li> <li>◆ Makes individual clocks. Uses the languages in everyday experiences</li> <li>◆ Sing songs, rhymes, jingles</li> <li>◆ Observes and discusses time devices used in the home, e.g. whistling kettles, timers, toasters, microwave</li> </ul>	Clocks Teacher made clocks Songs, poetry, rhymes	Teacher Made Test Anecdotal Records Performance task
<b>Measurement of Time</b> <b>Hour</b> <b>Half hour</b> <b>Quarter hour</b>	Measures time by using the clock in relation to particular activities	<ul style="list-style-type: none"> <li>◆ Discusses the clock face</li> <li>◆ Identifies the numbers on the clock face</li> <li>◆ Recognizes the order of the number on the clock</li> <li>◆ Indicates given times on clocks – 3 o'clock, 12:30 etc.</li> <li>◆ Recording time on the hour and half hour</li> </ul>	Clocks	

# Mathematics Syllabus

## Capacity/Volume

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT																																																		
<b>Day Time</b> <b>Night time</b>	Constructs graphical representations and interprets data in relation to use of time	Pictographs Time: Discuss daytime and night time activities.  Children construct chart to demonstrate activities undertaken at specific times. e.g. chart indicating times at which children go to bed.	Worksheets Clock faces Clock stamps Card clocks with movable hands.	Observation Checklists Portfolios Conferencing Teacher Made Test Anecdotal Records Performance Task																																																		
		<table border="1"> <thead> <tr> <th>Names</th> <th>6:00</th> <th>7:00</th> <th>8:00</th> <th>9:00</th> </tr> </thead> <tbody> <tr> <td>Mike</td> <td></td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Kim</td> <td></td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td>Joey</td> <td></td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Rom</td> <td>✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Lyn</td> <td></td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Aswa</td> <td></td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td>Che</td> <td>✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Laura</td> <td></td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Ken</td> <td></td> <td>✓</td> <td></td> <td></td> </tr> </tbody> </table>	Names	6:00	7:00	8:00	9:00	Mike		✓			Kim			✓		Joey		✓			Rom	✓				Lyn		✓			Aswa			✓		Che	✓				Laura		✓			Ken		✓				
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# Mathematics

## Syllabus

### Time

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT															
<b>Day Time</b> <b>Night time</b>	Understand the concepts of time through everyday activities.	<p>Tally Box</p> <p>Use tally box to tally the number of children who go to bed at specific times.</p> <table border="1"> <thead> <tr> <th>Bedtime</th> <th>Tally</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>6.00</td> <td>11</td> <td>3</td> </tr> <tr> <td>7.00</td> <td><del>1111</del></td> <td>5</td> </tr> <tr> <td>8.00</td> <td>11</td> <td>2</td> </tr> <tr> <td>9.00</td> <td></td> <td>0</td> </tr> </tbody> </table> <p>There are children who go to bed at 6:00 o'clock            There are children who go to bed at 8:00 o'clock</p>	Bedtime	Tally	Number	6.00	11	3	7.00	<del>1111</del>	5	8.00	11	2	9.00		0	Worksheets Clock faces Clock stamps Card clocks with movable hands.	Observation Checklists Portfolios Conferencing Teacher Made Test Anecdotal Records Performance Task
Bedtime	Tally	Number																	
6.00	11	3																	
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# Mathematics Syllabus

## The Calendar

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
	<p>Understands and uses the calendar. Writes the date</p>	<ul style="list-style-type: none"> <li>◆ Calendar activities</li> <li>Shade all school days in the month</li> <li>Circle birthdays in the month.</li> <li>The first Monday is the <input type="checkbox"/></li> <li>The last day of the month is <input type="checkbox"/></li> <li>In which month are the most birthdays?</li> <li>In which month are the least birthdays?</li> <li>◆ Complete block graph.</li> </ul>	<p>Calendars</p> <p>Rhyme:</p> <p>Thirty days has september, April, June and November, All the rest have thirty-one, Excepting February alone, which has twenty eight days clear and twenty nine in each leap year</p>	<p>Observations</p> <p>Checklists</p> <p>Portfolios</p> <p>Conferencing</p> <p>Teacher Made test</p> <p>Performance task</p>

# Mathematics Syllabus

## Capacity/Volume

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Pouring</b> <b>Full</b> <b>Half full</b> <b>Empty</b> <b>Holds more</b> <b>Holds less</b>	Demonstrates an understanding that liquids can be dispensed and measured using non-standard measures	<ul style="list-style-type: none"> <li>◆ Free play with sand and water to provide practice in pouring</li> <li>◆ Pours water into containers at different levels to show full, half-full, empty, holds more, holds less</li> </ul>	Containers of various sizes and shapes Water trough Pools Sand tray Eye droppers Standard measures Spoons, cups and jugs Sieve Sponge Measuring cup Bottle caps Soda bottles of varying sizes Glasses Cups Litre containers Half litre containers Quarter litre containers	Observation Checklists Portfolios Conferencing Teacher Made Test Anecdotal Records Performance Task
<b>More</b> <b>Less</b> <b>Quarter</b> <b>Half</b>	Uses vocabulary associated with the measurement of liquids	<ul style="list-style-type: none"> <li>◆ Engages in activities to demonstrate an understanding of measurement</li> <li>◆ Plays with water and sand using a variety of containers</li> </ul>		

# Mathematics Syllabus

## Capacity/Volume

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Conservation of liquids</b></p> <p><b>A given quantity of water/liquids remains the same regardless of the shape, size, height of the container in which it is contained</b></p> <p><b>Standard equipment used for measuring:</b></p> <p><b>Measuring spoons</b> <b>Litre</b> <b>Half litre</b> <b>Quarter litre</b></p>	<p>Recognizes the constancy of liquids</p> <p>Names and uses standard units for measuring capacity /volume</p> <p>Estimates and measures capacity by litre, half litre and quarter-litre</p>	<ul style="list-style-type: none"> <li>◆ Pours water from one container into another</li> <li>◆ Uses small containers to fill large ones to solve problems e.g. How many small soda bottles can fill a large soda bottle?</li> <li>◆ Engages in cooking and baking activities</li> <li>◆ Fills cups/glasses with liquids from large jugs</li> <li>◆ Estimates volume</li> <li>◆ Measures volume using standard units: litre, half-litre, quarter litre.</li> <li>◆ Solves worded problems involving capacity</li> </ul>		<p>Observation</p> <p>Checklists</p> <p>Portfolios</p> <p>Conferencing</p> <p>Teacher Made Test</p> <p>Rubrics</p> <p>Anecdotal Records</p> <p>Performance task</p>

# Mathematics

## Syllabus

### Money

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
Coins Notes Cheques	Identifies local currency in various denominations	<ul style="list-style-type: none"> <li>◆ Examines coins and talks about them</li> <li>◆ Describes coins – Colour, shape, size</li> <li>◆ Uses coins to make rubbings</li> <li>◆ Examines notes and talks about them</li> <li>◆ Examines notes of various denominations and describes them – colour</li> <li>◆ Examines cheques and talks about them</li> </ul>	Coins of each denomination Crayons, paper Notes of each denomination Pencils, glue, stock for shop, Milk cartons, soda bottles Cornflake boxes Toothpaste, soap, cream	Observation Checklists Portfolios Conferencing Teacher Made Test Anecdotal Records Performance task
Equivalency Two five cents = one ten cent	Recognizes relationships between the value of different coins	<ul style="list-style-type: none"> <li>◆ Makes money combination up to dollars</li> <li>◆ Exchanges coins for their equivalents</li> <li>◆ Sets up class shop</li> <li>◆ Combines coins 1 cent and 5 cents make 6 cents 10 c and 5c and 1c = 16 cents</li> <li>◆ Exchanges notes for their equivalents</li> <li>◆ Combines notes <math>\\$1.00 + 5.00 = \\$6.00</math></li> </ul>	Wrappers Scale Cash register Shopping basket Paper/plastic bags Play money Trolley Coins, notes	
Money transactions Addition - Coins and notes Subtraction – coins and notes	Uses coins and notes in money transactions with and without change	<ul style="list-style-type: none"> <li>◆ Engages in Shopping Activities</li> <li>◆ Visits local shop</li> <li>◆ Visits the supermarket</li> <li>◆ Visits Fairchild Street or other Markets</li> <li>◆ Participates in classroom shopping activities</li> <li>◆ Adds and subtracts using coins and notes</li> </ul>		

# Mathematics Syllabus

## Geometry

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
Shapes in the Environment	Observes shapes and becomes aware of various shapes in the environment.	<ul style="list-style-type: none"> <li>◆ Fits shapes into relevant bases and spaces</li> <li>◆ Fixes jigsaws</li> <li>◆ Matches shapes</li> <li>◆ Observes different shapes in the Activity Centres and the school's environment</li> </ul>	Shape trays, sorting trays and boxes. Shape dominoes Jigsaw Puzzles and shapes puzzles. Pegboard patterns collection of articles and pictures with specific shape	Observation Checklist Teacher Made Test Portfolios Conferencing Anecdotal Records Performance task
<b>Names basic shapes -</b> 2-D shapes, square, circle, triangle 3-D shape, cubes cuboids etc.	Recognises and learns the name of different shapes	<ul style="list-style-type: none"> <li>◆ Names the shapes of things in the environment e.g., round ball, square biscuit, doors, plates, etc. threading beads, blocks, buttons, cotton reels.</li> <li>◆ Incidental experiences in shape recognition. Makes specific shapes on Pegboard.</li> <li>◆ Colours squares, circles, triangles on work sheets</li> <li>◆ Writes names for 3-D shapes</li> <li>◆ Writes names for 2-D shapes – circles, squares</li> </ul>	Collection of 'junk' material e.g., cotton reels, bottle caps Building blocks and other construction materials. Playground equipment e.g., balls, hoops, skittles etc. 2-D and 3-D shapes wheel toys Attributes blocks Geometric shape-boards - cubes, cones, spheres, cuboid. Collection of relevant video and cassette tapes. Relevant number songs, rhymes, games, finger plays etc.	

## Mathematics Syllabus

### Geometry

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Characteristics of specific shapes similarities and differences</b>	<p>Recognises and learns The name of different Shapes</p> <p>Sorts materials/ objects according to shape</p>	<ul style="list-style-type: none"> <li>◆ Collects, sorts and compares junk material for shape recognition. Outdoor Activity: Rolls balls, hoops and Wheel toys Throws, catches and kicks Balls and bean bags Compares shapes of bat and ball, skittles, hoops, Boxes Tunnels and barrels (rolls and crawls through).</li> <li>◆ Art and Craft Experiences;</li> <li>◆ Colouring and tracing different shapes</li> <li>◆ Sorts buttons, blocks and other material into sorting trays and boxes. sorts using shape trays. Makes sets. Hunts for shapes in the Activity Centres and the Environment. Groups similar shapes together</li> </ul>		<p>Observation</p> <p>Checklist</p> <p>Teacher Made Test</p> <p>Portfolios</p> <p>Conferencing</p> <p>Rubrics</p> <p>Anecdotal Records</p> <p>Performance task</p>

# Mathematics Syllabus

## Geometry

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Shapes</b>	Demonstrates an understanding of shapes	<ul style="list-style-type: none"> <li>◆ Makes shapes from oddments.</li> <li>◆ Makes shape pictures</li> <li>◆ Mosaics</li> <li>◆ Collages</li> <li>◆ Rubbings</li> <li>◆ Folds and cuts basic shapes</li> </ul> Activities using: - Constructional material -Blocks, lego interlocking shapes, cardboard and wooden boxes. - Printing and finger-painting Pattern-making: - Straight, Zig-Zig, Circular etc. Role-play – Housekeeping e.g. Making cookies in geometrical shapes - Produces shapes through drawings, paintings and other creative activities. Uses shapes to make patterns.		Observation Checklist Teacher Made Test Portfolios Conferencing Anecdotal Records Performance task
<b>Visual Thinking</b>		<ul style="list-style-type: none"> <li>◆ Matches the animals with its shadow</li> <li>◆ Complete the pattern</li> <li>◆ Colour the shapes used to make the truck</li> <li>◆ Colour the shape which is exactly like the first shape</li> </ul>		

# Mathematics Syllabus

## Statistics

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT								
<b>Gathering Data Recording Data</b>  <b>Most; least; more; less same as</b>  <b>Makes two or more column graphs</b>	<b>Represents gathered information in a graph</b>  <b>Uses tally boxes in gathering information</b>	<ul style="list-style-type: none"> <li>◆ Discussions and Demonstration</li> <li>◆ Practical activities</li> <li>◆ Problem solving of everyday situations</li> <li>◆ Use of word cards and work sheets for reinforcement.</li> <li>◆ Representing basic factual information.</li> <li>◆ e.g. represent the number of persons in each child's family</li> <li>◆ Representing favourite fruits and Vegetables</li> </ul> <p>Record information on tally sheet and on pictographs</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">NAMES</th> <th style="width: 50%;">FRUITS</th> </tr> </thead> <tbody> <tr> <td>Kimberley Isabel Kadeem Continue with all Children from class</td> <td style="text-align: center;">◆ ◆ ◆ ◆ ◆ ◆</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Fruits</th> <th style="width: 50%;">No. of Pupils</th> </tr> </thead> <tbody> <tr> <td>Apples Oranges Grapes</td> <td></td> </tr> </tbody> </table>	NAMES	FRUITS	Kimberley Isabel Kadeem Continue with all Children from class	◆ ◆ ◆ ◆ ◆ ◆	Fruits	No. of Pupils	Apples Oranges Grapes		Construction paper Computer Computer software Templates	Observations Checklists Portfolios Conferencing Teacher Made Test Performance task
NAMES	FRUITS											
Kimberley Isabel Kadeem Continue with all Children from class	◆ ◆ ◆ ◆ ◆ ◆											
Fruits	No. of Pupils											
Apples Oranges Grapes												



# Mathematics Syllabus

## Statistics

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT																																												
<b>Gathering Data</b> <b>Recording Data</b> <b>Most, least, more,</b> <b>less, same as.</b>	Gathers and records data  Determines whether one set of objects is more/less than or the same as the other set	<ul style="list-style-type: none"> <li>◆ Questions: Which fruit is most liked?</li> <li>◆ Which fruit is least liked?</li> <li>◆ Represent information as follows: We visited Mr. Hoad's Farm. We saw these animals.</li> </ul> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Animals</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Cows</td> <td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Sheep</td> <td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Chicks</td> <td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td> </tr> </table> <p style="text-align: center;">1 2 3 4 5 6 7 8 9 10</p> <p>We saw <input type="text"/> cows</p> <p>We saw <input type="text"/> sheep</p> <p>We saw <input type="text"/> chicks</p> <p>Write more or less in the space below</p> <p>There are _____ sheep more than cows.</p> <p>There are _____ chicks more than sheep etc.</p> <p>Pictographs</p>	Animals											Cows	✓	✓	✓								Sheep	✓	✓	✓	✓	✓						Chicks	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Observations Checklists Portfolios Conferencing Teacher Made Test Performance task
Animals																																																
Cows	✓	✓	✓																																													
Sheep	✓	✓	✓	✓	✓																																											
Chicks	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																																						

# Mathematics

## Syllabus

### Time

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT															
Day time Night time	Discusses the day time and night time activities  Records the time of these activities	<p>Time: Discuss daytime and night time activities. Chart Bed times for class</p> <table border="1"> <thead> <tr> <th>Bedtime</th> <th>Tally</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>6.00</td> <td>11</td> <td>3</td> </tr> <tr> <td>7.00</td> <td><del>1111</del></td> <td>5</td> </tr> <tr> <td>8.00</td> <td>11</td> <td>2</td> </tr> <tr> <td>9.00</td> <td></td> <td>0</td> </tr> </tbody> </table> <p><input type="checkbox"/> Children go to bed at 6:00 etc. Give pupils a number of shapes, circles, square, triangles etc. On a block graph let pupils place and colour the number of circles, square, etc. to represent the number of the children's bedtime.</p>	Bedtime	Tally	Number	6.00	11	3	7.00	<del>1111</del>	5	8.00	11	2	9.00		0	Bedtime Chart	Observations Checklists Portfolios Conferencing Teacher Made Test Performance task
Bedtime	Tally	Number																	
6.00	11	3																	
7.00	<del>1111</del>	5																	
8.00	11	2																	
9.00		0																	

**Mathematics  
Syllabus**

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TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT

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EARLY CHILDHOOD EDUCATION

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# Health & Family Life

**SCOPE &  
SEQUENCE**

Ministry of Education  
& Human Resource Development



## Models for Curriculum Integration

### Part 3

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This section of the document outlines ways in which the subject areas can be integrated. Curriculum webs, thematic webs and instructional plans are presented as graphic representations of this integration. It should however be borne in mind that these representations are not exhaustive. Teachers are required to use these as a guide in developing webs designed to meet the needs and abilities of their pupils.

Thematic and curriculum webs have been included to show the specialist teacher in Art, Music and Information Technology how their curriculum area can be integrated in the curriculum. The specialist teacher and classroom teacher will plan and work together.

The webbing approach has been used to afford persons the opportunity to see at a glance how the subject areas have been integrated. The webs however highlight either the concepts or the content to be taught.

To ensure that all components of curriculum are covered, it is still necessary to develop a unit plan/instructional plan based on the webbed information. The instructional plan is the new terminology being used for the traditional unit plan. In this document both

the traditional and instructional plan are presented. The instructional plan takes the integration process another step forward. It removes the subject domains, while the unit plan maintains this division. Use of the instructional plan makes integration more holistic.

The unit plan/instructional plan outlines the broad and specific objectives, the teaching strategies and activities and assessment procedures to be adopted for the particular theme or topic. To facilitate this more detailed planning, syllabuses for the various subject areas have been included.

It must be emphasised that all aspects of curriculum cannot be appropriately covered through the Project Approach. Project work and systematic instruction must provide complementary learning opportunities for the students. In systematic instruction, the children acquire the skills and in the project they apply those skills in a meaningful context. The project work is that part of the curriculum which is planned in negotiation with the children and which supports and extends the more formal teacher directed element. (Chard, Vol. 1 pg.8)

EARLY CHILDHOOD EDUCATION  
**Models for Curriculum Integration**  
**Part 3**

<b>THEMATIC AND CURRICULUM WEBS AND INSTRUCTIONAL PLANS</b>			
<b>TITLE</b>	<b>THEMATIC WEB</b>	<b>CURRICULUM WEB</b>	<b>INSTRUCTIONAL PLAN</b>
The Environment	✓	✓	
Home and Family	✓		
People of other countries	✓	✓	
Communication	✓	✓	
Information Technology	✓	✓	
Our Culture, Our Heritage	✓	✓	✓
Tourism	✓	✓	✓
Independence	✓	✓	
Industries	✓	✓	
Animals	✓	✓	
Plants	✓	✓	✓
Fruit and Vegetables	✓	✓	
Water	✓	✓	✓



EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Scope & Sequence**

CONCEPTS/SKILL	CLASS			
	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>1.0 PERSONAL HYGIENE</b>				
1.0.1 The body and body functions	◆	✓	✓	✓
1.0.2 Care of the body	◆	✓	✓	✓
1.0.3 The daily bath	◆	✓	✓	✓
1.0.4 Care of the teeth	◆	✓	✓	✓
1.0.5 Care of the hair	◆	✓	✓	✓
1.0.6 Care of the hands and nails	◆	✓	✓	✓
1.0.7 Care of the eyes	◆	✓	✓	✓
1.0.8 Care of the feet and nails	◆	✓	✓	✓
<b>2.0 SENSORY PERCEPTION</b>				
2.0.1 The tongue and the sense of taste	◆	✓	✓	✓
2.0.2 The hands and the sense of touch	◆	✓	✓	✓
2.0.3 Eyes – sight	◆	✓	✓	✓
2.0.4 Ears – hearing	◆	✓	✓	✓
2.0.5 Nose – smelling	◆	✓	✓	✓
<b>3.0 ENVIRONMENTAL HEALTH</b>				
3.0.1 Use of toilet facilities (private and public)	◆	✓	✓	✓
3.0.2 Garbage disposal	◆	✓	✓	✓
3.0.3 Beautification of Environment (Home, School, Community)	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Scope & Sequence**

CONCEPTS/SKILL	CLASS			
	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>4.0 CONSUMER HEALTH</b>				
4.0.1 Community Workers	◆	✓	✓	✓
4.0.2 Health care facilities	◆	✓	✓	✓
<b>5.0 INTERPERSONAL RELATIONSHIPS</b>				
5.0.1 Types of families	◆	✓	✓	✓
5.0.2 Individual differences (valuing and respecting)	◆	✓	✓	✓
<b>6.0 FOOD AND NUTRITION</b>				
6.0.1 The importance of food	◆	✓	✓	✓
6.0.2 Energy-giving foods	◆	✓	✓	✓
6.0.3 Body repairing foods	◆	✓	✓	✓
6.0.4 Foods from animals	◆	✓	✓	✓
6.0.5 Foods from plants	◆	✓	✓	✓
6.0.6 A balance diet	◆	✓	✓	✓
6.0.7 Foods associated with mealtimes	◆	✓	✓	✓
6.0.8 Food preparation and handling	◆	✓	✓	✓
6.0.9 Foods grown around the home	◆	✓	✓	✓
6.0.10 Choosing wholesome snacks	◆	✓	✓	✓
6.0.11 Making wholesome snacks	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

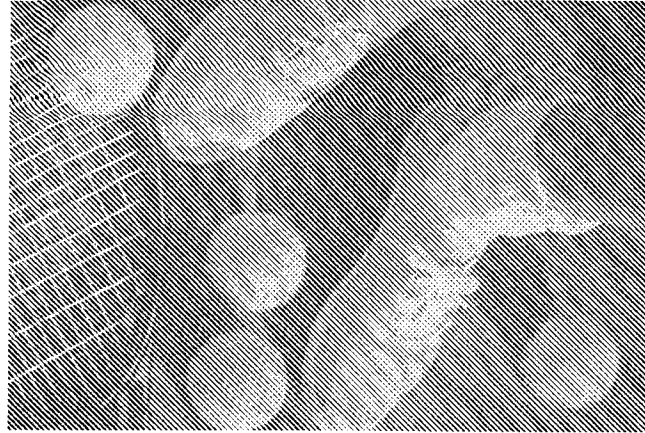
EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Scope & Sequence**

CONCEPTS/SKILL	CLASS			
	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>7.0 SAFETY EDUCATION</b>				
7.0.1 Dangerous behaviours and play	◆	✓	✓	✓
7.0.2 What makes a place safe	◆	✓	✓	✓
7.0.3 Safe play	◆	✓	✓	✓
7.0.4 Household hazards	◆	✓	✓	✓
7.0.5 Handling emergencies	◆	✓	✓	✓
7.0.6 At risk behaviours	◆	✓	✓	✓
<b>8.0 DENTAL HEALTH</b>				
8.0.1 Use of the teeth (appropriate and inappropriate)	◆	✓	✓	✓
8.0.2 What makes healthy teeth	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill





EARLY CHILDHOOD EDUCATION

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## **Health & Family Life**

**ATTAINMENT  
TARGETS**

Ministry of Education  
& Human Resource Development



EARLY CHILDHOOD EDUCATION  
**Health & Family Life  
 Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>1.0 PERSONAL HYGIENE</b>				
1.0.1 Recognise the importance of the daily bath	◆	✓	✓	✓
1.0.2 Demonstrate a knowledge of how to care for the teeth	◆	✓	✓	✓
1.0.3 Demonstrate the ability to dress and undress self	◆	✓	✓	✓
1.0.4 Recognise the importance of keeping hair clean and well groomed	◆	✓	✓	✓
1.0.5 Recognise the importance of having nails clean and well cut	◆	✓	✓	✓
1.0.6 Recognise the importance of wearing clean socks	◆	✓	✓	✓
1.0.7 Recognise the importance of wearing clean undergarments	◆	✓	✓	✓
1.0.8 Recognise the importance of wearing clean clothes	◆	✓	✓	✓
1.0.9 Recognise the importance of changing clothing on a daily basis	◆	✓	✓	✓
1.0.10 Recognise the importance of washing hands before eating	◆	✓	✓	✓
1.0.11 Recognise the importance of washing hands after using the bathroom	◆	✓	✓	✓
1.0.12 Recognise the importance of brushing teeth	◆	✓	✓	✓
1.0.13 Demonstrate an awareness of how to care for the eyes	◆	✓	✓	✓
<b>2.0 SENSORY PERCEPTION</b>				
2.0.1 Show an awareness of different sense organs	◆	✓	✓	✓
2.0.2 Exercise care in dealing with sense organs	◆	✓	✓	✓
2.0.3 Identify the various sense organs and their uses	◆	✓	✓	✓
2.0.4 Use the sense of taste to select foods	◆	✓	✓	✓
2.0.5 Use the sense of hearing to identify various sounds in the environment	◆	✓	✓	✓
2.0.6 Use the sense of touch to classify objects according to textures	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
2.0.7 Know that eyes are used for seeing	◆	✓	✓	✓
2.0.8 Demonstrate healthy habits as they relate to the care of the eye	◆	✓	✓	✓
2.0.9 Appreciate the importance of good eyesight	◆	✓	✓	✓
2.0.10 Understand the danger of prolonged television viewing	◆	✓	✓	✓
2.0.11 Empathize with peers who are visually impaired and the blind	◆	✓	✓	✓
2.0.12 Recognize that eye glasses, mirrors, magnifying glasses, microscopes, binoculars are instruments used for assisting one to see clearer	◆	✓	✓	✓
2.0.13 Recognize the need to rest ones eyes	◆	✓	✓	✓
2.0.14 Show an awareness of activities which can damage ones eyes (throwing missiles)	◆	✓	✓	✓
2.0.15 Know that ears are used for hearing	◆	✓	✓	✓
2.0.16 Demonstrate healthy habits as they relate to the care of the ear	◆	✓	✓	✓
2.0.17 Understand the dangers of putting foreign objects in the ear	◆	✓	✓	✓
2.0.18 Understand the danger of listening to excessively loud sounds	◆	✓	✓	✓
2.0.19 Empathize with the hearing impaired and the deaf	◆	✓	✓	✓
2.0.20 Show an awareness that the senses of taste, smell and touch are other channels through which one relates to ones environment	◆	✓	✓	✓
2.0.21 Understand the dangers of poking foreign objects in the nostrils	◆	✓	✓	✓
2.0.22 Understand the dangers of putting unknown liquids, tablets and other substances in the mouth	◆	✓	✓	✓
2.0.23 Demonstrate knowledge of different tastes: sweet, sour, acid, bitter, salty	◆	✓	✓	✓
2.0.24 Demonstrate knowledge that the nose is used for breathing and smelling	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill



EARLY CHILDHOOD EDUCATION  
**Health & Family Life  
Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>3.0 ENVIRONMENTAL HEALTH</b>					
3.0.1	Use bathroom facilities correctly	◆	✓	✓	✓
3.0.2	Dispose of garbage correctly	◆	✓	✓	✓
3.0.3	Identify animals and insects that carry diseases	◆	✓	✓	✓
3.0.4	Engage in beautification programmes at home, school and community	◆	✓	✓	✓
<b>4.0 CONSUMER HEALTH</b>					
4.0.1	Name and identify people who keep us healthy: Doctor, Dentist, Nurse, Sanitation Worker, Health Inspector, Janitors	◆	✓	✓	✓
4.0.2	Describe the roles of people who keep us healthy	◆	✓	✓	✓
<b>5.0 INTERPERSONAL RELATIONSHIPS</b>					
5.0.1	Develop concept of gender (boy, girl)	◆	✓	✓	✓
5.0.2	Give correct names to parts of the body	◆	✓	✓	✓
5.0.3	Value and appreciates individual differences	◆	✓	✓	✓
5.0.4	State differences between boys and girls (bodies, clothes, etc)	◆	✓	✓	✓
5.0.5	State correct names for bodily functions (urination, stool)	◆	✓	✓	✓
5.0.6	Identify the varying family structures	◆	✓	✓	✓
<b>6.0 FOOD AND NUTRITION</b>					
6.0.1	Recognise the importance of food for living	◆	✓	✓	✓
6.0.2	Recognise a wide variety of foods	◆	✓	✓	✓
6.0.3	Identify different sources of food	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
6.0.4 Classify foods according to groups	◆	✓	✓	✓
6.0.5 Identify and select animals used for food	◆	✓	✓	✓
6.0.6 Demonstrate a knowledge of the nutritional value of each food group	◆	✓	✓	✓
6.0.7 Recognise and appreciate the importance of a balanced diet	◆	✓	✓	✓
6.0.8 Develop healthy habits in relation to food preparation and food handling	◆	✓	✓	✓
6.0.9 Appreciate cultural and religious differences related to food preferences	◆	✓	✓	✓
6.0.10 Demonstrate the knowledge of foods eaten at different times of the day (Breakfast, Lunch, Dinner, Snacks)	◆	✓	✓	✓
6.0.11 Identify foods which are eaten on different occasions (conkies, hot cross buns, Jug-jug, Christmas cake, Easter eggs.)	◆	✓	✓	✓
6.0.12 Demonstrate a knowledge of common foods	◆	✓	✓	✓
6.0.13 Recognise various kinds of foods	◆	✓	✓	✓
6.0.14 Recognise the importance of choosing foods from the various food groups to maintain a healthy living	◆	✓	✓	✓
6.0.15 Demonstrate the knowledge that foods differ in colour, size, shape, taste, texture and nutritional value	◆	✓	✓	✓
6.0.16 Recognise the importance of cultivating food crops around the home	◆	✓	✓	✓
6.0.17 Show an awareness of various ways foods may be presented	◆	✓	✓	✓
6.0.18 Recognise the danger of eating too many sweets	◆	✓	✓	✓
6.0.19 Engage in the selection of wholesome snacks	◆	✓	✓	✓
6.0.20 Engage in the preparation of salads, drinks and simple dishes	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Health & Family Life  
 Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

	Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
7.0.1 Recognise the danger of playing with matches, electrical equipment, outlets, sharp objects etc.	◆	✓	✓	✓
7.0.2 Recognise the danger of playing with polythene bags, abandoned large appliances etc.(stoves, refrigerators)	◆	✓	✓	✓
7.0.3 Recognise the danger of speaking with food in the mouth	◆	✓	✓	✓
7.0.4 Demonstrate the knowledge of selecting safe places to play	◆	✓	✓	✓
7.0.5 Demonstrate an awareness of the danger of throwing stones and other objects (blocks, books, crayons etc.)	◆	✓	✓	✓
7.0.6 Demonstrate the ability to walk the streets safely	◆	✓	✓	✓
7.0.7 Avoid play which might be harmful to self and others	◆	✓	✓	✓
7.0.8 Demonstrate the correct procedure in handling emergencies (fire at home, falls and cuts at school etc.)	◆	✓	✓	✓
7.0.9 Know how to access help when in danger				
7.0.10 Know the emergency numbers – Police 211, Fire 311, Ambulance 511	◆	✓	✓	✓
7.0.11 Demonstrate an awareness of household hazards	◆	✓	✓	✓
7.0.12 Recognise the danger of accepting gifts from strangers	◆	✓	✓	✓
7.0.13 Recognise the danger of taking rides (car, cycle, bus) from strangers	◆	✓	✓	✓
7.0.14 Recognise the danger of sitting on laps of strangers when a responsible adult is not present	◆	✓	✓	✓
7.0.15 Recognise the danger of approaching strangers	◆	✓	✓	✓
7.0.16 Recognise the danger of playing in water without adult supervision	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Attainment Targets**

PUPILS SHOULD BE ABLE TO:

CLASS

		Nursery 3-4	Reception 4-5	Infants A 5-6	Infants B 6-7
<b>8.0</b>	<b>DENTAL HEALTH</b>				
8.0.1	Use teeth appropriately for biting and chewing food	◆	✓	✓	✓
8.0.2	Show awareness that babies have no teeth	◆	✓	✓	✓
8.0.3	Understand the importance of drinking milk to help build strong teeth	◆	✓	✓	✓
8.0.4	Recognise that teeth need proper care	◆	✓	✓	✓
8.0.5	Demonstrate the correct use of the toothbrush	◆	✓	✓	✓
8.0.6	Identify the difference between healthy gums (pink) and teeth (strong, smooth, white) and unhealthy gums (bleeding) and teeth cavities	◆	✓	✓	✓
8.0.6	Understand the danger of using teeth inappropriately (sucking thumb and fingers, biting hard objects, chewing pencils, biting nails)	◆	✓	✓	✓
8.0.7	Recognise the importance of brushing teeth after eating meals	◆	✓	✓	✓

◆ Begins teaching the concepts/skill

✓ Maintains and develops the concepts/skill



EARLY CHILDHOOD EDUCATION

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# Health & Family Life

## SYLLABUS

Ministry of Education  
& Human Resource Development



EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Personal Hygiene**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Myself and Others</b>            Concept of Self            Whom am I? - boy            or girl/male or            female</p>	<p>Recognises the            differences            between male and            female</p> <p>Identifies body            parts and state            their specific            functions</p> <p>Uses correct terms            for body poarts and            their functions -            e.g. penis vagina,            urinate, stool</p> <p>Uses toilet facilities            properly</p> <p>Dresses and            undresses in a            sensible or practical            manner</p>	<ul style="list-style-type: none"> <li>◆ Teacher and pupil enege in              discussions about the body, its parts              and their functions</li> <li>◆ Uses photographs of self and others              to establish differences</li> <li>◆ Recites relevant health action rhymes              and songs with finger plays</li> <li>◆ Views, videos, tapes and filmstrips to              teach body parts and their functions</li> </ul>	<p>Large boy/girl            puzzles</p> <p>Photograph of self            Photographs of            class</p> <p>Puzzles with parts            of the body</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Personal Hygiene**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>The Body</b></p> <p>Body parts and their specific functions:</p> <p>Care</p> <p>Daily bath</p> <p>Dental hygiene</p> <p>Hair</p> <p>Nails</p> <p>Skin</p> <p>Handkerchief</p> <p>Tissue</p> <p>Respect and regard respecting each other's privacy</p>	<p>Develops and practices a daily routine by:</p> <p>taking daily baths</p> <p>caring the teeth</p> <p>caring the body</p>	<ul style="list-style-type: none"> <li>◆ Physical exercises - indoor and outdoor-to highlight body parts</li> <li>◆ Listening to relevant stories</li> <li>◆ Activities in the learning centres (e.g.) dressing -buttoning, fastening back and front of garment - male and female garments, unisex garments</li> <li>◆ Dramatisation of stories, poems, etc. related to the body.</li> <li>◆ Role playing using dolls - male and female</li> <li>◆ Practical experiences in correct toilet/ bathroom behaviour (small groups)</li> <li>◆ Large posters depicting "Boy" and "Girl"</li> </ul>	<p>Finger paints, powder paints</p> <p>Large crayons</p> <p>Varied collection of rhymes, poems songs and finger plays</p> <p>Musical tapes</p> <p>Materials for 'dressing-up.'</p> <p>Play dough, modelling clay</p> <p>Simple pictorial charts</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>



EARLY CHILDHOOD EDUCATION  
**Health & Family Life  
 Syllabus**

**Personal Hygiene**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Correct use of toilet facilities and materials e.g. toilet tissue</b></p> <p><b>The importance of soap and clear water in personal cleanliness</b></p> <p><b>The importance of washing the hands after the use of the toilet</b></p> <p><b>The dangers of eating and drinking in toilets/bathrooms</b></p> <p><b>Correct use of cubicles</b></p> <p><b>Correct use of wash basins</b></p>	<p>Develops and practices a daily routine by:</p> <p>taking daily baths</p> <p>caring the teeth</p> <p>caring the body</p>	<ul style="list-style-type: none"> <li>◆ Practical experiences in care of the teeth, nails, hands, etc. as a role play</li> <li>◆ Visits by resource personnel in health care</li> <li>◆ Encouraging the use of correct language and practices on a daily basis</li> <li>◆ Viewing of self and others in the mirror to ascertain cleanliness</li> <li>◆ Drawing, painting and modelling the parts of the body</li> <li>◆ Centres of Interest - e.g. the hair dressing salon, the boutique should be set up for playing</li> </ul>	<p>Items relating to dental health - tooth brushes, floss, tooth paste</p> <p>Combs, brushes, shampoos and other hairdressing items</p> <p>Mirror to view self</p> <p>Basins/pans for bathing dolls and for washing</p> <p>Handkerchiefs and boxes of tissues</p> <p>Soap, wash cloths and bath towels</p> <p>Resource personnel - the nurse, hairdresser, dentist, photographer</p> <p>Relevant audio video tapes</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Sensory Perception**  
**The Sense Organs**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>The External Senses</b> Sight Hearing Smell Taste Touch <b>Other Senses Which Give Information About Body Needs are:</b> Hunger Pain Thirst Identifying sense organs	States the various sense organs and their uses Appreciates the various processes involved in sensory perception Exercises care in dealing with sense organs Selects foods according to certain attributes (colour, texture, etc.) Identifies various sounds in the environment Classifies objects according to textures	<ul style="list-style-type: none"> <li>◆ Teacher/pupil discussions about the body, its parts and their functions</li> <li>◆ Cooking activities -tasting of foods</li> <li>◆ Music and movement activities</li> <li>◆ Related rhymes, poems and jingles</li> <li>◆ Role playing - ice-cream melting</li> <li>◆ Art activities - hand painting, drawing, etc.</li> <li>◆ Feeling of objects for descriptions</li> </ul>	Charts depicting eye, ear, nose and mouth Musical/percussion instruments Audio/Videos tapes Materials of various textures for touching Scented materials for smelling Simple foods for tasting	Observation Checklist Portfolios Anecdotal Records Teacher-Made Test Attainment Targets

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Sensory Perception**  
**The Sense Organs**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Sense of Sight</b> How we see Composition of eyes Values of eye-lids and eye-lashes Care of eyes Instruments used to improve sight Spectacles Microscope Telescope Magnifying glasses	Recognises a deficiency in a sense organ	<ul style="list-style-type: none"> <li>◆ Field trips</li> <li>◆ Discusses a chart about the eye</li> <li>◆ Examination of instruments</li> <li>◆ Teacher/Pupil discussions on instruments</li> <li>◆ Game: Blind Man's Bluff</li> </ul>	Charts Spectacles Microscope Telescope Magnifying Glasses	Observation Checklist Portfolios Anecdotal Records Teacher-Made Test Attainment Targets
<b>The Sense of Hearing</b> The Ear: How we hear Care of the ear Diseases of the ear Sounds in the environment Making sounds	Recognises a deficiency in a sense organ	<ul style="list-style-type: none"> <li>◆ Field Trips</li> <li>◆ Discusses a chart about the ear</li> <li>◆ Examination of hearing aids</li> <li>◆ Listens to various natural and taped sounds</li> <li>◆ Identifies sounds heard</li> </ul>	Chart on the ear Cassette Recorder Tapes Pictures Audio Visual Aids Materials	Observation Checklist Portfolios Anecdotal Records Teacher-Made Test Attainment Targets

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Sensory Perception**  
**The Sense Organs**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>The Sense of Taste</b>  <b>The Tongue</b>            Function of the tongue            Care of the tongue            Diseases of the tongue            Differentiating between, the various tastes: sweet, bitter, sour; and salty</p>	<p>Recognises a deficiency in a sense organ</p>	<ul style="list-style-type: none"> <li>◆ Discusses pictures on the tongue</li> <li>◆ Engages in activities of tasting - sweet, sour bitter etc.</li> <li>◆ Engages in activities of tasting to identify salty, bitter, etc.</li> </ul>	<p>Water (plain) water with sugar added            Water with salt added            Candy            sugar            Salt            Chocolate            Fruits</p>	<p>Observation            Checklist            Portfolios            Anecdotal Records            Teacher-Made Test            Attainment Targets</p>
<p><b>The Sense of Smell</b>  <b>The Nose:</b>            Function of the nose            Caring for the nose            How things smell</p>	<p>Recognises a deficiency in a sense organ</p>	<ul style="list-style-type: none"> <li>◆ Discusses a chart about the nose</li> <li>◆ Smells various substances</li> <li>◆ Identifies substances by their scents</li> </ul>	<p>Chart            Plant            Perfume            Alcohol            Alcolado</p>	<p>Observation            Checklist            Portfolios            Anecdotal Records            Teacher-Made Test            Attainment Targets</p>
<p><b>The Sense of Touch</b>            Uses of the skin            Diseases which affect the skin/ feeling e.g. diabetes            The hands - nerve endings            Textures - rough, smooth, hard, soft</p>	<p>Recognises a deficiency in a sense organ</p>	<ul style="list-style-type: none"> <li>◆ Engages in activities of touching</li> <li>◆ Examines the skin, hands</li> <li>◆ Discusses the disease diabetes and its effects</li> </ul>	<p>A variety of materials with varying textures - smooth, rough            Hands</p>	<p>Observation            Checklist            Portfolios            Anecdotal Records            Teacher-Made Test            Attainment Targets</p>

EARLY CHILDHOOD EDUCATION  
**Health & Family Life  
 Syllabus**

**Elements of a Healthy Lifestyle  
 Food and Nutrition**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Importance of food</b></p> <p>All living things need food for:            energy;            growth and protection against diseases.</p> <p>Food can be obtained in different forms.</p> <p>Foods differ in colour, taste, size, texture, smell and shape.</p> <p>Foods are prepared and eaten in different ways - raw, cooked, dried, frozen and canned.</p> <p>Foods eaten at various times of the day e.g. breakfast, snack, lunch, dinner.</p>	<p>Recognises the importance of food to living organisms.</p> <p>Recognises a variety of foods.</p> <p>Identifies the different sources of foods.</p> <p>Classifies foods according to food groups.</p> <p>Identifies and selects animals used for food.</p> <p>Demonstrates a knowledge of the nutritional value of each food group.</p>	<ul style="list-style-type: none"> <li>◆ Discussions about living things - people, animals and plants.</li> <li>◆ Observing people, animals, birds and fish - how they feed and move.</li> <li>◆ Illustration of stories and poems.</li> <li>◆ Model making of fruits and vegetables.</li> <li>◆ Observing vegetables in a garden.</li> <li>◆ Nature walks, field trips, markets, Pine Hill Diary, Poultry Farm and Zoo.</li> <li>◆ Assembling puzzles of animals, fruits, etc. Relevant stories, rhymes and songs.</li> <li>◆ Cooking activities.</li> <li>◆ Drawing, colouring, modeling foods.</li> <li>◆ Observing and discussing pictures of plants and animals.</li> <li>◆ Have pupils arrange foods in different groups and forms e.g. milk - raw, Corn - pop, on the cob, cornmeal.</li> </ul>	<p>Sample of foods</p> <p>Charts</p> <p>Class aquarium</p> <p>Collection of pictures of foods and food labels.</p> <p>Relevant cassettes and video tapes</p> <p>Tape recorders</p> <p>Resource persons</p> <p>Models of foods</p> <p>Pep-bottle and tyre gardens:</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Elements of a Healthy Lifestyle**  
**Food and Nutrition**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Source of Food</b></p> <p>Plants and animals are sources of food.</p> <p>Food may be classified into two (2) different categories:</p> <p>a) Foods from animals</p> <p>Milk:            - Where it comes from            - Milk as a Complete food:            - as a food use with Milk            Meat, Fish, Eggs            Poultry</p> <p>b) Foods from Plants:            Fruits, Vegetables, Grains, Seeds, Nuts</p> <p>Different parts of the plant are used for food</p> <p>Roots:            Carrots, beets, onions</p> <p>Leaves:            Lettuce, cabbage, spinach</p> <p>Stems/stalks: celery, broccoli</p> <p>Seeds: Nuts, corn, grains</p>	<p>Recognises and appreciates the importance of a balance diet.</p> <p>Develops healthy habits in relation to food preparation and handling.</p> <p>Appreciates cultural and religious differences related to food preferences.</p> <p>Identifies food eaten at different times of the day.</p> <p>Identifies food which are eaten on special occasions - e.g. conkies, great/wedding/Christmas cake, hot cross buns.</p>	<ul style="list-style-type: none"> <li>◆ <b>Role Playing</b></li> <li>◆ Learning centre activities e.g. the school shop e.g. shopping for breakfast foods.</li> <li>◆ Planning, observing and recording the growth of foods.</li> <li>◆ Project displays.</li> <li>◆ Compiling picture booklets and simple charts.</li> <li>◆ Have pupils identify various kinds of foods within a particular group - fruits, vegetables, snack, etc.</li> <li>◆ Identify foods which are disliked and liked and graphically display them.</li> <li>◆ Poster making competitions</li> <li>◆ Caring and observing the growth and development of pets</li> <li>◆ Discuss foods eaten at snack, lunch, dinner and supper time</li> <li>◆ Table etiquette</li> <li>◆ Weighing of pupils.</li> <li>◆ Recording of weight</li> <li>◆ Reading, interpreting and discussing pictures related to the topic</li> <li>◆ Compiling booklets</li> <li>◆ Practical experiences in cleaning e.g. putting away toys and teaching aids/ tidying bookshelves and learning centres etc.</li> </ul>	<p>- Scales - Tapes - Ribbon - Cooking - Utensils - Oven</p> <p>Story books/ rhymes, poems and jingles</p> <p>Resource personnel - Health Inspector and Sanitation Worker</p> <p>Picture related to healthy and unhealthy environment</p> <p>Videos, tape/films</p> <p>Posters and pictures showing the correct ways to dispose of garbage</p> <p>Field trips</p> <p>Tyre gardens/pep-bottle gardens</p> <p>Stems</p> <p>Stalks</p> <p>Celery</p> <p>Broccoli</p> <p>Seeds</p> <p>Nuts</p> <p>Grains</p> <p>Corn</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>

EARLY CHILDHOOD EDUCATION  
**Health & Family Life  
 Syllabus**

**Elements of a Healthy Lifestyle  
 Food and Nutrition**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Food Groups</b>            Good foods are important to health for growth, energy.            We need the right foods to grow.            A balanced diet includes a variety of foods from each food group.</p> <p><b>Growth Food/ Proteins</b>            Meat Poultry Fish Eggs</p> <p><b>Growth Foods/ Vitamins and Minerals</b>            Fruits and vegetables            Where and how fruits and vegetables grow.            Identify and name fruits and vegetables.</p> <p><b>Growth Foods/ Carbohydrates</b>            Bread, Pasta, Potatoes, Rice and Yam</p>	<p>Recognises and appreciates the importance of a balance diet.</p> <p>Develops healthy habits in relation to food preparation and handling.</p> <p>Appreciates cultural and religious differences related to food preferences.</p> <p>Identifies food eaten at different times of the day.</p> <p>Identifies food which are eaten on special occasions - e.g. conkies, great/wedding/Christmas cake, hot cross buns.</p>	<ul style="list-style-type: none"> <li>◆ Participating in stories and rhymes relevant to concept formation</li> <li>◆ Field trips to various farms</li> <li>◆ Using words and picture games</li> <li>◆ Writing of poems/stories</li> <li>◆ Designing and constructing pep-bottle and tyre gardens</li> <li>◆ Small and large group discussions</li> <li>◆ Talks by related personnel</li> <li>◆ Examines various fruits and vegetables</li> <li>◆ Tastes various fruits and vegetables</li> <li>◆ Illustrates various fruit and vegetables</li> <li>◆ Makes fruit/vegetable salad</li> <li>◆ Examine various carbohydrate foods</li> <li>◆ Makes dishes using carbohydrates</li> </ul>	<p>Charts on food groups</p> <p>Examples of food from food groups</p> <p>Pep-bottle tyres</p> <p>Soil</p> <p>Pictures of various types of foods</p> <p>Meat poultry</p> <p>Fish</p> <p>Egg etc.</p> <p>Various Fruits and vegetables</p> <p>Charts/pictures of fruits and vegetables</p> <p>Cutlery</p> <p>Salad bowls</p> <p>Platters</p> <p>Pictures/charts</p> <p>Microscope</p> <p>Bread</p> <p>Pasta</p> <p>Potatoes</p> <p>Rice</p> <p>Yam</p> <p>Kitchen equipment</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>





EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Disease Prevention and Control**  
**Germs and their mode of control**

TOPICS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p>Washing of hands with soap and water after:</p> <ol style="list-style-type: none"> <li>1. Playing outdoors/indoors;</li> <li>2. using the bathroom; and</li> <li>3. before eating etc</li> </ol> <p>Wear shoes outdoors</p> <p>Wash fruits and vegetables before eating</p> <p>Avoid playing in dirty water</p> <p>Avoid handling discarded objects e.g. condoms, etc.</p>	<p><b>States ways by which diseases can be prevented</b></p>	<ul style="list-style-type: none"> <li>◆ Demonstrations by teacher</li> <li>◆ Role playing</li> <li>◆ Making posters</li> <li>◆ Illustrations</li> <li>◆ Video/slide presentations</li> <li>◆ Discussions</li> </ul>	<p>Water</p> <p>Soap</p> <p>Poems</p> <p>Songs</p> <p>Rhymes</p> <p>Charts</p> <p>Shoes</p> <p>Fruits</p> <p>Vegetables</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Rubrics</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Disease Prevention and Control**  
**Germs and their mode of control**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Transmission of Diseases</b> Air Water Bodily contact Insects Animals Body waste -faeces (stool)/urine (spit) saliva <b>Personal Public Hygiene</b> Control	<b>Demonstrates an awareness of the ways in which germs are spread</b>	<ul style="list-style-type: none"> <li>◆ Discussions</li> <li>◆ Examinations</li> <li>◆ Talks by resource Personnel</li> <li>◆ Video Presentation</li> <li>◆ Slide Presentation</li> <li>◆ Interviews</li> <li>◆ Uses handkerchiefs/tissues to prevent transmission by sneezing and climbing</li> <li>◆ Role playing</li> </ul>	Charts Microscope Television V C R Tapes Slides Questionnaires Handkerchiefs Tissues	Observation Checklist Portfolios Rubrics Anecdotal Records Teacher-Made Test Attainment Targets

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Disease Prevention and Control**  
**Germs and their mode of control**

TOPICS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>Infectious Diseases</b> <b>Signs, Symptoms and Remedies</b> The common cold Measles Influenza Chicken pox AIDS Tuberculosis <b>Communicable Diseases</b> Leptospirosis Dengue fever	<b>Understands the importance of immunization in the fight against diseases.</b>	<ul style="list-style-type: none"> <li>◆ Role playing</li> <li>◆ Related poems and rhymes</li> <li>◆ Video presentation</li> <li>◆ Making of posters</li> <li>◆ Talking by Resource Personnel</li> <li>◆ Discussions</li> <li>◆ Role Playing</li> <li>◆ Related poems and rhymes</li> <li>◆ Video presentation</li> <li>◆ Making posters</li> <li>◆ Talks by resource personnel</li> <li>◆ Discussions</li> <li>◆ Role playing</li> </ul>	Poems Songs Rhymes Charts Pictures Crayons Paper Paints Cards Television V C R Tapes	Observation Checklist Portfolios Rubrics Anecdotal Records Teacher-Made Test Attainment Targets

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Disease Prevention and Control**  
**Germs and their mode of control**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>What are Germs?</b>            Germs are tiny living organisms (creatures too small to see with the naked eyes).</p> <p><b>Where are Germs Found?</b>            Germs are found - in the air, in the water, in foods, in and on the body, etc.</p>	<p><b>States clearly what germs are and where they may be found.</b></p> <p><b>Identifies Infectious diseases.</b></p> <p><b>Discusses the ways in which Infectious diseases are spread.</b></p> <p><b>Lists the symptoms of some common childhood Infectious diseases.</b></p> <p><b>States ways in which infections may be prevented.</b></p>	<ul style="list-style-type: none"> <li>◆ Group discussions</li> <li>◆ Using microscopes to observe germs</li> <li>◆ Dramatisation and role playing</li> <li>◆ Drawing/poster making</li> <li>◆ Reading and interpreting pictures</li> <li>◆ Poster making competitions</li> <li>◆ Reading simple graphs</li> <li>◆ Visit to the polyclinic.</li> <li>◆ Field trips.</li> <li>◆ Talks by a public health nurse/ inspector</li> <li>◆ Making illustrations</li> </ul>	<p>Microscopes</p> <p>Resource personnel:            Health Inspector,            Nurse</p> <p>Video/slides</p> <p>Pictures</p> <p>Puzzles</p> <p>Posters</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Rubrics</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>

EARLY CHILDHOOD EDUCATION  
**Health & Family Life  
 Syllabus**

**Disease Prevention and Control**  
**HIV/AIDS**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<b>HIV/AIDS</b> Virus Body fluids Severe illness Death Suffering	<p><b>Defines in simple terms the meaning of HIV and AIDS.</b></p> <p><b>Shows compassion for any persons afflicted with the virus.</b></p> <p><b>States ways in which the disease can be passed from one person to another.</b></p> <p><b>Demonstrates responsible behaviours by avoiding actions which are likely to expose them to infection to HIV/AIDS virus.</b></p>	<ul style="list-style-type: none"> <li>◆ Composed guided discussion</li> <li>◆ Role playing as a nurse and patient</li> <li>◆ Draws to show emotions</li> <li>◆ Small group and one to one discussions</li> <li>◆ Dramatisation to show from where blood can be taken for testing</li> <li>◆ Dramatisation: correct behaviours/ ways of coping with loss.</li> <li>◆ Role playing</li> </ul>	Diagram of the body - flow of blood Poster depicting: - correct and incorrect behaviours; - covering of exposed wounds; - the wearing of gloves when handling exposed blood; and - giving comfort to those who have suffered loss	Observation Checklist Portfolios Rubrics Anecdotal Records Teacher-Made Test Attainment Targets

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

**Disease Prevention and Control**  
**HIV/AIDS**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
Causes HIV/AIDS Virus Transmission Blood contact, unclean (unsterilised) needles, syringes Breast feeding	<b>Talks freely about            loss and its effects            on them</b>	<ul style="list-style-type: none"> <li>◆ Views and discusses of posters depicting correct and incorrect behaviours</li> <li>◆ Talks by resource persons - nurse</li> <li>◆ Views video tapes</li> <li>◆ Repetition and singing of simple rhymes and songs</li> <li>◆ Dramatisation using dolls to show the correct way to handle exposed blood</li> <li>◆ Grab bay method:</li> <li>◆ Pupils write/draw anonymously how they feel about loss, and drop in box. Select several feelings and discuss the best way to cope with them</li> </ul>	Video tapes Dolls Condoms Balloons Antiseptic Syringe Simple rhymes Resource persons	Observation Checklist Portfolios Rubrics Anecdotal Records Teacher-Made Test Attainment Targets

EARLY CHILDHOOD EDUCATION  
**Health & Family Life  
 Syllabus**

**Disease Prevention and Control  
 HIV/AIDS**

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
Detection Blood testing <b>Prevention and            Control of AIDS</b> Handling Cuts Wound Harmful drugs <b>Effects of HIV/AIDS</b> Death Unemployment Separation Involvement in leisure time activities		<ul style="list-style-type: none"> <li>◆ Video presentation</li> <li>◆ Talks by resource personnel</li> <li>◆ Discussions</li> <li>◆ Demonstration by teacher</li> <li>◆ Talks by Resource Personnel</li> <li>◆ Video/slide</li> <li>◆ Presentations</li> <li>◆ Role playing</li> <li>◆ Talk by Resource Personal</li> <li>◆ Discussion</li> <li>◆ Role Playing</li> <li>◆ Video/Slide presentation</li> </ul>	Booklets containing cartoons which depict feelings Gloves Television Tapes V C R Slide projector Charts Pictures	Observation Checklist Portfolios Rubrics Anecdotal Records Teacher-Made Test Attainment Targets





## Health & Family Life Syllabus

### Safety Education Safety in the Home, School and Community

TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Safety in the Home</b></p> <p>Safe use of matches by adults.</p> <p>The hot stove, pot, iron and the dangers they can present.</p> <p>Fire hazards:- the open flame - stoves and candles.</p> <p>Fire hazards:- electrical equipment.</p> <p>Hot substances and the injury which can result from contact with them.</p>	<p><b>Recognises that It is dangerous to play with matches, electrical equipment/outlets and sharp objects.</b></p> <p><b>Demonstrates the correct procedures in handling emergencies e.g. fire drill.</b></p>	<ul style="list-style-type: none"> <li>◆ Teacher/pupil discussions and incidental charts</li> <li>◆ Dramatic activity</li> <li>◆ Role playing in learning centres Relevant rhymes, songs, poems, jingles and stories</li> <li>◆ Compiling and discussing news sheets</li> <li>◆ Practical exercises and drills</li> <li>◆ Games and riddles</li> <li>◆ Compiling of friezes charts, booklets</li> <li>◆ Demonstrations/presentations by relevant resource personnel e.g. lifeguard</li> <li>◆ Video presentations</li> <li>◆ Fire drill - practical demonstrations using fire hoses where available</li> <li>◆ Drawing and painting</li> <li>◆ The making of collages</li> <li>◆ Project work units</li> <li>◆ Field trips e.g. to the fire department, to the beach to observe lifeguard stations</li> </ul>	<p>Charts - depicting traffic lights etc.</p> <p>Picture books</p> <p>Story books</p> <p>Clothes' iron and other electrical equipment</p> <p>Matches</p> <p>Knives and tapes</p> <p>Collection of rhymes, songs, jingles</p> <p>Videos and film strips</p> <p>Play material found in learning centres</p> <p>Seat belts</p> <p>Relevant resource personnel</p> <p>Floater, life belts, life rafts</p> <p>Television</p> <p>V C R</p> <p>Tapes</p> <p>Fire extinguishers</p> <p>Sand</p> <p>Water</p> <p>Foam</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Rubrics</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>

EARLY CHILDHOOD EDUCATION  
**Health & Family Life**  
**Syllabus**

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<p><b>Other Hazards in the Home</b></p> <p>Misuse of polythene bags.</p> <p>Swallowing harmful substances e.g. bleach, chewing or swallowing medication which belongs to others.</p> <p>Swallowing found objects.</p> <p>Danger in playing with sharp and/or heavy objects.</p> <p>Choking on unchewed and large pieces of food.</p> <p>Falling on stairs.</p> <p>Swinging on doors.</p> <p>Playing 'hide and seek' in cupboards and unused refrigerators.</p>	<p><b>Explains the dangers of playing with polythene bags e.g. placing over their heads.</b></p> <p><b>States why it is unsafe to speak with food in the mouth.</b></p> <p><b>Selects safe places to play.</b></p> <p><b>Recognises that throwing stones and other objects present a danger.</b></p> <p><b>Avoids play which might be harmful to themselves and others e.g. Jump-kicking.</b></p> <p><b>Demonstrates the correct procedures in handling emergencies e.g. fire drill.</b></p>	<ul style="list-style-type: none"> <li>◆ Story telling</li> <li>◆ Rhymes</li> <li>◆ Collage representing safety scenarios</li> <li>◆ Demonstrations of Safety Regulations</li> <li>◆ Role Playing</li> <li>◆ Discussing hazardous situations</li> </ul>	<p>Video tapes &amp; VCR</p> <p>Safety personnel</p> <p>Posters</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Rubrics</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>

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<p><b>Safety at School            Hazards In the            school</b></p> <p>Danger of using            equipment as            weapons e.g.            striking peers with            bats, balls, blocks.</p> <p>Danger of placing            toys, beads,            counters, etc. in            ears and other body            cavities.</p> <p>The correct use of            play dough,            plasticine, paints,            crayon, sand, water.</p> <p>The correct use of            outdoor equipment            e.g. swings, slides,            seesaws.</p> <p>The danger of            running on            corridors and            swinging on            balustrades.</p> <p>The danger of            eating other pupils'            snacks without            permission.</p>	<p><b>Explains the            dangers of            misusing            equipment.</b></p> <p><b>Demonstrates            appropriate            conduct/            behaviour on walk            ways.</b></p> <p><b>Discusses the            dangers of eating            other pupils' food.</b></p>	<ul style="list-style-type: none"> <li>◆ Role playing</li> <li>◆ Demonstration by teachers</li> <li>◆ Talks from Resource Personnel</li> <li>◆ Discussion</li> <li>◆ Video presentations</li> <li>◆ Making posters</li> </ul>	<p>Bats</p> <p>Balls</p> <p>Blocks</p> <p>Beads</p> <p>Counters</p> <p>Swings</p> <p>Slides</p> <p>Seesaws</p> <p>Pictures</p> <p>Charts</p> <p>Play dough</p> <p>Plasticine</p> <p>Crayons</p> <p>Sands</p> <p>Water</p> <p>Plastic</p> <p>Pedestrians            crossing</p> <p>Pictures of            crossings</p> <p>Traffic lights</p> <p>Models of traffic            lights</p> <p>Television</p> <p>Video</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Rubrics</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>

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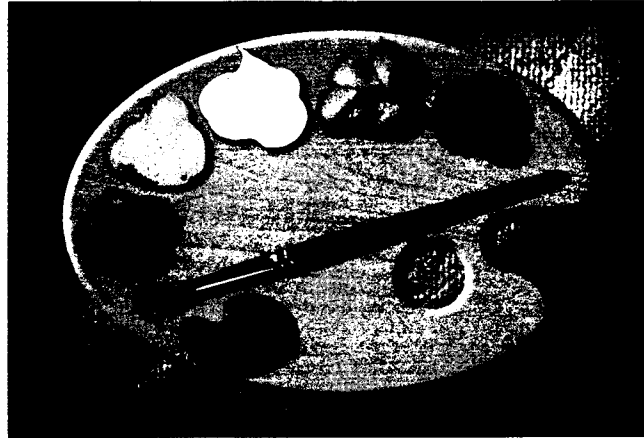
TOPICS/ CONCEPTS	OBJECTIVES	SUGGESTED ACTIVITIES	SUGGESTED RESOURCES	ASSESSMENT
<p><b>Safety in the Wider Community</b></p> <p>Road safety.</p> <p>Crossing the street - the traffic lights and pedestrian crossings.</p> <p>Walking along the street.</p> <p>Riding along the street.</p> <p>Driving along the street - safety locks and seat belts.</p> <p>Danger of playing in the street.</p> <p>Chasing after balls and pets in the street.</p> <p>Eating food which has fallen in the street.</p> <p>Playing in water (pools, sea) without adult supervision.</p>	<p><b>Selects safe places to play.</b></p> <p><b>Recognises that throwing stones and other objects present a danger.</b></p> <p><b>Demonstrates the correct/safe way to walk and cross the street.</b></p> <p><b>Avoids play which might be harmful to themselves and others e.g. jump-kicking.</b></p> <p><b>Demonstrates the correct procedures in handling emergencies e.g. fire drill.</b></p>	<ul style="list-style-type: none"> <li>◆ Demonstration of safety rules by teacher</li> <li>◆ Demonstration of correct use of materials by teacher</li> <li>◆ Discussions</li> <li>◆ Role Playing</li> <li>◆ Charts on Road Safety</li> <li>◆ Demonstration on crossing the street by teacher</li> <li>◆ Talks by Resource Personnel</li> <li>◆ Discussions</li> <li>◆ Video Presentations</li> <li>◆ Demonstrations</li> <li>◆ Pictures</li> <li>◆ Discussions</li> <li>◆ Role playing</li> <li>◆ Video presentations</li> <li>◆ Illustrations</li> </ul>	<p>Tape</p> <p>Pictures</p> <p>Rhymes</p> <p>Songs</p> <p>Balls</p> <p>Charts</p> <p>Photographs</p> <p>Television</p> <p>V C R</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Rubrics</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>

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<p><b>Learning About Strangers</b></p> <p>Accepting/asking for rides from strangers.</p> <p>Talking and going with strangers.</p> <p>Accepting money and gifts from strangers.</p> <p>Sitting on the lap of a stranger, when mother is not present.</p> <p>The meaning of a 'bribe'.</p>	<p><b>Explains who is a stranger.</b></p> <p><b>Discusses the dangers of talking or going with strangers.</b></p> <p><b>Explain what is meant by a bribe</b></p>	<ul style="list-style-type: none"> <li>◆ Role playing</li> <li>◆ Demonstration by teachers</li> <li>◆ Talks from Resource Personnel</li> <li>◆ Discussion</li> <li>◆ Video presentations</li> <li>◆ Making posters</li> </ul>	<p>Tape</p> <p>Pictures</p> <p>Charts</p> <p>Television</p> <p>V C R</p> <p>Tapes</p> <p>Paper</p> <p>Card</p> <p>Crayons</p> <p>Paints</p>	<p>Observation</p> <p>Checklist</p> <p>Portfolios</p> <p>Rubrics</p> <p>Anecdotal Records</p> <p>Teacher-Made Test</p> <p>Attainment Targets</p>





EARLY CHILDHOOD EDUCATION

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# Visual Arts

## SCOPE & SEQUENCE

Ministry of Education  
& Human Resource Development

