

NDMA KINDERGARTEN CURRICULUM

Last reviewed in October, 2013

The six Transdisciplinary Themes explored throughout the Kindergarten year include:

WHO WE ARE

HOW THE WORLD WORKS

WHERE WE ARE IN PLACE AND TIME

HOW WE ORGANIZE OURSELVES

HOW WE EXPRESS OURSELVES

SHARING THE PLANET

**See the Programme of Inquiry (POI) for unit specifics.*

Disciplines and IB Strands Include:

Math Strands

- Data Handling
- Measurement
- Shape and Space
- Pattern and Function
- Number

Science Strands

- Living Things
- Earth and Space
- Materials and Matter
- Forces and Energy

Social Studies Strands

- Human Systems and Economic Activities
- Social Organization and Culture
- Continuity and Change Through Time
- Human and Natural Environments
- Resources and Environments

Language Strands

- Oral Language
 - Listening
 - Speaking
- Visual Language
 - Viewing
 - Presenting
- Written Language
 - Reading
 - Writing

Religion

Math

IB Math Strands

- Data Handling
- Measurement
- Shape and Space
- Pattern and Function
- Number

IB Strand	Objectives
Data Handling	<ul style="list-style-type: none"> • Introduce the concepts of analyzing and interpreting data • Read and interpret bar graphs • Collect, organize and display data • Introduce surveys and tally charts • Classify objects into categories and identify the categories into more or less
Measurement	<ul style="list-style-type: none"> • Know and use the common words for parts of the day (morning, afternoon, evening, and night) and relative time (yesterday, today, tomorrow, last week, next year) • Identify tools that measure time (clocks, calendars) • Identify daily landmark times to the nearest hour • Compare two or more objects by length, weight and capacity, which is shorter, longer, taller, lighter, heavier • Describe and classify objects and verbally express more or less using measurement vocabulary • Classify objects into categories and identify the categories into more or less • Identify denominations of coins • Recognize symbols \$ and ¢ • Identify the amount of money in cents up to one dollar
Shape and Space	<ul style="list-style-type: none"> • Relate familiar three-dimensional objects inside and outside the classroom to their geometric name, e.g. ball/sphere, box/cube, soup can/cylinder, ice cream cone/cone • Identify, sort and classify objects by attribute and identify objects that do not belong in a particular group • Create, describe and extend simple geometric patterns • Understand and use common language to describe patterns, regions and boundaries of their immediate environment. • Describe objects in the environment using positional words • Correctly name, sort, and describe 2 and 3 dimensional basic shapes in all sizes and orientation • Analyze shapes to the number of sides and corners • Create shapes by drawing or clay sculpture • Compose simple shapes to form larger shapes
Pattern and Function	<ul style="list-style-type: none"> • Understand patterns and sequence occurs in everyday students. • Be able to identify, describe, extend and create patterns in various ways • Represent addition and subtraction problems using objects, drawings, formal equations, etc. • Solve addition and subtraction word problems using visual representation from objects or drawings no matter the missing variable • Decompose numbers 0-10 into numerous equations represented by drawings or objects • Compose and decompose numbers 11-19 • Answer how many makes 10 using objects, drawings or written equations • Fluently add and subtract within 5

IB Strand	Objectives
Number	<ul style="list-style-type: none">• Know number names from 0-20• Count to 100 by 1's and 10's• Count forward from any given number in a known sequence• Write the numbers 0-20• Count objects and writes the numeral that represents the count• Understand the relationship between numbers and quantities• Recognize that a number of objects in any arrangement still represents the same number• Identify objects that are greater than, less than, or the same as using matching and counting strategies• Compare numbers to which is larger or smaller

Science

IB Science Strands

- Living Things
- Earth and Space
- Materials and Matter
- Forces and Energy

IB Strands	Objectives
Inquiry Process And Materials and Matter	<ul style="list-style-type: none"> • Make purposeful observations of the natural world using the appropriate senses • Generate questions based on observations • Plan and conduct simple investigations • Manipulate simple tools that aid observation and data collection • Make accurate measurements with appropriate (non-standard) units for the measurement tool • Construct simple charts from data and observations • Share ideas about science through purposeful conversation • Communicate and present findings of observations • Develop strategies for information gathering • Develop scientific concepts through various illustrations, performances, models, exhibits and activities
IB Strand: Forces and Energy	<ul style="list-style-type: none"> • Describe the position of an object in relation to other objects around it • Describe the direction of a moving object from different observers' views <p>Gravity</p> <ul style="list-style-type: none"> • Observe how objects fall toward the earth <p>Force</p> <ul style="list-style-type: none"> • Demonstrate pushes and pulls on objects that can move • Observe that objects initially at rest will move in the direction of the push or pull • Observe how pushes and pulls can change the speed or direction of moving objects • Observe how shape (ex. cone, cylinder, sphere) and mass of an object can affect motion <p>Position</p> <ul style="list-style-type: none"> • Describe the position of an object (ex. above, below, in front of, behind, on) in relation to other objects around it • Describe the direction of a moving object (ex. away from, closer to) from different observers' views
Living Things	<ul style="list-style-type: none"> • Identify and compare living and non-living things • Identify that living things have basic needs
Earth and Space	<ul style="list-style-type: none"> • Identify Earth materials that occur in nature (sand, rocks, soil, water) • Describe how Earth materials contribute to the growth of plant and animal life

Social Studies

IB Social Studies Strands

- Human Systems and Economic Activities
- Social Organization and Culture
- Continuity and Change Through Time
- Human and Natural Environments
- Resources and Environments

Units of Study	Objectives
History (IB Strand: Continuity and Change Through Time)	<ul style="list-style-type: none"> • Create a timeline of events from students' own lives: what happened last night, yesterday, today, this morning • Describe ways people learn about the past (photos, artifacts, diaries, stories, videos) Living and working together in communities <ul style="list-style-type: none"> • Explore different types of communities • Learn roles and responsibilities of community members
Geography (IB Strand: Human and Natural Environments)	<ul style="list-style-type: none"> • Recognize that maps and globes represent places • Use environmental directions or positional words (up/down, in/out, above/below) to identify significant locations in the classroom • Identify and describe places in the immediate environment (classroom, home, playground) • Describe ways people use the environment to meet human needs and wants
Civics and Government (IB Strand: Social Organization and Culture)	<ul style="list-style-type: none"> • Identify our country's flag as an important symbol of the United States • Describe fair ways for groups to make decisions • Describe situations in which students demonstrated self-discipline and individual responsibility (following essential agreements, group work, taking turns) • Appreciate reasons people belong to groups, their roles and different ways people interact within groups
Economics (IB Strand: Resources and the Environment)	<ul style="list-style-type: none"> • Describe economic wants students have experienced • Distinguish between goods and services • Recognize situations in which people trade

Language Arts (Reading)

IB Strand	Units of Study	Objectives
Writing	Phonemic Awareness	<ul style="list-style-type: none"> • Demonstrate phonemic awareness by the wide range of sound manipulation competencies, including sound blending and deletion • Recognize that words are composed of sounds blended together and carry meaning
Writing	Phonics	<ul style="list-style-type: none"> • Understand the alphabetic principle, that sounds in words are expressed by the letters of the alphabet • Use grapho-phonemic cues to recognize a few one-syllable words when presented completely out of context • Begin to associate letters and sounds, particularly initial and final consonants
Writing	Word Recognition	<ul style="list-style-type: none"> • Automatically recognize a small number of frequently encountered, personally meaningful words in print • Make progress in automatically recognizing a few of the 220 Dolch basic sight words • Follow familiar written text while pointing to matching words • Narrow possibilities in predicting words using initial letters/sounds, patterns of language, and picture clues • Know the meanings of words encountered frequently in grade-level reading and oral language contexts
Writing	Vocabulary	<ul style="list-style-type: none"> • In context, determine the meaning of words and familiar and repeated phrases, including objects, actions, concepts, content vocabulary and literary terms; use strategies and resources including picture clues, prediction and other people to determine meanings
Writing	Fluency:	<ul style="list-style-type: none"> • Automatically apply the following aspects of fluency: naming of letters, association of letters and their sounds, recognition of a few words both when encountered in context and isolation, and demonstrating understanding of concepts of print
Visual	Narrative Text	<ul style="list-style-type: none"> • Become familiar with classic, multicultural and contemporary literature recognized for quality and literary merit that represents our common heritage as well as cultures from around the world • Identify the basic form and purpose of a variety of narrative genres, including stories, nursery rhymes, poetry and songs • Discuss setting, characters and events in narrative text • Identify how authors/illustrators use literary devices, including pictures and illustrations, to support the understanding of settings and characters • Respond to individual and multiple texts by finding evidence, discussing, illustrating, and/or writing to reflect; make meaning and make connections
Visual	Informational Text	<ul style="list-style-type: none"> • Identify and describe the basic form and purpose of a variety of informational genres, including environmental text, concept books and picture books • Explain how authors use text features, including pictures, illustrations and icons, to enhance the understanding of key ideas presented in descriptive, sequential patterns

IB Strand	Units of Study	Objectives
Written	Comprehension	<ul style="list-style-type: none"> • Begin to make text-to-self and text-to-text connections and comparisons by activating prior knowledge and connecting personal knowledge and experience to ideas in text through oral and written responses • Retell up to three events from familiar text using students' own words or phrasing • Begin to make connections across texts by making meaningful predictions based on illustrations or portions of text • Apply significant knowledge from grade-level science, social studies and mathematics texts
Written	Reading Attitude	<ul style="list-style-type: none"> • Become enthusiastic about reading and learning how to read • Choose books, book activities, word play and writing on students own during free time in school and at home

Language Arts (Writing)

Strand	Units of Study	Objectives
Writing	Writing Genre	<ul style="list-style-type: none"> • Write a brief personal narrative using pictures, words, word-like clusters, and/or sentences as support • Approximate poetry, using copy change and teacher guidance, based on reading a wide variety of grade-appropriate poetry • Write a brief informational piece, such as a page for a class book, using drawings, words, word-like clusters, and/or sentences • Write a report using MLA format for title and author
Writing	Writing Process	<ul style="list-style-type: none"> • With teacher assistance, consider the audience's reaction as they plan narrative or informational writing • Brainstorm to generate and structure ideas for narrative or informational writing • Draft focused ideas using semi-phonetic spelling to represent narrative and informational text when writing, incorporating pictures and drawings • Attempt to revise writing based on reading it aloud, requesting suggestions and clarifications that support meaning
Writing	Personal Style	<ul style="list-style-type: none"> • Develop originality in oral, written and visual messages in both narrative and informational writing
Writing	Spelling	<ul style="list-style-type: none"> • In the context of writing, correctly spell a small number of frequently encountered and personally meaningful words • In the context of writing, correctly spell less frequently encountered words, relying on structural cues (beginning and ending sounds) and environmental sources (word wall, word lists)
Writing	Handwriting:	<ul style="list-style-type: none"> • Form upper and lowercase manuscript letters • Leave space between words and word-like clusters of letters • Write from left to right and top to bottom
Writing	Writing Attitude	<ul style="list-style-type: none"> • Become enthusiastic about writing and learning to write
Writing	Grammar and Usage	<ul style="list-style-type: none"> • Identify nouns, proper nouns, verbs and plurals • Capitalize first word of sentences and proper nouns • Punctuation: period, question mark, exclamation point

Language Arts (Speaking: Oral)

Strand	Units of Study	Objectives
Oral	Conventions	<ul style="list-style-type: none"> • Explore and use language to communicate with a variety of audiences and for different purposes, including problem-solving, explaining, looking for solutions, constructing relationships, and expressing courtesies • Speak clearly and audibly in complete, coherent sentences, and use sound effects or illustrations for dramatic effect in narrative and informational presentations • Present in standard American English • Understand, providing examples of how language differs from playground and classroom as a function of linguistic and cultural group membership
Oral	Discourse	<ul style="list-style-type: none"> • Engage in substantive conversations, remaining focused on subject matter with interchanges beginning to build on prior responses in literature discussions, paired conversations or other interactions • Briefly tell or retell about familiar experiences or interests focusing on basic story grammar or main ideas and key details • Respond to multiple text types by reflecting, making meaning and making connections • Plan and deliver presentations using a descriptive informational organizational pattern providing several facts and details to make a point clearly and audibly
Oral	Listening and Viewing	<ul style="list-style-type: none"> • Understand and follow one- and two-step directions • Ask appropriate questions during a presentation or report • Listen to or view knowledgeably while demonstrating appropriate social skills of audience behaviors (eye contact, attention, support) in small and large group settings; listen, interact and respond appropriately • Begin to evaluate messages students experience, learning to differentiate between sender and receiver • Listen to or view and respond knowledgeably to a variety of genres

Religion

Units of Study	Objectives
Worship	<ul style="list-style-type: none"> • Celebrate appropriately during worship services • Learn the sign of the cross • Begin to learn prayers (Our Father, Hail Mary) • Begin to connect faith to everyday life