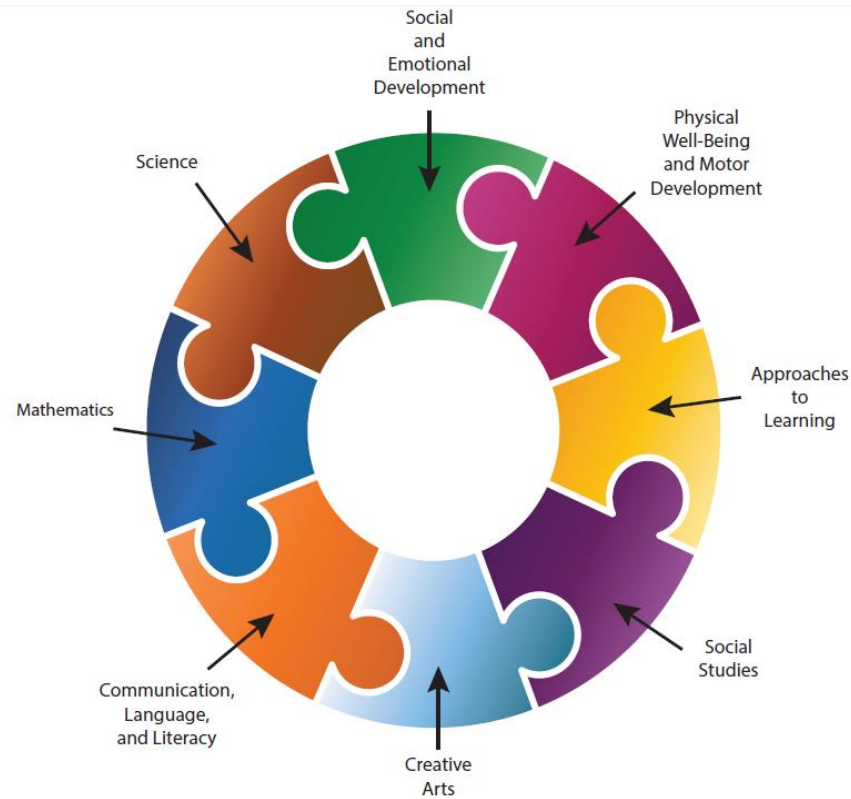


Alignment with the Iowa CORE

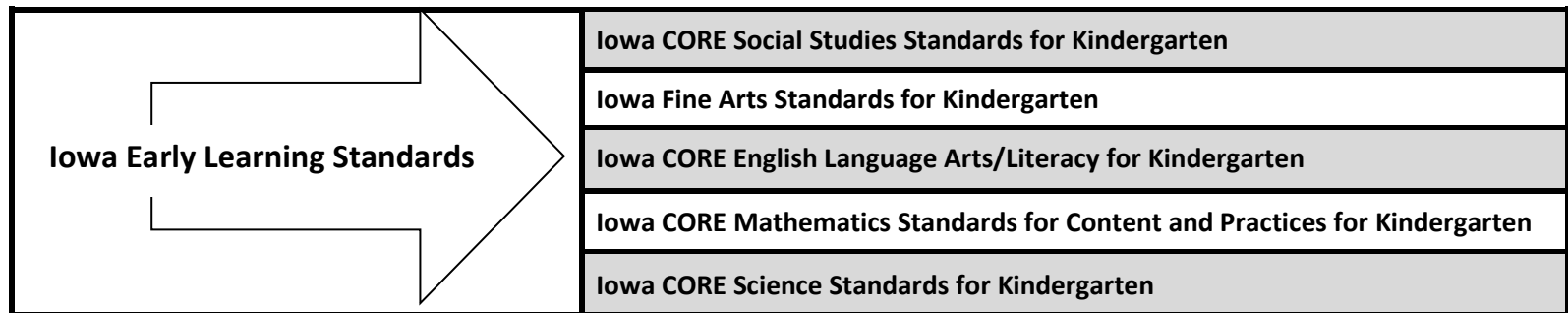
Iowa Early Learning Standards 3rd edition



Iowa Early Learning Standards 3rd Edition and the Iowa CORE Alignment Overview

The alignments of the Iowa Early Learning Standards 3rd edition (IELS) to the Iowa CORE (www.iowacore.gov) provide a broad framework for curriculum, instruction, and assessment practices for children from birth through kindergarten. The alignments connect the age-appropriate expectations for infants, toddlers, and preschool children to knowledge that children should master by the **end of kindergarten**. In addition, the alignments provide an illustration of how learning at the earliest ages builds increasingly to support academic and social success for children as they enter the K-12 educational system.

Five alignment documents show how the IELS serve as introductory learning for the expectations of the Iowa kindergarten content standards:



Three columns in the following alignment documents contain the two age groups in the Iowa Early Learning Standards 3rd edition and the kindergarten standards of the Iowa CORE. The left column provides the infant/toddler standards, the middle column provides the preschool standards, and the right column provides the kindergarten standards from the Iowa CORE:

 Infant/Toddler Birth – 3 Years	 Preschool 3 – 5 Years	 End of Kindergarten
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Note: The alignments do not show a one-to-one match of standards between the 2017 IELS and the Iowa CORE for kindergarten. Instead, the accumulating effect of what an infant/toddler learns creates the foundation, then the preschooler's learning builds upon the foundation; and ultimately, what a child discovers from birth to five years directly supports learning during the kindergarten year.

Iowa CORE Standards for Kindergarten				
Social Studies Standards	Fine Arts Standards*	English Language Arts/Literacy Standards	Mathematics Standards	Science Standards
<ul style="list-style-type: none"> • Behavioral Sciences • Civics/Government • Economics • Financial Literacy • Geography • History 	<ul style="list-style-type: none"> • Visual Arts • Theatre • Music • Dance • Media Arts 	<ul style="list-style-type: none"> • Reading Standards for Literature (fiction) • Reading Standards for Informational Texts (nonfiction) • Reading Standards: Foundational Skills (concepts of print, the alphabetic principle, basic writing conventions) • Writing Standards • Language Standards (English grammar usage) • Speaking and Listening Standards 	<ul style="list-style-type: none"> • Counting and Cardinality • Operations and Algebraic Thinking • Number and Operations in Base Ten • Measurement and Data • Geometry <p><i>See Standards for Mathematical Practices below.</i></p>	<ul style="list-style-type: none"> • Motions and Stability: Forces and Interactions • Energy • From Molecules to Organisms: Structures and Processes • Earth's Systems • Earth and Human Activity • Engineering Design

* Given the extensive scope of the **Iowa Fine Arts Standards for Kindergarten**, the concepts, knowledge, and skills represented in all areas of the Iowa Early Learning Standards are viewed as critical and contributing foundational components for learning in early elementary grades. Therefore, specific IELS areas and benchmarks are not listed in the alignment document for the Iowa Fine Arts Standards.

In addition to the Standards for Mathematical Content, the Iowa CORE also identifies Standards for Mathematical Practices. The eight mathematical practices represent abstract, conceptual knowledge that children gain through repeated learning opportunities with problem solving, reasoning, and communication skills. It is important to know these are practices, rather than skills to measure.

The Standards for Mathematical Practices in the Iowa CORE are:

1. MAKE SENSE OF PROBLEMS AND PERSEVERE IN SOLVING THEM.	5. USE APPROPRIATE TOOLS STRATEGICALLY.
2. REASON ABSTRACTLY AND QUANTITATIVELY.	6. ATTENTION TO PRECISION.
3. CONSTRUCT VIABLE ARGUMENTS AND CRITIQUE THE REASONING OF OTHERS.	7. LOOK FOR AND MAKE USE OF STRUCTURE.
4. MODEL WITH MATHEMATICS.	8. LOOK FOR AND EXPRESS REGULARITY IN REPEATED REASONING.

The Standards for Mathematical Practices are provided in a table format at the end of the alignment document for mathematics. The table illustrates how the infant/toddler and preschool Iowa Early Learning Standards are embedded within each of the Standards for Mathematical Practices. Examples are also provided as to how the mathematical practices might be demonstrated by children in the two age groups.

Infant/Toddler Birth - 3 Years	Preschool 3 - 5 Years	End of Kindergarten
Social and Emotional Development (Area 1) Approaches to Learning (Area 3) Social Studies (Area 4) Creative Arts (Area 5) Communication, Language, and Literacy (Area 6) Mathematics (Area 7) Science (Area 8)	Social & Emotional Development (Area 1) Approaches to Learning (Area 3) Social Studies (Area 4) Creative Arts (Area 5) Communication, Language, and Literacy (Area 6) Mathematics (Area 7) Science (Area 8)	access the Iowa CORE at www.iowacore.gov
Area 1: Social and Emotional Development	Area 1: Social and Emotional Development	
<p>Standard 1.1.IT Self Infants and toddlers display a positive sense of self. (p 90)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. responds to familiar adults' and children's interactions using behaviors such as gazing, cuddling, and accepting assistance. 2. explores his/her own body. 3. shows awareness of self, such as responding to own image in mirror. 4. shows preferences for toys and experiences. 5. expresses reaction through facial expressions, sounds, and gestures. 6. begins to recognize own power by showing interest in making choices or expressing preferences. 	<p>Standard 1.1.PS Self Children express a positive awareness of self in terms of specific abilities, characteristics, and preferences. (p 92)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. expresses a positive sense of self in terms of specific abilities. 2. expresses needs, wants, opinions, and feelings in socially appropriate ways. 3. demonstrates increasing confidence and independence in a variety of tasks and routines, and expresses pride in accomplishments. 4. recognizes own power to make choices. 	<p>INQUIRY STANDARD</p> <p>SS.K.1. Recognize a compelling question.</p> <p>Constructing Supporting Questions: SS.K.2. Identify the relationship between compelling and supporting questions.</p> <p>Communicating and Critiquing Conclusions: SS.K.3 Construct responses to compelling questions using examples.</p> <p>Taking Informed Action: SS.K.4 Take group or individual action to help address local, regional, and/or global problems. SS.K.5 Use deliberative and democratic procedures to make decisions about and act on civic problems in their classrooms.</p>

Area 1: Social and Emotional Development	Area 1: Social and Emotional Development	
<p>Standard 1.2.IT Self-Regulation Infants and toddlers show increasing awareness of and ability to express emotions in socially and culturally appropriate ways. (p 94)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. indicates need for assistance through actions such as crying, gesturing, vocalizing, using words, or approaching familiar adults. 2. comforts him or herself when distressed or tired by actions such as sucking, stroking a blanket, or hugging a toy. 3. begins to express a range and variety of feelings and emotions through body language, facial expressions, actions, and/or verbal responses. 4. shows increasing ability to recognize own feelings, including simple (e.g., mad, glad) and complex (e.g., excited, frustrated, disappointed) feelings. 5. responds to emotions expressed by others, for example, by comforting another child or crying in response to the cries of others. 6. begins to control behavior through following simple rules and limits in a variety of settings. 7. begins to transition between feeling states with guidance from a caring adult. 	<p>Standard 1.2.PS Self-Regulation Children show increasing ability to regulate their behavior and express their emotions in appropriate ways. (p 96)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. demonstrates the ability to monitor his/her own behavior and its effects on others, following and contributing to adult expectations. 2. persists with difficult tasks without becoming overly frustrated. 3. begins to accept consequences of his/her own actions. 4. manages transitions and changes to routines. 5. states feelings, needs, and opinions in difficult situations without harming self, others, or property. 6. expresses an increasing range and variety of emotions, and transitions between feeling states become smoother. 	<p>BEHAVIORAL SCIENCES</p> <p><u>Recognize the Interaction Between the Individual and Various Groups:</u> SS.K.6. Describe students’ roles in different groups of which they are members including their family, school, and community.</p> <p><u>Examine Factors that Led to Continuity and Change on Human Development and Behavior:</u> SS.K.7. Describe ways in which students and others are alike and different within a variety of social categories.</p>

Area 1: Social and Emotional Development	Area 1: Social and Emotional Development	
<p>Standard 1.3.IT Relationships with Adults Infants and toddlers relate positively with significant adults. (p 98)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. distinguishes between familiar and unfamiliar adults; for example, is comforted by the sight of the familiar adult or the sound of the familiar adult's voice. 2. accepts assistance and comfort from familiar adults. 3. seeks and maintains contact with familiar adults; for example, by looking at the adult, hearing the adult's voice, or touching the adult. 4. shows discomfort at separations from familiar adults. 5. seeks help from familiar adults in unfamiliar situations. 6. explores the environment, both indoors and outdoors, but may return to a familiar adult periodically for security. 7. begins to imitate or portray roles and relationships. 8. imitates adult behaviors. 	<p>Standard 1.3.PS Relationships with Adults Children relate positively with significant adults. (p 100)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. interacts comfortably with familiar adults. 2. accepts guidance, comfort, and directions from a range of familiar adults in a variety of environments. 3. expresses affection toward familiar adults. 4. shows trust in familiar adults. 5. seeks help, as needed, from familiar adults. 	<p>CIVICS/GOVERNMENT</p> <p><u>Interpret Processes, Rules, and Laws:</u> SS.K.8. Determine a procedure for how people can effectively work together to make decisions to improve their classrooms or communities. (21st century skills) SS.K.9. Compare and contrast rules from different places. (21st century skills)</p>

Area 1: Social and Emotional Development	Area 1: Social and Emotional Development	
<p>Standard 1.4.IT Relationships with Children Infants and toddlers respond to and initiate interactions with other children. (p 102)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. initiates interactions with other children through gestures, vocalizations, facial expressions, and/or body movements. 2. accepts help from familiar adults in interactions with other children. 3. begins to demonstrate empathy for others and responds to people's facial expressions, body language, and or interactions. 4. develops an awareness of his/her behavior and how it affects others. 5. imitates other children's behaviors. 	<p>Standard 1.4.PS Relationships with Children Children respond to and initiate appropriate interactions with other children, and form positive peer relationships. (p 104)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. initiates and sustains positive interactions with peers, organizes play. 2. wants to please and be like friends 3. negotiates with others to resolve disagreements. 4. develops friendships with other peers; starts to demonstrate turn taking and sharing with others. 5. expresses empathy to peers, demonstrates caring behaviors 6. accepts consequences of his/her actions. 7. recognizes how behaviors can affect others. 8. names friends. 	<p>ECONOMICS</p> <p><u>Engage in Economic Decision Making:</u> SS.K.10. Give examples of choices that are made because of scarcity.</p>

Area 3: Approaches to Learning	Area 3: Approaches to Learning	
<p>Standard 3.1.IT Curiosity and Initiative Infants and toddlers express curiosity and initiative in exploring the environment and learning new skills. (p 122)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. shows interest in people including other infants, objects, and events. 2. uses their senses to choose, explore, and manipulate a variety of objects or toys in a variety of ways. 3. actively plays with or near adults, other children, and materials. 	<p>Standard 3.1.PS Curiosity and Initiative Children express curiosity, interest, and initiative in exploring the environment, engaging in experiences, and learning new skills. (p 124)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. deliberately chooses to explore a variety of materials and experiences, seeking out new challenges. 2. participates in experiences with eagerness, flexibility, imagination, independence, and inventiveness. 3. asks questions about a variety of topics. 4. repeats skills and experiences to build competence and support the exploration of new ideas. 	<p>FINANCIAL LITERACY</p> <p>Analyze Credit and Debt Levels: SS.K.11. Explain the difference between buying and borrowing. (21st century skills)</p> <p>Create a Saving and Spending Plan: SS.K.12. Distinguish between appropriate spending choices. (21st century skills)</p>

Area 3: Approaches to Learning	Area 3: Approaches to Learning	
<p>Standard 3.2.IT Engagement and Persistence Infants and toddlers purposefully choose, engage, and persist in play, experiences, and routines. (p 126)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> holds attention of familiar adult; for example, through eye contact or vocalizations. repeats familiar and newly learned experiences. if interested, maintains focus on people or objects, play experiences, or novel events. demonstrates persistence with challenging materials and experiences. 	<p>Standard 3.2.PS Engagement and Persistence Children purposefully choose and persist in experiences and play. (p 128)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> maintains concentration on a task despite distractions and interruptions. stays engaged and completes a variety of both adult-directed and self-initiated tasks, projects, and experiences of increasing degrees of difficulty. sets goals and follows a plan in order to complete a task. chooses to participate in play and learning experiences. 	<p>GEOGRAPHY</p> <p><u>Create Geographic Representations:</u> SS.K.13. Create a route to a specific location using maps, globes, and other simple geographic models.</p> <p><u>Evaluate Human Environment Interaction:</u> SS.K.14. Compare environmental characteristics in Iowa with other places.</p> <p><u>Analyze Human Population Movement and Patterns:</u> SS.K.15. Explain why and how people move from place to place.</p>

Area 3: Approaches to Learning	Area 3: Approaches to Learning	
<p>Standard 3.3.IT Reasoning and Problem Solving Infants and toddlers demonstrate strategies for reasoning and problem solving. (p 130)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. uses an object, action, or adult to accomplish tasks, such as pulling a blanket to reach a toy or pushing a button to hear a sound. 2. experiments to find a solution to a problem. 3. imitates an adult action to solve a problem. 4. recognizes difficulties and adjusts actions, as needed. 5. seeks and accepts help when encountering a problem beyond his/her ability to solve independently. 	<p>Standard 3.3.PS Reasoning and Problem Solving Children demonstrate strategies for reasoning and problem solving. (p 132)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. shows interest in and finds a variety of solutions to questions, tasks, or problems. 2. recognizes and solves problems through active exploration, including trial and error, and through interactions and discussions with peers and adults. 3. shares ideas or makes suggestions of how to solve a problem presented by another person. 	<p>HISTORY</p> <p><u>Analyze Change, Continuity, and Context:</u> SS.K.16. Distinguish at least two related items or events by sequencing them from the past to the present. SS.K.17. Compare life in the past to life today.</p> <p><u>Critique Historical Sources and Evidence:</u> SS.K.18. Given context clues, develop a reasonable idea about who created the primary or secondary source, when they created it, where they created it, or why they created it.</p> <p><u>Iowa History:</u> SS.K.19. Compare and contrast local environmental characteristics to that of other parts of the state of Iowa.</p>

Area 3: Approaches to Learning	Area 3: Approaches to Learning	
<p>Standard 3.4.IT Play and Senses Infants and toddlers engage in play to learn. (p 134)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. uses sights, smells, sounds, textures, and tastes to explore and experience routines and materials within the environment. 2. chooses and participates in a variety of play experiences. 3. imitates behaviors of others in play. 4. repeats experiences with materials, adults, and peers to build knowledge and understanding of the world around them. 	<p>Standard 3.4.PS Play and Senses Children engage in play to learn. (p 136)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. engages in a variety of indoor and outdoor play experiences. 2. uses sights, smells, sounds, textures, and tastes to discriminate between and explore experiences, materials, and the environment. 3. engages in self-initiated, unstructured play. 4. plans and executes play experiences alone and with others. 	

Area 4: Social Studies	Area 4: Social Studies	
<p>Standard 4.1.IT Awareness of Family and Community Infants and toddlers demonstrate a sense of belonging within their family, program, and other social settings or groups. (p 140)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> expresses enjoyment at being in a familiar setting or group. recognizes familiar adults and uses them to determine safety during exploration. freely explores and plays within familiar settings. 	<p>Standard 4.1.PS Awareness of Family and Community Children demonstrate an increasing awareness of belonging to a family and community. (p 142)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> demonstrates understanding that communities are composed of groups of people who live, play, or work together. demonstrates ability to identify communities to which they belong. recognizing that their family is an important group to which they belong. demonstrates responsibility as a member of a family or community. shows confidence in expressing individual opinions and thoughts while respecting the thoughts and opinions of others. participates in creating and following rules and routines. demonstrates an initial awareness of the concepts of fairness, individual rights, and welfare of family and community members. 	

Area 4: Social Studies	Area 4: Social Studies	
<p>Standard 4.2.IT Awareness of Culture Infants and toddlers demonstrate a strong sense of self within their culture. (p 144)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> expresses enjoyment at being in a familiar setting or group. chooses and participates in familiar experiences, including songs and stories from his or her home culture. explores materials from various cultures. 	<p>Standard 4.2.PS Awareness of Culture Children demonstrate an increasing awareness of culture and diversity. (p 146)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> demonstrates an awareness of diversity such as family characteristics, adult roles within a family, and skin and hair color. demonstrates acceptance of persons from different cultures and ethnic groups. demonstrates a sense of belonging, feeling pride in his/her own culture while showing respect for others. uses respectful and descriptive language for human similarities and differences, demonstrating curiosity, comfort, ease, and empathy with similarities and differences. 	

Area 4: Social Studies	Area 4: Social Studies	
<p>Standard 4.3.IT Exploration of the Environment Infants and toddlers explore new environments with interest and recognize familiar places. (p 148)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. demonstrates interest and curiosity within familiar and unfamiliar settings. 2. explores and plays with new, as well as familiar objects, in the environment using all five senses. 3. chooses and participates in unfamiliar experiences. 	<p>Standard 4.3.PS Exploration of the Environment Children demonstrate an increasing awareness of the environment in which they live, especially how people (including themselves) relate to that environment. (p 150)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. interacts with the world, first with familiar settings and then with less familiar ones; first in simple ways and then in more complex, exploratory ways. 2. constructs meaning about him/herself and the world through relevant and meaningful experiences with objects and their environment. 3. recognizes aspects of the environment, such as roads, buildings, trees, gardens, bodies of water, or land formations. 4. recognizes that people share the environment with other people, animals, and plants. 5. understands that people can take care of the environment through activities and experiences, such as cleaning, conserving, reusing, and recycling. 6. recognizes a variety of jobs and the work associated with them. 	

Area 4: Social Studies	Area 4: Social Studies	
	<p><i>Standard 4.4.PS Awareness of the Past</i> Children demonstrate an increasing awareness of past events and how those events relate to one's self, family, and community. (p 152)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. differentiates between past, present, and future. 2. represents events and experiences that occurred in the past through words, play, and art. 3. uses past events to construct meaning of the world. 4. understands that events happened in the past and that the events relate to oneself, family, community, and culture. 	

Area 5: Creative Arts	Area 5: Creative Arts	
<p>Standard 5.1.IT Art Infants and toddlers participate in a variety of sensory and art-related experiences. (p 156)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. gazes at a picture, photo, or mirror images. 2. manipulates and explores play materials within the environment. <p><i>The older infant and toddler also:</i></p> <ol style="list-style-type: none"> 3. expresses interest in art-related experiences and media. 4. engages in experiences that support creative expression. 5. chooses and experiments with a variety of art materials such as playdough, crayons, chalk, water, markers, and paint. 	<p>Standard 5.1.PS Art Children participate in a variety of art and sensory-related experiences. (p 158)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. uses a variety of drawing and art materials, such as drawing utensils, paint, clay, and wood to create original works, form, and meaning. 2. expresses ideas about his/her own artwork and the artwork of others, relating artwork to what is happening in the environment or life experiences. 3. demonstrates care and persistence when involved in art projects. 4. plans and works cooperatively to create drawings, paintings, sculptures, and other art projects. 	

Area 5: Creative Arts	Area 5: Creative Arts
<p>Standard 5.2.IT Music, Rhythm, and Movement Infants and toddlers participate in a variety of rhythm, music, and movement experiences. (p 160)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> shows interest in songs, tones, rhythms, voices, and music. experiments with a variety of age-appropriate instruments and sound-making objects. enjoys exploring ways of interacting with others through touch and motion. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> chooses and participates in music and movement experiences. sings simple songs and participates in finger plays. sings daily songs to recognize the patterns throughout their day. 	<p>Standard 5.2.PS Music, Rhythm, and Movement Children participate in a variety of music and movement experiences. (p 162)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> participates in a variety of musical and rhythmic experiences, including singing, dancing, listening, playing simple rhythmic and tonal instruments, and creating and singing chants, rhymes, and fingerplays from diverse cultures. demonstrates meaningful creative and imaginative responses, including taking on pretend roles, when listening to music to reflect the expressive elements of music. notices differences in high and low sounds (pitch), long and short sounds (rhythm), loud and quiet sounds (dynamics), fast and low sounds (tempo), and differences between instruments or sounds (timbre). recognizes patterns in songs and rhymes and repeats them, using songs, chants or instruments, including the emergence of steady beat. demonstrates an awareness of music and sound as part of daily life indoors and outdoors.

Area 5: Creative Arts	Area 5: Creative Arts	
<p>Standard 5.3.IT Dramatic Play Infants and toddlers engage in dramatic play experiences. (p 166)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. imitates the sounds, facial expressions, gestures, or behaviors of another person. 2. imitates the actions and sounds of animals, people, and objects. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 3. engages in dramatic play in both indoor and outdoor environments. 	<p>Standard 5.3.PS Dramatic Play Children engage in dramatic play experiences. (p 168)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. shows creativity and imagination when using materials. 2. assumes different roles in dramatic play situations. 3. interacts with peers in dramatic play experiences that become more extended and complex. 	

Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
<p>Standard 6.1.IT Language Understanding and Use Infants and toddlers understand and use communication and language for a variety of purposes. (p 172)</p> <p>Benchmarks: <i>The infant or toddler, in home language and English:</i></p> <ol style="list-style-type: none"> 1. responds to the vocalizations and communications, verbal and nonverbal, of familiar adults. 2. uses vocalizations and gestures to gain attention from others. 3. uses vocalizations and gestures to communicate wants and needs. 4. increases both listening (receptive) and speaking (expressive) vocabulary. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 5. progresses to using words then simple sentences to communicate. 6. participates in conversations that include turn-taking, using both receptive (listening) and expressive (speaking) language skills. 7. answers simple questions. 8. follows simple directions. 	<p>Standard 6.1.PS Language Understanding and Use Children understand and use communication and language for a variety of purposes. (p 174)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. demonstrates a steady increase in listening (receptive language) and speaking (expressive language) vocabulary. 2. initiates, listens, and responds in relationship to the topics of conversations with peers and adults. 3. speaks in phrases and sentences of increasing length and complexity. 4. follows oral directions that involve several actions. 5. asks and answers a variety of questions. 6. demonstrates knowledge of the rules of conversations such as taking turns while speaking. <p><i>The child, who is an English language learner, also:</i></p> <ol style="list-style-type: none"> 7. uses their home language, sometimes in combination with English, to communicate with people. 	

Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
	<p>Standard 6.1.PS Language Understanding and Use Children understand and use communication and language for a variety of purposes. [cont'd] (p 174)</p> <ul style="list-style-type: none"> 8. demonstrates ongoing development and improvement in vocabulary and complexity in use of home language. 9. demonstrates engagement at home or the classroom in literacy activities to related to her or his home language. 10. demonstrates receptive (listening) and express (speaking English language skills to be able to comprehend the English language. 11. demonstrates engagement in English literacy activities to be able to understand and respond to books, storytelling, and songs presented in English. 	

Area 7: Mathematics	Area 7: Mathematics	
<p>Standard 7.1.IT Comparison, Number, and Operation Infants and toddlers show increasing understanding of comparisons and amount, including use of numbers and counting. (p 190)</p> <p>Benchmarks: <i>The infant:</i></p> <ol style="list-style-type: none"> 1. begins to notice characteristics of objects such as size, color, shape, or quantity. <p><i>The toddler:</i></p> <ol style="list-style-type: none"> 2. matches and sorts objects by size, color, shape, or quantity. 3. begins to use simple counting in play and interactions, although numbers may occur out of order. 4. makes simple comparisons between two objects using words like big, small, more, etc. 	<p>Standard 7.1.PS Comparison, Number, and Operation Children understand counting, ways of representing numbers, and relationships between quantities and numerals. (p 192)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. recognizes small quantities (1 to 5) without counting them (subitizing). 2. counts to 20 verbally. 3. points and counts 10-20 objects accurately. 4. makes sets of 6-10 objects and describes parts. 5. uses language such as more, less or the same amount as to compare quantities. 6. identifies numerals to 10 by name. 	

Area 7: Mathematics	Area 7: Mathematics	
<p>Standard 7.2.IT Patterns Infants and toddlers begin to recognize patterns. (p 194)</p> <p>Benchmarks: <i>The infant:</i></p> <ol style="list-style-type: none"> 1. demonstrates expectations for familiar sequences of routines and experiences such as crying when it is near feeding time. <p><i>The toddler:</i></p> <ol style="list-style-type: none"> 2. shows recognition of sequence in events or objects. 3. repeats actions in sequence, such as fingerplays. 4. notices patterns and objects in the environment. 5. organizes objects into groups during play and exploration. 	<p>Standard 7.2.PS Patterns Children understand patterns. (p 196)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. recognizes, reproduces and creates patterns moving from simple to complex. 2. extends patterns by predicting what comes next. 3. describes patterns seen in natural and designed settings 	

Area 7: Mathematics	Area 7: Mathematics	
<p>Standard 7.3.IT Shapes and Spatial Relationships Infants and toddlers show increasing understanding of spatial relationships. (p 198)</p> <p>Benchmarks: <i>The infant:</i> 1. takes objects apart. 2. fills and empties containers. <i>The toddler:</i> 3. takes objects apart and attempts to put them together. 4. shows awareness of his/her own body space. 5. matches similar shapes. 6. follows simple direction related to positions (in, on, under, up and down).</p>	<p>Standard 7.3.PS Shapes and Spatial Relationships Children understand shapes and spatial relationships. (p 200)</p> <p>Benchmarks: <i>The child:</i> 1. demonstrates understanding of spatial words such as up, down, over, under, top, bottom, inside, outside, in front, and behind. 2. identifies and describes two - and three - dimensional shapes. 3. notices characteristics, similarities, and differences among shapes, such as corners, points, edges, and sides. 4. notices how shapes fit together and can be taken apart to form other shapes.</p>	

Area 7: Mathematics	Area 7: Mathematics	
	<p>Standard 7.4.PS Measurement Children understand comparisons and measurement. (p 202)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. sorts, classifies, and puts objects in series, using a variety of properties. 2. makes comparisons between several objects based on one or more attributes, such as length, height, weight, and area, using words such as taller, shorter, longer, bigger, smaller, heavier, lighter, full, empty, length, height, and weight. 3. measures objects using non-standard units of measurement, such as using blocks to determine how tall a child is. 4. explores objects using standard measuring tools (e.g., rulers, measuring cups, and balance scales. 5. begins to demonstrate knowledge that measurement requires a 'fair' comparison starting at the same baseline or measuring the same property such as length, height, and volume. 	

Area 7: Mathematics	Area 7: Mathematics	
	<p>Standard 7.4.PS Measurement Children understand comparisons and measurement. [cont'd] (p202)</p> <p>6. develops an awareness of simple time concepts within his/her daily life such as day, night, sequence of usual daily events such as breakfast, lunch, dinner, bedtime; outdoor time follows snack; and brushing teeth after a meal.</p>	

Area 7: Mathematics	Area 7: Mathematics	
	<p>Standard 7.5.PS Data Analysis Children demonstrate the process of data analysis by sorting and classifying, asking questions, and finding answers. (p 204)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. sorts collections of objects into sets such as lines, piles, or groups by color, size, shape, or kind. 2. sorts and resorts in a variety of ways. 3. compares and orders such as most to least, same amount as, or least to most. 4. sorts data into two groups such as big and not big; green and not green; and pets and not pets. 5. asks questions, collects, records, and organizes classroom data to find answers to questions. 	

Area 8: Science	Area 8: Science	
<p>Standard 8.1.IT Scientific Investigations Infants and toddlers gather and interpret information from the environment around them. (p 208)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. begins to notice objects and events in the indoor and outdoor environments. 2. engages in a variety of play experiences and exploration when provided open-ended materials (ie. toys or household items that can be taken apart/put together, a container of water and various objects, seeds of different sizes/textures/shapes). 3. uses one or more senses to make observations of their environment. 4. reacts to changes in the environment. 5. attempts to manipulate/understand their environment through repetitive play. 6. identifies and interacts with new objects placed in their environment. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 7. asks simple questions about observations of the environment using language (may be home language), behavior, interactions, etc. 	<p>Standard 8.1.PS Scientific Investigations Children gather information and conduct investigations to address their wonderings and test solutions to problems. (p 210)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. asks questions about his/her environment, and begins to identify and look for information that will help answer those questions or solve problems. 2. plans and conducts simple investigations alone or in collaboration with peers to answer questions or design solutions to scientific or engineering problems. 3. begins to use appropriate scientific tools/technology in conducting investigations such as scales, tape measure, magnifying glass, tweezers, and eye dropper. 4. observes, investigates, and describes objects, materials, and other physical science phenomena such as shadows and reflections in the classroom and outdoor environments. 5. observes, investigates, and describes the characteristics, behavior, and habitats of living things. 	

Area 8: Science	Area 8: Science	
	<p><i>Standard 8.1.PS Scientific Investigations</i> Children gather information and conduct investigations to address their wonderings and test solutions to problems. [cont'd] (p 210)</p> <p>6. asks questions based on observations of weather-related phenomena and begins to notice relationships and patterns over time such as it is warmer in the summer and colder in the winter.</p> <p>7. develops an awareness of nature through the exploration of natural environments and materials or through caring for animals or plants.</p>	

Area 8: Science	Area 8: Science	
<p>Standard 8.2.IT Scientific Reasoning Infants and toddlers use reasoning to make sense of information in their environment. (p 214)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. uses trusted relationships to gain understanding of the living and nonliving world. 2. explores cause and effect relationships by engaging in problem solving through trial and error. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 3. shows understanding of object permanence (that people exist when they cannot be seen, and objects exist even when out of sight). 4. makes a choice to reach a desired outcome. 	<p>Standard 8.2.PS Scientific Reasoning Children use reasoning to make sense of information and design solutions to problems in their environment. (p 217)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. begins to make comparisons and categorize nonliving things based on characteristics they can observe such as texture, color, size, shape, temperature, sound, odor, usefulness, and weight. 2. uses information from investigations to identify similarities and differences in characteristics and behavior of living things and make inferences about their needs and how they get met such as caterpillars eat leaves. 3. uses prior experiences and/or data from observations to identify patterns in how living and nonliving things stay the same or change over time and/or when conditions change such as plants grow when they get the proper amounts of water and light; combine substances, heat/cool an item; baby animals generally resemble their parents. 	

Area 8: Science	Area 8: Science	
	<p><i>Standard 8.2.PS Scientific Reasoning</i> Children use reasoning to make sense of information and design solutions to problems in their environment. [cont'd] (p 217)</p> <p>4. begins to identify ways humans positively and negatively impact the environment such as beginning awareness of conservation and respect for the environment, based on investigations.</p> <p>5. describes and compares the properties and motions of objects, based on exploration, in terms of speed and direction such as faster, down, beside and begin to notice cause and effect relationships such as a ball rolls faster on a steeper incline.</p> <p>6. begins to make patterns based on long-term explorations of weather and observations of the earth and sky begins to notice patterns such as differences in weather in different seasons and how different types of weather influence people and the environment.</p>	

Area 8: Science	Area 8: Science	
<p>Standard 8.3.IT Scientific Communication Infants and toddlers share information and understanding about experiences in their environment. (p 219)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. produces questions using gestures and/or facial expressions. 2. expresses vocalizations and gestures to gain attention from others. 3. shows repetitive actions to demonstrate new learning experiences. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 4. composes simple verbal questions in English or home language. 5. verbally responds to other's questions, statements in English or home language. 6. draws pictures to represent his/her observations of objects and/or of changes to objects/the environment. 7. engages in scientific conversations, using both receptive (listening) and expressive (speaking) language skills. 	<p>Standard 8.3.PS Scientific Communication Children share information and understanding about experiences in their environment. (p 221)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. shares observations and ideas about the properties and behavior of nonliving and living things through a variety of modalities such as language, drawing, modeling, gesturing, and dramatizing. 2. obtains, evaluates, and uses age-appropriate text and online resources, with support, to gather information related to a topic of study and makes connections to observations and experiences. For example, when studying butterflies, children may evaluate a variety of books and begin to identify which ones are most useful for learning about real butterflies. 3. begins to ask questions of others to seek out more information on a topic. Participates in generating questions to ask a visiting expert on a topic of interest. 	

Area 8: Science	Area 8: Science	
	<p><i>Standard 8.3.PS Scientific Communication</i> Children share information and understanding about experiences in their environment. (cont'd)</p> <p>4. offers evidence to explain the thought process he/she used to make conclusions/claims and listens to the claims, conclusions, and evidence of others to begin to identify areas of agreement and disagreement.</p> <p>5. participates in creating a final product such as a panel, classroom book, or newsletter that communicates what was learned during one exploration or during the study of a topic over time. Individual children may contribute through language, drawing, writing, or choosing items to be included.</p>	

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Infant/Toddler Birth - 3 Years	Preschool 3 - 5 Years	End of Kindergarten
All eight IELS areas contain standards that align to Iowa Fine Arts Standards.	All eight IELS areas contain standards that align to Iowa Fine Arts Standards.	access the Iowa Fine Arts Standards at https://www.educateiowa.gov/pk-12/content-areas/fine-arts
Area 1: Social and Emotional Development	Area 1: Social and Emotional Development	
Area 2: Physical Well-Being and Motor Development	Area 2: Physical Well-Being and Motor Development	
Area 3: Approaches to Learning	Area 3: Approaches to Learning	
Area 4: Social Studies	Area 4: Social Studies	
Area 5: Creative Arts	Area 5: Creative Arts	
Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
Area 7: Mathematics	Area 7: Mathematics	
Area 8: Science	Area 8: Science	
All Iowa Early Learning Standard areas/ benchmarks for infants/toddlers contribute to the foundation of knowledge and skills needed to meet the Fine Arts Standards for the end of Kindergarten.	All Iowa Early Learning Standard areas/ benchmarks for preschool-aged children contribute to the foundation of knowledge and skills needed to meet the Fine Arts Standards for the end of Kindergarten.	<p>VISUAL ARTS</p> <p><u>Creating</u></p> <p>VA:Cr1.1.K Engage in exploration and imaginative play with materials.</p> <p>VA:Cr1.2.K Engage collaboratively in creative art-making in response to an artistic problem.</p>

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Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>VA:Cr2.1.K Through experimentation, build skills in various media and approaches to art-making.</p> <p>VA:Cr2.2.K Identify safe and non-toxic art materials, tools, and equipment.</p> <p>VA:Cr2.3.K Create art that represents natural and constructed environments.</p> <p>VA:Cr3.1.K Explain the process of making art while creating.</p> <p><u>Performing/Presenting/Producing</u></p> <p>VA:Pr4.1.K Select art objects for personal portfolio and display, explaining why they were chosen.</p> <p>VA:Pr5.1.K Explain the purpose of a portfolio or collection.</p> <p>VA:Pr6.1.K Explain what an art museum is and distinguish how an art museum is different from other buildings.</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p><u>Responding</u></p> <p>VA:Re7.1.K Identify uses of art within one's personal environment.</p> <p>VA:Re7.2.K Describe what an image represents.</p> <p>VA:Re8.1.K Interpret art by identifying subject matter and describing relevant details.</p> <p>VA:Re9.1.K Explain reasons for selecting a preferred artwork.</p> <p><u>Connecting</u></p> <p>VA:Cn10.1.K Create art that tells a story about a life experience.</p> <p>VA:Cn11.1.K Identify a purpose of an artwork.</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>THEATRE</p> <p><u>Creating</u></p> <p>TH:Cr1.1.K a. With prompting and support, invent and inhabit an imaginary elsewhere in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p>b. With prompting and support, use non-representational materials to create props, puppets, and costume pieces for dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p>TH:Cr2.1.K a. With prompting and support, interact with peers and contribute to dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p>b. With prompting and support, express original ideas in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>TH:Cr3.1.K a. With prompting and support, ask and answer questions in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p><u>Performing/Presenting/Producing</u></p> <p>TH:Pr.4.1.K a. With prompting and support, identify characters and setting in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p>TH:Pr.5.1.K a. With prompting and support, understand that voice and sound are fundamental to dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p>b. With prompting and support, explore and experiment with various technical elements in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>TH:Pr.6.1.K a. With prompting and support, use voice and sound in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p><u>Responding</u></p> <p>TH:Re.7.1.K a. With prompting and support, express and emotional response to characters in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p>TH:Re.8.1.K a. With prompting and support, identify preferences in dramatic play, a guided drama experience (e.g., process drama, story drama, creative drama), or age-appropriate theatre performance.</p> <p>b. With prompting and support, name and describe settings in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>TH:Re.9.1.K a. With prompting and support, actively engage with others in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p><u>Connecting</u></p> <p>TH:Cn.10.1.K a. With prompting and support, identify similarities between characters and oneself in dramatic play, a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p>TH:Cn.11.1.K a. With prompting and support, identify skills and knowledge from other areas in dramatic play, a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p>TH:Cn.11.2.K a. With prompting and support, identify stories that are different from one another in dramatic play, a guided drama experience (e.g., process drama, story drama, creative drama).</p> <p>b. With prompting and support, tell a short story in dramatic play, a guided drama experience (e.g., process drama, story drama,</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>MUSIC</p> <p><u>Creating</u></p> <p>MU:Cr1.1.K a. With guidance, explore and experience music concepts (such as beat and melodic contour).</p> <p>b. With guidance, generate musical ideas (such as movements and motives).</p> <p>MU:Cr2.1.K a. With guidance, demonstrate and choose favorite musical ideas.</p> <p>MU:Cr3.1.K a. With guidance, apply personal, peer, and teacher feedback in refining personal musical ideas.</p> <p>MU:Cr3.2.K a. With guidance, demonstrate a final version of personal musical ideas to peers.</p> <p><u>Performing/Presenting/Producing</u></p> <p>MU:Pr4.1.K a. With guidance, demonstrate and state personal interest in varied musical selections.</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>MU:Pr4.2.K a. With guidance, explore and demonstrate awareness of music contrasts (such as high/low, loud/soft, same/different) in a variety of music selected for performance.</p> <p>MU:Pr4.3.K With guidance, demonstrate awareness of expressive qualities (such as voice quality, dynamics, and tempo) that support the creators' expressive intent.</p> <p>MU:5.1.K a. With guidance, apply personal, teacher, and peer feedback to refine music making.</p> <p>b. With guidance, use suggested strategies in rehearsal to improve expressive qualities of music.</p> <p>MU:Pr6.1.K a. With guidance, perform music with expression.</p> <p>b. Perform appropriately for the (formal or informal) audience.</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p><u>Responding</u></p> <p>MU:Re7.1.K a. With guidance, list personal interests and experiences and demonstrate reasons behind musical preference.</p> <p>MU:Re7.2.K a. With guidance, demonstrate how a specific music concept (such as beat or melodic direction) is used in music.</p> <p>MU:Re8.1.K a. With guidance, demonstrate awareness of expressive qualities (such as dynamics and tempo) that reflect creators'/performers' expressive intent.</p> <p>MU:Re9.1.K a. With guidance, apply personal and expressive preferences in the evaluation of music.</p> <p><u>Connecting</u></p> <p>MU:Cn10.0.Ka Demonstrate how interests, knowledge, and skills relate to personal choices and intent when creating, performing, and responding to music.</p>

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Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>Embedded within: MU:Cr3.2.Ka With guidance, demonstrate a final version of personal musical ideas to peers.</p> <p>MU:Pr4.1.Ka With guidance, demonstrate and state personal interest in varied musical selections. MU:Pr4.3.Ka With guidance, demonstrate awareness of expressive qualities (such as voice quality, dynamics, and tempo) that support the creators' expressive intent.</p> <p>MU:Cn11.0.Ka Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.</p> <p>Embedded within: MU:Pr4.2.Ka With guidance, explore and demonstrate awareness of music contrasts (such as high/low, loud/soft, same/different) in a variety of music selected for performance.</p> <p>MU:Re7.2.Ka With guidance, demonstrate how a specific music concept (such as beat or melodic direction) is used in music.</p> <p>MU:Re9.1.Ka With guidance, apply personal and expressive preferences in the evaluation of music.</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>MUSIC—HARMONIZING INSTRUMENTS STRAND</p> <p>Proficiency levels for this strand represent expectations beginning in later elementary grades.</p> <p>MUSIC—TRADITIONAL AND EMERGING ENSEMBLES STRAND</p> <p>Proficiency levels for this strand represent expectations beginning in later elementary grades.</p> <p>MUSIC—COMPOSITION AND THEORY STRAND</p> <p>Proficiency levels for this strand represent expectations beginning in high school.</p> <p>MUSIC—MUSIC TECHNOLOGY STRAND</p> <p>Proficiency levels for this strand represent expectations beginning in high school.</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>DANCE</p> <p><u>Creating</u></p> <p>DA:Cr2.1.K a. Improvise dance that has a beginning, middle, and end.</p> <p>b. Express an idea, feeling, or image, through improvised movement moving alone or with a partner.</p> <p>DA:Cr3.1.K a. Apply suggestions for changing movement through guided improvisational experiences.</p> <p>b. Depict a dance movement by drawing a picture or using a symbol.</p> <p><u>Performing/Presenting/Producing</u></p> <p>DA:Pr4.1.K a. Make still and moving body shapes that show lines (for example, straight, bent, and curved), changes levels, and vary in size (large/small). Join with others to make a circle formation and work with others to change its dimensions.</p> <p>b. Demonstrate tempo contrasts with movements that match to tempo of sound</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>c. Identify and apply different characteristics to movements (for example, slow, smooth, or wavy).</p> <p>DA:Pr5.1.K</p> <p>a. Demonstrate same-side and cross-body locomotor and no-locomotor movements, body patterning movements, and body shapes.</p> <p>b. Move safely in general space and start and stop on cue during activities, group formations, and creative explorations while maintaining personal space.</p> <p>c. Move body parts in relation to other body parts and repeat and recall movements upon request.</p> <p>DA:Pr6.1.K</p> <p>a. Dance for and with others in a designated space.</p> <p>b. Select a prop to use as part of a dance.</p> <p><u>Responding</u></p> <p>DA:Re7.1.K</p> <p>a. Find a movement that repeats in a dance.</p> <p>b. Demonstrate or describe observed or performed dance movements.</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>DA:Re8.1.K a. Observe movement and describe it using simple dance terminology.</p> <p>DA:Re9.1.K a. Find a movement that was noticed in a dance. Demonstrate the movement that was noticed and explain why it attracted attention.</p> <p><u>Connecting</u></p> <p>DA:Cn10.1.K a. Recognize and name an emotion that is experienced when watching, improvising, or performing dance and relate it to a personal experience.</p> <p>b. Observe a work of visual art. Describe and then express through movement something of interest about the artwork, and ask questions for discussion concerning the artwork.</p> <p>DA:Cn11.1.K a. Describe or demonstrate the movements in a dance that was watched or performed.</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>MEDIA ARTS</p> <p><u>Creating</u></p> <p>MA:Cr1.1.K Discover and share ideas for media artworks using play and experimentation.</p> <p>MA:Cr2.1.K With guidance, use ideas to for plans or models for media arts productions.</p> <p>MA:Cr3.1.K a. Form and capture media arts content for expression and meaning in media arts productions.</p> <p>b. Make changes to the content, form, or presentation of media artworks and share results.</p> <p><u>Performing/Presenting/Producing</u></p> <p>MA:Pr4.1.K With guidance, combine arts forms and media content, such as dance and video, to form media artworks.</p> <p>MA:Pr5.1.K a. Identify and demonstrate basic skills, such as handling tools, making choices, and cooperating in creating media artworks.</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p>b. Identify and demonstrate creative skills, such as performing, within media arts productions.</p> <p>c. Practice, discover, and share how media arts creation tools work.</p> <p>MA:Pr6.1.K</p> <p>a. With guidance, identify and share roles and the situation in presenting media artworks.</p> <p>b. With guidance, identify and share reactions to the presentation of media artworks.</p> <p><u>Responding</u></p> <p>MA:Re7.1.K</p> <p>a. Recognize and share components and messages in media artworks.</p> <p>b. Recognize and share how a variety of media artworks create different experiences.</p> <p>MA:Re8.1.K</p> <p>With guidance, share observations regarding a variety of media artworks.</p> <p>MA:Re9.1.K</p> <p>Share appealing qualities and possible changes in media artworks.</p>

Infant/Toddler: Birth - 3 Years	Preschool: 3 - 5 Years	End of Kindergarten
		<p><u>Connecting</u></p> <p>MA:Cn10.1.K a. Use personal experiences and choices in making media artworks.</p> <p>b. Share memorable experiences of media artworks.</p> <p>MA:Cn11.1.K a. With guidance, share ideas in relating media artworks and everyday life, such as daily activities.</p> <p>b. With guidance, interact safely and appropriately with media arts tools and environments.</p>

Infant/Toddler Birth - 3 Years	Preschool 3 - 5 Years	End of Kindergarten
All eight IELS areas contain standards that align to Iowa CORE English Language Arts.	All eight IELS areas contain standards that align to Iowa CORE English Language Arts.	access the Iowa CORE at www.iowacore.gov
Area 1: Social and Emotional Development	Area 1: Social and Emotional Development	<p>LITERATURE</p> <p>Key Ideas and Details:</p> <ol style="list-style-type: none"> 1. With prompting and support, ask and answer questions about key details in a text. (RL.K.1) 2. With prompting and support, retell familiar stories, including key details. (RL.K.2) 3. With prompting and support, identify characters, settings, and major events in a story. (RL.K.3) <p>Craft and Structure:</p> <ol style="list-style-type: none"> 4. Ask and answer questions about unknown words in a text. (RL.K.4) 5. Recognize common types of texts (e.g. storybooks, poems). (RL.K.5) 6. With prompting and support, name the author and illustrator of a story and define the role of each in telling the story. (RL.K.6)
<p>Standard 1.1.IT Self Infants and toddlers display a positive sense of self. (p 90)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. responds to familiar adults' and children's interactions using behaviors such as gazing, cuddling, and accepting assistance. 2. explores his/her own body. 3. shows awareness of self, such as responding to own image in mirror. 4. shows preferences for toys and experiences. 5. expresses reaction through facial expressions, sounds, and gestures. 6. begins to recognize own power by showing interest in making choices or expressing preferences. 	<p>Standard 1.1.PS Self Children express a positive awareness of self in terms of specific abilities, characteristics, and preferences. (p 92)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. expresses a positive sense of self in terms of specific abilities. 2. expresses needs, wants, opinions, and feelings in socially appropriate ways. 3. demonstrates increasing confidence and independence in a variety of tasks and routines, and expresses pride in accomplishments. 4. recognizes own power to make choices. 	

Area 1: Social and Emotional Development	Area 1: Social and Emotional Development	
<p>Standard 1.2.IT Self-Regulation Infants and toddlers show increasing awareness of and ability to express emotions in socially and culturally appropriate ways. (p 94)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.indicates need for assistance through actions such as crying, gesturing, vocalizing, using words, or approaching familiar adults. 2.comforts him or herself when distressed or tired by actions such as sucking, stroking a blanket, or hugging a toy. 3.begins to express a range and variety of feelings and emotions through body language, facial expressions, actions, and/or verbal responses. 4.shows increasing ability to recognize own feelings, including simple (e.g., mad, glad) and complex (e.g., excited, frustrated, disappointed) feelings. 5.responds to emotions expressed by others, for example, by comforting another child or crying in response to the cries of others. 6.begins to control behavior through following simple rules and limits in a variety of settings. 7.begins to transition between feeling states with guidance from a caring adult. 	<p>Standard 1.2.PS Self-Regulation Children show increasing ability to regulate their behavior and express their emotions in appropriate ways. (p 96)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.demonstrates the ability to monitor his/her own behavior and its effects on others, following and contributing to adult expectations. 2.persists with difficult tasks without becoming overly frustrated. 3.begins to accept consequences of his/her own actions. 4.manages transitions and changes to routines. 5.states feelings, needs, and opinions in difficult situations without harming self, others, or property. 6.expresses an increasing range and variety of emotions, and transitions between feeling states become smoother. 	<p>Integration of Knowledge and Ideas:</p> <ol style="list-style-type: none"> 7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts). (RL.K.7) 8. (Not applicable to literature) (RL.K.8) 9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories. (RL.K.9) <p>Range of Reading and Text Level Complexity:</p> <ol style="list-style-type: none"> 10. Actively engage in group reading activities with purpose and understanding. (RL.K.10) <p>INFORMATIONAL TEXT</p> <p>Key Ideas and Details:</p> <ol style="list-style-type: none"> 1. With prompting and support, ask and answer questions about key details in a text. (RI.K.1) 2. With prompting and support, identify the main topic and retell key details of a text. (RI.K.2) 3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text. (RI.K.3)

Area 1: Social and Emotional Development	Area 1: Social and Emotional Development	
<p>Standard 1.3.IT Relationships with Adults Infants and toddlers relate positively with significant adults. (p 98)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.distinguishes between familiar and unfamiliar adults; for example, is comforted by the sight of the familiar adult or the sound of the familiar adult's voice. 2.accepts assistance and comfort from familiar adults. 3.seeks and maintains contact with familiar adults; for example, by looking at the adult, hearing the adult's voice, or touching the adult. 4.shows discomfort at separations from familiar adults. 5.seeks help from familiar adults in unfamiliar situations. 6.explores the environment, both indoors and outdoors, but may return to a familiar adult periodically for security. 7.begins to imitate or portray roles and relationships. 8.Imitates adult behaviors. 	<p>Standard 1.3.PS Relationships with Adults Children relate positively with significant adults. (p 100)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.interacts comfortably with familiar adults. 2.accepts guidance, comfort, and directions from a range of familiar adults in a variety of environments. 3.expresses affection toward familiar adults. 4.shows trust in familiar adults. 5.seeks help, as needed, from familiar adults. 	<p>INFORMATIONAL TEXT (cont'd)</p> <p>Craft and Structure:</p> <ol style="list-style-type: none"> 4. With prompting and support, ask and answer questions about unknown words in a text. (RI.K.4) 5. Identify the front cover, back cover, and title page of a book. (RI.K.5) 6. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text. (RI.K.6) <p>Integration of Knowledge and Ideas:</p> <ol style="list-style-type: none"> 7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts). (RI.K.7) 8. With prompting and support, identify the reasons an author gives to support points in a text. (RI.K.8) 9. With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures). (RI.K.9) <p>Range of Reading and Text Level Complexity:</p> <ol style="list-style-type: none"> 10. Actively engage in group reading activities with purpose and understanding. (RI.K.10)

Area 1: Social and Emotional Development	Area 1: Social and Emotional Development	
<p>Standard 1.4.IT Relationships with Children Infants and toddlers respond to and initiate interactions with other children. (p 102)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. Initiates interactions with other children through gestures, vocalizations, facial expressions, and/or body movements. 2. accepts help from familiar adults in interactions with other children. 3. begins to demonstrate empathy for others and responds to people’s facial expressions, body language, and or interactions. 4. develops an awareness of his/her behavior and how it affects others. 5. imitates other children’s behaviors. 	<p>Standard 1.4.PS Relationships with Children Children respond to and initiate appropriate interactions with other children, and form positive peer relationships. (p 104)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. initiates and sustains positive interactions with peers, organizes play. 2. wants to please and be like friends 3. negotiates with others to resolve disagreements. 4. develops friendships with other peers; starts to demonstrate turn taking and sharing with others. 5. expresses empathy to peers, demonstrates caring behaviors 6. accepts consequences of his/her actions. 7. recognizes how behaviors can affect others. 8. names friends. 	<p>FOUNDATIONAL SKILLS</p> <p><u>Print Concepts:</u></p> <ol style="list-style-type: none"> 1. Demonstrate understanding of the organization and basic features of print. <ol style="list-style-type: none"> a. Follow words from left to right, top to bottom, and page by page. b. Recognize that spoken words are represented in written language by specific sequences of letters. c. Understand that words are separated by spaces in print. d. Recognize and name all upper- and lowercase letters of the alphabet. (RF.K.1) <p><u>Phonological Awareness:</u></p> <ol style="list-style-type: none"> 2. Demonstrate understanding of spoken words, syllables, and sounds phonemes. <ol style="list-style-type: none"> a. Recognize and produce rhyming words. b. Count, pronounce, blend, and segment syllables in spoken words. c. Blend and segment onsets and rimes of single-syllable spoken words. d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. (This does not include CVCs ending with /l/, /r/, or /x/). e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words. (RF.K.2)

Area 2: Physical Well-Being and Motor Development	Area 2: Physical Well-Being and Motor Development	
<p>Standard 2.3.IT Small Motor Development Infants and toddlers develop small motor skills. (p 116)</p> <p>Benchmarks: <i>The infant:</i></p> <ol style="list-style-type: none"> 1.uses hand-eye coordination to perform self-help and small motor tasks, such as eating food, picking up objects, placing objects on a surface, transferring objects from hand to hand, and fitting objects into a hole in a box. <p><i>The toddler:</i></p> <ol style="list-style-type: none"> 2.uses hand-eye coordination to perform self-help and small motor tasks such as eating with a fork or spoon, completing simple puzzles, stacking blocks, dressing self with assistance, scribbling with crayons or markers, participating in finger plays and using musical instruments. 	<p>Standard 2.3.PS Small Motor Development Children develop small motor skills. (p 118)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.uses hand-eye coordination to perform self-help and small motor tasks with a variety of manipulative materials such as beads, pegs, shoelaces, and puzzle pieces and musical instruments. 2.demonstrates increased skills in using scissors and writing tools for various learning experiences. 	<p>FOUNDATIONAL SKILLS (cont'd)</p> <p><u>Phonics and Word Recognition:</u></p> <ol style="list-style-type: none"> 3. Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sound for each consonant. b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels. c. Read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does). d. Distinguish between similarly spelled words by identifying the sounds that differ. <p>(RF.K.3)</p> <p><u>Fluency:</u></p> <ol style="list-style-type: none"> 4. Read emergent-reader texts with purpose and understanding. (RF.K.4)

Area 3: Approaches to Learning	Area 3: Approaches to Learning	
<p>Standard 3.1.IT Curiosity and Initiative Infants and toddlers express curiosity and initiative in exploring the environment and learning new skills. (p 122)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.shows interest in people including other infants, objects, and events. 2.uses their senses to choose, explore, and manipulate a variety of objects or toys in a variety of ways. 3.actively plays with or near adults, other children, and materials. 	<p>Standard 3.1.PS Curiosity and Initiative Children express curiosity, interest, and initiative in exploring the environment, engaging in experiences, and learning new skills. (p 124)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.chooses to deliberately explore a variety of materials and experiences, seeking out new challenges. 2.participates in experiences with eagerness, flexibility, imagination, independence, and inventiveness. 3.asks questions about a variety of topics. 4.repeats skills and experiences to build competence and support the exploration of new ideas. 	<p style="text-align: center;">WRITING</p> <p><u>Text Types and Purposes:</u></p> <ol style="list-style-type: none"> 1. Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., <i>My favorite book is...</i>). (W.K.1) 2. Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (W.K.2) 3. Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened. (W.K.3) <p><u>Production and Distribution of Writing:</u></p> <ol style="list-style-type: none"> 4. (Begins in grade 3) (W.K.4) 5. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. (W.K.5) 6. With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaborations with peers. (W.K.6)

Area 3: Approaches to Learning	Area 3: Approaches to Learning	
<p>Standard 3.2.IT Engagement and Persistence Infants and toddlers purposefully choose, engage, and persist in play, experiences, and routines. (p 126)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.holds attention of familiar adult; for example, through eye contact or vocalizations. 2.repeats familiar and newly learned experiences. 3.of interested, maintains focus on people or objects, play experiences, or novel events. 4.demonstrates persistence with challenging materials and experiences. 	<p>Standard 3.2.PS Engagement and Persistence Children purposefully choose and persist in experiences and play. (p 128)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.maintains concentration on a task despite distractions and interruptions. 2.stays engaged and completes a variety of both adult-directed and self-initiated tasks, projects, and experiences of increasing degrees of difficulty. 3.sets goals and follows a plan in order to complete a task. 4.chooses to participate in play and learning experiences. 	<p>WRITING (cont'd)</p> <p><u>Research to Build and Present Knowledge:</u></p> <ol style="list-style-type: none"> 7.Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (W.K.7) 8.With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. (W.K.8) 9.(Begins in grade 4) (W.K.9) <p><u>Range of Writing:</u></p> <ol style="list-style-type: none"> 10.(Begins in grade 3) (W.K.10)

Area 3: Approaches to Learning	Area 3: Approaches to Learning	
<p>Standard 3.3.IT Reasoning and Problem Solving Infants and toddlers demonstrate strategies for reasoning and problem solving. (p 130)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.uses an object, action, or adult to accomplish tasks, such as pulling a blanket to reach a toy or pushing a button to hear a sound. 2.experiments to find a solution to a problem. 3.imitates an adult action to solve a problem. 4.recognizes difficulties and adjusts actions, as needed. 5.seek and accepts help when encountering a problem beyond his/her ability to solve independently. 	<p>Standard 3.3.PS Reasoning and Problem Solving Children demonstrate strategies for reasoning and problem solving. (p 132)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.shows interest in and finds a variety of solutions to questions, tasks, or problems. 2.recognizes and solves problems through active exploration, including trial and error, and through interactions and discussions with peers and adults. 3.shares ideas or makes suggestions of how to solve a problem presented by another person. 	<p>SPEAKING AND LISTENING</p> <p><u>Comprehension and Collaboration:</u></p> <ol style="list-style-type: none"> 1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and large groups. <ol style="list-style-type: none"> a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges. (SL.K.1) 2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood. (SL.K.2) 3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (SL.K.3) <p><u>Presentation of Knowledge and Ideas:</u></p> <ol style="list-style-type: none"> 4. Describe familiar people, places, things, and events and, with prompting and support, provide attention to detail. (SL.K.4) 5. Add drawings or other visual displays to descriptions as desired to provide additional detail. (SL.K.5) 6. Speak audibly and express thoughts, feelings, and ideas clearly when retelling familiar stories or reciting poems, nursery rhymes or lines of a play. (SL.K.6)

Area 3: Approaches to Learning	Area 3: Approaches to Learning	
<p>Standard 3.4.IT Play and Senses Infants and toddlers engage in play to learn. (p 134)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.uses sights, smells, sounds, textures, and tastes to explore and experience routines and materials within the environment. 2.chooses and participates in a variety of play experiences. 3.imitates behaviors of others in play. 4.repeats experiences with materials, adults, and peers to build knowledge and understanding of the world around them. 	<p>Standard 3.4.PS Play and Senses Children engage in play to learn. (p 136)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.engages in a variety of indoor and outdoor play experiences. 2.uses sights, smells, sounds, textures, and tastes to discriminate between and explore experiences, materials, and the environment. 3.engages in self-initiated, unstructured play. 4.plans and executes play experiences alone and with others. 	<p style="text-align: center;">LANGUAGE</p> <p>Conventions of Standard English:</p> <ol style="list-style-type: none"> 1.Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none"> a. Print many upper- and lowercase letters. b. Use frequently occurring nouns and verbs. c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes). d. Understand and use question words (interrogatives) (e.g., <i>who, what, where, when, why, how</i>). e. Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with). f. Produce and expand complete sentences in shared language activities. (L.K.1) 2.Demonstrate command of conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none"> a. Capitalize the first word in a sentence and the pronoun I. B. Recognize and name end punctuation. c. Write a letter or letters for most consonant and short-vowel sounds (phonemes). d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships. (L.K.2)

Area 4: Social Studies	Area 4: Social Studies	
<p>Standard 4.1.IT Awareness of Family and Community Infants and toddlers demonstrate a sense of belonging within their family, program, and other social settings or groups. (p 140)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.expresses enjoyment at being in a familiar setting or group. 2.recognizes familiar adults and uses them to determine safety during exploration. 3.freely explores and plays within familiar settings. 	<p>Standard 4.1.PS Awareness of Family and Community Children demonstrate an increasing awareness of belonging to a family and community. (p 142)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.demonstrates understanding that communities are composed of groups of people who live, play, or work together. 2.demonstrates ability to identify communities to which he or she belongs. 3.recognizes that his or her family is an important group to which he or she belongs. 4.demonstrates responsibility as a member of a family or community. 5.shows confidence in expressing individual opinions and thoughts while respecting the thoughts and opinions of others. 6.participates in creating and following rules and routines. 7.demonstrates an initial awareness of the concepts of fairness, individual rights, and welfare of family and community members. 	<p>LANGUAGE (cont'd)</p> <p>Knowledge of Language: 3. (Begins in grade 2) (L.K.3)</p> <p>Vocabulary Acquisition and Use:</p> <ol style="list-style-type: none"> 4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. <ol style="list-style-type: none"> a. Identify new meanings for familiar words and apply them accurately (e.g., knowing <i>duck</i> is a bird and learning the verb to <i>duck</i>). b. Use the most frequently occurring inflections and affixes (e.g., <i>-ed, -s, re-, un-, pre-, -ful, -less</i>) as a clue to the meaning of an unknown word. (L.K.4) 5. With guidance and support from adults, explore word relationships and nuances in word meanings. <ol style="list-style-type: none"> a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent. b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). c. Identify real-life connections between words and their use (e.g., note places at school that are <i>colorful</i>). d. Distinguish shades of meaning among verbs describing the same general action (e.g., walk, march, strut, prance) by acting out the meanings. (L.K.5)

Area 4: Social Studies	Area 4: Social Studies	
<p>Standard 4.2.IT Awareness of Culture Infants and toddlers demonstrate a strong sense of self within their culture. (p 144)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.expresses enjoyment at being in a familiar setting or group. 2.chooses and participates in familiar experiences, including songs and stories from his or her home culture. 3.explores materials from various cultures. 	<p>Standard 4.2.PS Awareness of Culture Children demonstrate an increasing awareness of culture and diversity. (p 146)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.demonstrates an awareness of diversity such as family characteristics, adult roles within a family, and skin and hair color. 2.demonstrates acceptance of persons from different cultures and ethnic groups. 3.demonstrates a sense of belonging, feeling pride in his or her own culture while showing respect for others. 4.uses respectful and descriptive language for human similarities and differences, demonstrating curiosity, comfort, ease, and empathy with similarities and differences. 	<p>LANGUAGE (cont'd)</p> <p>6.Use words and phrases acquired through conversations, reading and being read to, and responding to texts. (L.K.6)</p>

Area 4: Social Studies	Area 4: Social Studies	
<p>Standard 4.3.IT Exploration of the Environment Infants and toddlers explore new environments with interest and recognize familiar places. (p 148)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.demonstrates interest and curiosity within familiar and unfamiliar settings. 2.explores and plays with new, as well as familiar objects, in the environment using all five senses. 3.chooses and participates in unfamiliar experiences. 	<p>Standard 4.3.PS Exploration of the Environment Children demonstrate an Increasing awareness of the environment in which they live, especially how people (including themselves) relate to that environment. (p 150)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.interacts with the world, first with familiar settings and then with less familiar ones; first in simple ways and then in more complex, exploratory ways. 2.constructs meaning about him/herself and the world through relevant and meaningful experiences with objects and their environment. 3.recognizes aspects of the environment, such as roads, buildings, trees, gardens, bodies of water, or land formations. 4.recognizes that people share the environment with other people, animals, and plants. 5.understands that people can take care of the environment through activities and experiences, such as cleaning, conserving, reusing, and recycling. 6.recognizes a variety of jobs and the work associated with them. 	

Area 4: Social Studies	Area 4: Social Studies	
	<p>Standard 4.4.PS Awareness of the Past Children demonstrate an increasing awareness of past events and how those events relate to one's self, family, and community. (p 152)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.differentiates between past, present, and future. 2.represents events and experiences that occurred in the past through words, play, and art. 3.uses past events to construct meaning of the world. 4.understands that events happened in the past and that the events relate to oneself, family, community, and culture. 	

Area 5: Creative Arts	Area 5: Creative Arts	
<p>Standard 5.1.IT Art Infants and toddlers participate in a variety of sensory and art-related experiences. (p 156)</p> <p>Benchmarks: <i>The infant:</i> 1.gazes at a picture, photo, or mirror images. 2.manipulates and explores play materials within the environment. <i>The older infant and toddler also:</i> 3.expresses interest in art-related experiences and media. 4.engages in experiences that support creative expression. 5.chooses and experiments with a variety of art materials such as playdough, crayons, chalk, water, markers, and paint.</p>	<p>Standard 5.1.PS Art Children participate in a variety of art and sensory-related experiences. (p 158)</p> <p>Benchmarks: <i>The child:</i> 1.uses a variety of drawing and art materials, such as drawing utensils, paint, clay, and wood to create original works, form, and meaning. 2.expresses ideas about his/her own artwork and the artwork of others, relating artwork to what is happening in the environment or life experiences. 3.demonstrates care and persistence when involved in art projects. 4.plans and works cooperatively to create drawings, paintings, sculptures, and other art projects.</p>	

Area 5: Creative Arts	Area 5: Creative Arts
<p>Standard 5.2.IT Music, Rhythm, and Movement Infants and toddlers participate in a variety of rhythm, music, and movement experiences. (p 160)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.shows interest in songs, tones, rhythms, voices, and music. 2.experiments with a variety of age-appropriate instruments and sound-making objects. 3.enjoys exploring ways of interacting with others through touch and motion. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 4.chooses and participates in music and movement experiences. 5.sings simple songs and participates in finger plays. 6.sings daily songs to recognize the patterns throughout their day. 	<p>Standard 5.2.PS Music, Rhythm, and Movement: Children participate in a variety of music and movement experiences. (p 162)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.participates in a variety of musical and rhythmic experiences, including singing, dancing, listening, playing simple rhythmic and tonal instruments, and creating and singing chants, rhymes, and finger plays from diverse cultures. 2.demonstrates meaningful creative and imaginative responses, including taking on pretend roles, when listening to music to reflect the expressive elements of music. 3.notices differences in high and low sounds (pitch), long and short sounds (rhythm), loud and quiet sounds (dynamics), fast and low sounds (tempo), and differences between instruments or sounds (timbre). 4.recognizes patterns in songs and rhymes and repeats them, using songs, chants or instruments, including the emergence of steady beat. 5.demonstrates an awareness of music and sound as part of daily life indoors and outdoors.

Area 5: Creative Arts	Area 5: Creative Arts	
<p>Standard 5.3.IT Dramatic Play Infants and toddlers engage in dramatic play experiences. (p 166)</p> <p>Benchmarks: <i>The infant or toddler:</i> 1. imitates the sounds, facial expressions, gestures, or behaviors of another person. 2. imitates the actions and sounds of animals, people, and objects. <i>The toddler also:</i> 3. engages in dramatic play in both indoor and outdoor environments.</p>	<p>Standard 5.3.PS Dramatic Play Children engage in dramatic play experiences. (p 168)</p> <p>Benchmarks: <i>The child:</i> 1. shows creativity and imagination when using materials. 2. assumes different roles in dramatic play situations. 3. interacts with peers in dramatic play experiences that become more extended and complex.</p>	

Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
<p>Standard 6.1.IT Language Understanding and Use Infants and toddlers understand and use communication and language for a variety of purposes. (p 172)</p> <p>Benchmarks: <i>The infant or toddler, in home language and English:</i></p> <ol style="list-style-type: none"> 1.responds to the vocalizations and communications, verbal and nonverbal, of familiar adults. 2.uses vocalizations and gestures to gain attention from others. 3.uses vocalizations and gestures to communicate wants and needs. 4.increases both listening (receptive) and speaking (expressive) vocabulary. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 5.progresses to using words and then simple sentences to communicate. 6.participates in conversations that include turn-taking, using both receptive (listening) and expressive (speaking) language skills. 7.answers simple questions. 8.follows simple directions. 	<p>Standard 6.1.PS Language Understanding and Use Children understand and use communication and language for a variety of purposes. (p 174)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.demonstrates a steady increase in listening (receptive language) and speaking (expressive language) vocabulary. 2.initiates, listens, and responds in relationship to the topics of conversations with peers and adults. 3.speaks in phrases and sentences of increasing length and complexity. 4.follows oral directions that involve several actions. 5.asks and answers a variety of questions. 6.demonstrates knowledge of the rules of conversations such as taking turns while speaking. <p><i>The child, who is an English language learner, also:</i></p> <ol style="list-style-type: none"> 7.uses his or her home language, sometimes in combination with English, to communicate with people. 	

Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
	<p>Standard 6.1.PS Language Understanding and Use: Children understand and use communication and language for a variety of purposes. [cont'd] (p 174)</p> <ul style="list-style-type: none"> 8. demonstrates ongoing development and improvement in vocabulary and complexity in use of home language. 9. demonstrates engagement at home or the classroom in literacy activities to related to her or his home language. 10. demonstrates receptive (listening) and express (speaking English language skills to be able to comprehend the English language. 11. demonstrates engagement in English literacy activities to be able to understand and respond to books, storytelling, and songs presented in English. 	

Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
<p>Standard 6.2.IT Early Literacy Infants and toddlers engage in early reading experiences. (p 178)</p> <p>Benchmarks: <i>The infant and toddler:</i></p> <ol style="list-style-type: none"> 1.explores or shows interest in books by picking them up, mouthing them, carrying them, or flipping through pages. 2.focuses on a book or the reader when hearing stories read to him/her. 3.gazes at or points to pictures in books. 4.responds to or engages in songs, rhyming games, or finger plays with a familiar adult. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 5.points to, labels, and/or talks about objects, events, or people within books. 6.enjoys and repeats songs, rhymes, or finger plays. 7.answers simple questions related to books. 	<p>Standard 6.2.PS Early Literacy Children engage in early reading experiences. (p 180)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.expresses an interest and enjoyment in listening to books and attempts to read familiar books. (Print motivation) 2.displays book handling knowledge by turning the book right side up, turning one page at a time, recognizing familiar books by the cover, pointing to words as they talk about or retell stories using books, and using left to right sweep. (Print awareness) 3.shows an awareness of environmental print such as pointing to familiar words or letters. (Print awareness) 4.understands that sentences are made up of words and words are made of individual letters. (Concepts of print) 5.understands and uses, increasingly, a variety of words. (Vocabulary) 6.shows increasing comprehension of a story through retelling the story and/or recognizing story elements such as the plot or characters. (Comprehension and story retelling) 	

Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
	<p>Standard 6.2.PS Early Literacy: Children engage in early reading experiences. [cont'd] (p 180)</p> <ul style="list-style-type: none"> 6. increasingly recognizes and names more of the letters in their first and last name and letters they see frequently. (Letter knowledge) 7. recognizes most upper and lower case letters. (Letter knowledge) 8. produces the sound of some of the letters he or she knows. (Phonics) 9. identifies words that rhyme from a group of three words: cat, rug, hat. (Phonological awareness - rhyme) 10. identifies the beginning sound in words, such as identifying two words that start with the same sound. (Phonological awareness – alliteration) 11. identifies the syllables in her or his name and in familiar objects or words by clapping and segmenting the syllables. (Phonological awareness – segmenting syllables) 12. blends syllables to identify a word, object, or picture. (Phonological awareness – blending syllables) 	

Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
<p>Standard 6.3.IT Early Writing Infants and toddlers engage in early writing experiences. (p 184)</p> <p>Benchmarks: <i>The infant:</i> 1.grasps and/or manipulates a variety of objects in his/her environment. <i>The older infant and toddler also:</i> 2.scribbles spontaneously, usually using a fist grip. 3.shows increasing skill in manipulating objects such as stacking several items, using pegboards, and mastering the use of eating utensils.</p>	<p>Standard 6.3.PS Early Writing Children engage in early writing experiences. (p 186)</p> <p>Benchmarks: <i>The child:</i> 1.attempts to communicate with others using scribbles, shapes, pictures, letter-like forms and/or letters in writing. 2.experiments with a variety of writing tools such as pencils, crayons, brushes, markers, and digital tools. 3.uses expressive (speaking) language to share intended meaning of drawings and writing. 4.starts to demonstrate interest in learning to write letters, especially the letters in his/her name. 5.uses invented spelling consisting of beginning sounds to represent a whole word.</p>	

Area 7: Mathematics	Area 7: Mathematics	
	<p>Standard 7.5.PS Data Analysis Children demonstrate the process of data analysis by sorting and classifying, asking questions, and finding answers. (p 204)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. sorts collections of objects into sets such as lines, piles, or groups by color, size, shape, or kind. 2. sorts and resorts in a variety of ways. 3. compares and orders such as most to least, same amount as, and least to most. 4. sorts data into two groups such as big and not big; green and not green; and pets and not pets. 5. asks questions, collects, records, and organizes classroom data to find answers to questions. 	

Area 8: Science	Area 8: Science	
<p>Standard 8.1.IT Scientific Investigations Infants and toddlers gather and interpret information from the environment around them. (p 208)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.begins to notice objects and events in the indoor and outdoor environments. 2.engages in a variety of play experiences and exploration when provided open-ended materials (ie. toys or household items that can be taken apart/put together, a container of water and various objects, seeds of different sizes/textures/shapes). 3.uses one or more senses to make observations of their environment. 4.reacts to changes in the environment. 5.attempts to manipulate/understand their environment through repetitive play. 6.identifies and interacts with new objects placed in their environment. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 7.asks simple questions about observations of the environment using language (may be home language), behavior, interactions, etc. 	<p>Standard 8.1.PS Scientific Investigations Children gather information and conduct investigations to address their wonderings and test solutions to problems. (p 210)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.asks questions about his/her environment, and begins to identify and look for information that will help answer those questions or solve problems. 2.plans and conducts simple investigations alone or in collaboration with peers to answer questions or design solutions to scientific or engineering problems. 3.begins to use appropriate scientific tools/ technology in conducting investigations, i.e., scales, tape measure, magnifying glass, tweezers, or eye dropper. 4.observes, investigates, and describes objects, materials, and other physical science phenomena such as shadows or reflections in the classroom and outdoor environments. 	

Area 8: Science	Area 8: Science	
	<p><i>Standard 8.1.PS Scientific Investigations</i> Children gather information and conduct investigations to address their wonderings and test solutions to problems. [cont'd] (p 210)</p> <p>5. observes, investigates, and describes the characteristics, behavior, and habitats of living things.</p> <p>6. asks questions based on observations of weather-related phenomena and begins to notice relationships and patterns over time such as it is warmer in the summer and colder in the winter.</p> <p>7. develops an awareness of nature through the exploration of natural environments and materials or through caring for animals or plants.</p>	

Area 8: Science	Area 8: Science	
<p>Standard 8.2.IT Scientific Reasoning: Infants and toddlers use reasoning to make sense of information in their environment. (p 214)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.uses trusted relationships to gain understanding of the living and nonliving world. 2.explores cause and effect relationships by engaging in problem solving through trial and error. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 3.shows understanding of object permanence (that people exist when they cannot be seen, and objects exist even when out of sight). 4.makes a choice to reach a desired outcome. 	<p>Standard 8.2.PS Scientific Reasoning Children use reasoning to make sense of information and design solutions to problems in their environment. (p 217)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.begins to make comparisons and categorize nonliving things based on characteristics they can observe such as texture, color, size, shape, temperature, sound, odor, usefulness, weight. 2.uses information from investigations to identify similarities and differences in characteristics and behavior of living things and make inferences about their needs and how they get met such as caterpillars eat leaves. 3.uses prior experiences and/or data from observations to identify patterns in how living and nonliving things stay the same or change over time and/or when conditions change such as plants grow when they get the proper amounts of water and light; combine substances; heat/cool an item; baby animals generally resemble their parents. 	

Area 8: Science	Area 8: Science	
	<p>Standard 8.2.PS Scientific Reasoning Children use reasoning to make sense of information and design solutions to problems in their environment. [cont'd] (p 217)</p> <p>4.begins to identify ways humans positively and negatively impact the environment such as beginning awareness of conservation and respect for the environment, based on investigations.</p> <p>5.describes and compares the properties and motions of objects, based on exploration, in terms of speed and direction such as faster, down, beside and begin to notice cause and effect relationships such as a ball rolls faster on a steeper incline.</p> <p>6.begins to make patterns based on long-term explorations of weather and observations of the earth and sky begins to notice patterns such as differences in weather in different seasons and how different types of weather influence people and the environment.</p>	

Area 8: Science	Area 8: Science	
<p>Standard 8.3.IT Scientific Communication Infants and toddlers share information and understanding about experiences in their environment. (p 219)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1.produces questions using gestures and/or facial expressions. 2.expresses vocalizations and gestures to gain attention from others. 3.shows repetitive actions to demonstrate new learning experiences. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 4.composes simple verbal questions in English or home language. 5.Verbally responds to other’s questions, statements in English or home language. 6.draws pictures to represent his/her observations of objects and/or of changes to objects/the environment. 7.engages in scientific conversations, using both receptive (listening) and expressive (speaking) language skills. 	<p>Standard 8.3.PS Scientific Communication Children share information and understanding about experiences in their environment. (p 221)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1.shares observations and ideas about the properties and behavior of nonliving and living things through a variety of modalities such as language, drawing, modeling, gesturing, dramatizing. 2.obtains, evaluates, and uses age-appropriate text and online resources, with support, to gather information related to a topic of study and makes connections to observations and experiences. For example, when studying butterflies, he or she may evaluate a variety of books and begin to identify which ones are most useful for learning about real butterflies. 3.begins to ask questions of others to seek out more information on a topic. Participates in generating questions to ask a visiting expert on a topic of interest. 	

Area 8: Science	Area 8: Science	
	<p><i>Standard 8.3.PS Scientific Communication</i> Children share information and understanding about experiences in their environment. [cont'd] (p 221)</p> <p>4.offers evidence to explain the thought process he/she used to make conclusions/ claims and listens to the claims, conclusions, and evidence of others to begin to identify areas of agreement and disagreement.</p> <p>5.participates in creating a final product such as a panel, classroom book, or newsletter that communicates what was learned during one exploration or during the study of a topic over time. Individual children may contribute through language, drawing, writing, or choosing items to be included.</p>	

Infant/Toddler Birth - 3 Years	Preschool 3 - 5 Years	End of Kindergarten
Physical Well-Being/Motor Development (Area 2) Approaches to Learning (Area 3) Mathematics (Area 7) Science (Area 8)	Physical Well-Being/Motor Development (Area 2) Approaches to Learning (Area 3) Mathematics (Area 7) Science (Area 8)	access the Iowa CORE at www.iowacore.gov
Area 2: Physical Well-Being and Motor Development	Area 2: Physical Well-Being and Motor Development	
<p>Standard 2.3.IT Small Motor Development Infants and toddlers develop small motor skills. (p 116)</p> <p>Benchmarks: <i>The infant:</i></p> <ol style="list-style-type: none"> uses hand-eye coordination to perform self-help and small motor tasks, such as eating food, picking up objects, placing objects on a surface, transferring objects from hand to hand, and fitting objects into a hole in a box. <p><i>The toddler:</i></p> <ol style="list-style-type: none"> uses hand-eye coordination to perform self-help and small motor tasks such as eating with a fork or spoon, completing simple puzzles, stacking blocks, dressing self with assistance, scribbling with crayons or markers, participating in finger plays and using musical instruments. 	<p>Standard 2.3.PS Small Motor Development Children develop small motor skills. (p 118)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> uses hand-eye coordination to perform self-help and small motor tasks with a variety of manipulative materials such as beads, pegs, shoelaces, and puzzle pieces and musical instruments. demonstrates increased skills in using scissors and writing tools for various learning experiences. 	<p>COUNTING AND CARDINALITY: Know number names and the count sequence.</p> <ol style="list-style-type: none"> Count to 100 by ones and by tens. (K.CC.A.1) Count forward beginning from a given number within the known sequence (instead of having to begin at 1). (K.CC.A.2) Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). (K.CC.A.3) <p>Count to tell the number of objects.</p> <ol style="list-style-type: none"> Understand the relationship between numbers and quantities; connect counting to cardinality. <ol style="list-style-type: none"> When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Area 3: Approaches to Learning	Area 3: Approaches to Learning	
<p>Standard 3.3.IT Reasoning and Problem Solving Infants and toddlers demonstrate strategies for reasoning and problem solving. (p 130)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. uses an object, action, or adult to accomplish tasks, such as pulling a blanket to reach a toy or pushing a button to hear a sound. 2. experiments to find a solution to a problem. 3. imitates an adult action to solve a problem. 4. recognizes difficulties and adjusts actions, as needed. 5. seeks and accepts help when encountering a problem beyond his/her ability to solve independently. 	<p>Standard 3.3.PS Reasoning and Problem Solving Children demonstrate strategies for reasoning and problem solving. (p 132)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. shows interest in and finds a variety of solutions to questions, tasks, or problems. 2. recognizes and solves problems through active exploration, including trial and error, and through interactions and discussions with peers and adults. 3. shares ideas or makes suggestions of how to solve a problem presented by another person. 	<p>COUNTING AND CARDINALITY (cont'd)</p> <ol style="list-style-type: none"> b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. c. Understand that each successive number name refers to a quantity that is one larger. (K.CC.B.4) <p>5. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. (K.CC.B.5)</p> <p>Compare Numbers</p> <ol style="list-style-type: none"> 6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (K.CC.C.6) 7. Compare two numbers between 1 and 10 presented as written numerals. (K.CC.C.7)

Area 7: Mathematics	Area 7: Mathematics	
<p>Standard 7.1.IT Comparison, Number, and Operation Infants and toddlers show increasing understanding of comparisons and amount, including use of numbers and counting. (p 190)</p> <p>Benchmarks: <i>The infant:</i> 1. begins to notice characteristics of objects such as size, color, shape, or quantity. <i>The toddler:</i> 2. matches and sorts objects by size, color, shape, or quantity. 3. begins to use simple counting in play and interactions, although numbers may occur out of order. 4. makes simple comparisons between two objects using words like big, small, more, etc.</p>	<p>Standard 7.1.PS Comparison, Number, and Operation Children understand counting, ways of representing numbers, and relationships between quantities and numerals. (p 192)</p> <p>Benchmarks: <i>The child:</i> 1. recognizes small quantities (1 to 5) without counting them (subitizing). 2. counts to 20 verbally. 3. points and counts 10-20 objects accurately. 4. makes sets of 6-10 objects and describes parts. 5. uses language such as more, less or the same amount as to compare quantities. 6. identifies numerals to 10 by name.</p>	<p>Operations and Algebraic Thinking:</p> <p>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</p> <ol style="list-style-type: none"> 1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. (K.OA.A.1) 2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. (K.OA.A.2) 3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$). (K.OA.A.3) 4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. (K.OA.A.4) 5. Fluently add and subtract within 5. (K.OA.A.5)

Area 7: Mathematics	Area 7: Mathematics	
<p>Standard 7.2.IT Patterns Infants and toddlers begin to recognize patterns. (p 194)</p> <p>Benchmarks: <i>The infant:</i></p> <ol style="list-style-type: none"> 1. demonstrates expectations for familiar sequences of routines and experiences such as crying when it is near feeding time. <p><i>The toddler:</i></p> <ol style="list-style-type: none"> 2. shows recognition of sequence in events or objects. 3. repeats actions in sequence, such as fingerplays. 4. notices patterns and objects in the environment. 5. organizes objects into groups during play and exploration. 	<p>Standard 7.2.PS Patterns Children understand patterns. (p 196)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. recognizes, reproduces and creates patterns moving from simple to complex. 2. extends patterns by predicting what comes next. 3. describes patterns seen in natural and designed settings. 	<p>Number and Operations in Base Ten: Work with numbers 11-19 to gain foundations for place value.</p> <ol style="list-style-type: none"> 1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. (K.NBT.A.1) <p>Measurement and Data: Describe and compare measurable attributes.</p> <ol style="list-style-type: none"> 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (K.MD.A.1) 2. Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter. (K.MD.A.2) <p>Classify objects and count the number of objects in each category.</p> <ol style="list-style-type: none"> 3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (K.MD.B.3)

Area 7: Mathematics	Area 7: Mathematics	
<p>Standard 7.3.IT Shapes and Spatial Relationships Infants and toddlers show increasing understanding of spatial relationships. (p 198)</p> <p>Benchmarks: <i>The infant:</i></p> <ol style="list-style-type: none"> 1. takes objects apart. 2. fills and empties containers. <p><i>The toddler:</i></p> <ol style="list-style-type: none"> 3. takes objects apart and attempts to put them together. 4. shows awareness of his/her own body space. 5. matches similar shapes. 6. follows simple direction related to positions such as in, on, under, up, or down). 	<p>Standard 7.3.PS Shapes and Spatial Relationships Children understand shapes and spatial relationships. (p 200)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. demonstrates understanding of spatial words such as up, down, over, under, top, bottom, inside, outside, in front, and behind. 2. identifies and describes two - and three - dimensional shapes. 3. notices characteristics, similarities, and differences among shapes, such as corners, points, edges, and sides. 4. notices how shapes fit together and can be taken apart to form other shapes. 	<p>Geometry: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).</p> <ol style="list-style-type: none"> 1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. (K.G.A.1) 2. Correctly name shapes regardless of their orientations or overall size. (K.G.A.2) 3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). (K.G.A.3) <p>Analyze, compare, create, and compose shapes.</p> <ol style="list-style-type: none"> 4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). (K.G.B.4) 5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. (K.G.B.5) 6. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?" (K.G.B.6)

Area 7: Mathematics	Area 7: Mathematics	
	<p>Standard 7.4.PS Measurement Children understand comparisons and measurement. (p 202)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. sorts, classifies, and puts objects in series, using a variety of properties. 2. makes comparisons between several objects based on one or more attributes, such as length, height, weight, and area, using words such as taller, shorter, longer, bigger, smaller, heavier, lighter, full, empty, length, height, and weight. 3. measures objects using non-standard units of measurement, such as using blocks to determine how tall a child is. 4. explores objects using standard measuring tools such as rulers, measuring cups, and balance scales. 5. begins to demonstrate knowledge that measurement requires a 'fair' comparison starting at the same baseline or measuring the same property such as length, height, and volume. 	

Area 7: Mathematics	Area 7: Mathematics	
	<p>Standard 7.4.PS Measurement Children understand comparisons and measurement. [cont'd] (p 202)</p> <p>Benchmarks: <i>The child:</i></p> <p>6. develops an awareness of simple time concepts within his/her daily life such as day, night; and sequence of usual daily events such as breakfast, lunch, dinner, bedtime; outdoor time follows snack; and brushing teeth after a meal.</p>	

Area 7: Mathematics	Area 7: Mathematics	
	<p>Standard 7.5.PS Data Analysis Children demonstrate the process of data analysis by sorting and classifying, asking questions, and finding answers. (p 204)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. sorts collections of objects into sets such as lines, piles, or groups by color, size, shape, or kind. 2. sorts resorts in a variety of ways. 3. compares and orders such as most to least, same amount as, least to most. 4. sorts data into two groups such as big and not big; green and not green; pets and not pets. 5. asks questions, collects, records, and organizes classroom data to find answers to questions. 	

Area 8: Science	Area 8: Science	
<p>Standard 8.1.IT Scientific Investigations Infants and toddlers gather and interpret information from the environment around them. (p 208)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. begins to notice objects and events in the indoor and outdoor environments. 2. engages in a variety of play experiences and exploration when provided open-ended materials (ie. toys or household items that can be taken apart/put together, a container of water and various objects, seeds of different sizes/ textures/shapes). 3. uses one or more senses to make observations of their environment. 4. reacts to changes in the environment. 5. attempts to manipulate/understand their environment through repetitive play. 6. identifies and interacts with new objects placed in their environment. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 7. asks simple questions about observations of the environment using language (may be home language), behavior, and interactions. 	<p>Standard 8.1.PS Scientific Investigations Children gather information and conduct investigations to address their wonderings and test solutions to problems. (p 210)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. asks questions about his/her environment, and begins to identify and look for information that will help answer those questions or solve problems. 2. plans and conducts simple investigations alone or in collaboration with peers to answer questions or design solutions to scientific or engineering problems. 3. begins to use appropriate scientific tools/ technology in conducting investigations, such as scales, tape measure, magnifying glass, tweezers, and eye dropper. 4. observes, investigates, and describes objects, materials, and other physical science phenomena such as shadows and reflections in the classroom and outdoor environments. 5. observes, investigates, and describes the characteristics, behavior, and habitats of living things. 	

Area 8: Science	Area 8: Science	
	<p><i>Standard 8.1.PS Scientific Investigations</i> Children gather information and conduct investigations to address their wonderings and test solutions to problems. [cont'd] (p 210)</p> <p>6. asks questions based on observations of weather-related phenomena and begins to notice relationships and patterns over time such as it is warmer in the summer and colder in the winter.</p> <p>7. develops an awareness of nature through the exploration of natural environments and materials or through caring for animals or plants.</p>	

Area 8: Science	Area 8: Science	
<p>Standard 8.2.IT Scientific Reasoning Infants and toddlers use reasoning to make sense of information in their environment. (p 214)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. uses trusted relationships to gain understanding of the living and nonliving world. 2. explores cause and effect relationships by engaging in problem solving through trial and error. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 3. shows understanding of object permanence (that people exist when they cannot be seen, and objects exist even when out of sight). 4. makes a choice to reach a desired outcome. 	<p>Standard 8.2.PS Scientific Reasoning Children use reasoning to make sense of information and design solutions to problems in their environment. (p 217)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. begins to make comparisons and categorize nonliving things based on characteristics they can observe such as texture, color, size, shape, temperature, sound, odor, usefulness, and weight. 2. uses information from investigations to identify similarities and differences in characteristics and behavior of living things and make inferences about their needs and how they get met such as caterpillars eat leaves. 3. uses prior experiences and/or data from observations to identify patterns in how living and nonliving things stay the same or change over time and/or when conditions change such as plants grow when they get the proper amounts of water and light; combine substances; heat/cool an item; and baby animals generally resemble their parents. 	

Area 8: Science	Area 8: Science	
	<p>Standard 8.2.PS Scientific Reasoning Children use reasoning to make sense of information and design solutions to problems in their environment. [cont'd] (p 217)</p> <p>4. begins to identify ways humans positively and negatively impact the environment such as beginning awareness of conservation and respect for the environment, based on investigations.</p> <p>5. describes and compares the properties and motions of objects in terms of speed and direction such as faster, down, beside, based on exploration; and begins to notice cause and effect relationships such as a ball rolls faster on a steeper incline.</p> <p>6. begins to make patterns based on long-term explorations of weather and observations of the earth and sky begins to notice patterns such as differences in weather in different seasons and how different types of weather influence people and the environment.</p>	

Area 8: Science	Area 8: Science	
<p>Standard 8.3.IT Scientific Communication Infants and toddlers share information and understanding about experiences in their environment. (p 219)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. produces questions using gestures and/or facial expressions. 2. expresses vocalizations and gestures to gain attention from others. 3. shows repetitive actions to demonstrate new learning experiences. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 4. composes simple verbal questions in English or home language. 5. verbally responds to other's questions, statements in English or home language. 6. draws pictures to represent his/her observations of objects and/or of changes to objects/the environment. 7. engages in scientific conversations, using both receptive (listening) and expressive (speaking) language skills. 	<p>Standard 8.3.PS Scientific Communication Children share information and understanding about experiences in their environment. (p 221)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. shares observations and ideas about the properties and behavior of nonliving and living things through a variety of modalities such as language, drawing, modeling, gesturing, and dramatizing. 2. obtains, evaluates, and uses age-appropriate text and online resources, with support, to gather information related to a topic of study and makes connections to own observations and experiences. For example, when studying butterflies, she or he may evaluate a variety of books and begin to identify which ones are most useful for learning about real butterflies. 3. begins to ask questions of others to seek out more information on a topic. Participates in generating questions to ask a visiting expert on a topic of interest. 4. offers evidence to explain the thought process he/she used to make conclusions/claims and listens to the claims, conclusions, and evidence of others to begin to identify areas of agreement and disagreement. 	

Area 8: Science	Area 8: Science	
	<p><i>Standard 8.3.PS Scientific Communication</i> Children share information and understanding about experiences in their environment. [cont'd] (p 221)</p> <p>5. participates in creating a final product such as a panel, classroom book, or newsletter that communicates what was learned during one exploration or during the study of a topic over time. Individual children may contribute through language, drawing, writing, or choosing items to be included.</p>	

Alignment of Early Childhood Mathematical Practices

1. MAKE SENSE OF PROBLEMS AND PERSEVERE IN SOLVING THEM.

Embedded in the following standards:

Infant/Toddler	Preschool
<p>Curiosity and Initiative (3.1.IT) Engagement and Persistence (3.2.IT) Reasoning and Problem Solving (3.3.IT) Play and Senses (3.4.IT) Scientific Investigations (8.1.IT) Scientific Reasoning (8.2.IT)</p> <p>Adult supports:</p> <ul style="list-style-type: none"> Adults avoid the temptation to solve social and environmental problems for children and instead prompt with “How can we solve this problem?” and then model a solution. Ainsley (12 months) played with her shapes bucket, dropping the various pieces through the correct slots. The adult sat down next to her, talking with her about the task and what to do when the piece didn’t fit with the first try. Abbi (24 months) watched her older sister put an interlocking puzzle together, and then she went to the shelf and reached for a knobbed puzzle. The adult joined her and together they dumped the pieces out beside her sister’s puzzle and picked the pieces up one at a time to place them in the correct spot. When Abbi picked up a piece and placed it in a spot that was incorrect, she flipped and turned it to try to make it fit. When unsuccessful, Abbi picked up another piece until she successfully placed the piece in the correct spot. 	<p>Curiosity and Initiative (3.1.PS) Engagement and Persistence (3.2.PS) Reasoning and Problem Solving (3.3.PS) Play and Senses (3.4.PS) Scientific Investigations (8.1.PS) Scientific Reasoning (8.2.PS)</p> <p>Adult Supports:</p> <ul style="list-style-type: none"> Children are given multiple opportunities to solve puzzles, some of which are “just a little” too difficult for them. Adults avoid the temptation to solve social and environmental problems for children and instead prompt with “How can we solve this problem?” Children are allotted sufficient free choice time to allow them to work through problems to their solution without their play (problem solving) time being interrupted. Carlos watches other children in a center as they remove links and experiment with the length of chain needed in order to knock a can off of blocks. Carlos goes to the chain and begins removing links. He remains at the center for 20 minutes, removing and adding links as the adult talks with him about the activity.

Alignment of Early Childhood Mathematical Practices

2. REASON ABSTRACTLY AND QUANTITATIVELY.

Embedded in the following standards:

Infant/Toddler	Preschool
<p>Curiosity and Initiative (3.1.IT) Reasoning and Problem Solving (3.3.IT) Comparison, Number, and Operation (7.1.IT) Patterns (7.2.IT) Scientific Reasoning (8.2.IT)</p> <p>Adult supports:</p> <ul style="list-style-type: none"> Children are provided with multiple and varied manipulatives to explore and observe the adult in a talk aloud and/or think aloud about more, less, and the same. Thomas (20 months) is getting ready to go outside to play in the snow. As he puts on his boots and gloves, the adult counts ‘1 boot, 2 boots’ and ‘1 glove, 2 gloves’ while she assists him in getting ready. 	<p>Curiosity and Initiative (3.1.PS) Reasoning and Problem Solving (3.3.PS) Comparison, Number, and Operation (7.1.PS) Patterns (7.2.PS) Measurement (7.4.PS) Data Analysis (7.5.PS) Scientific Reasoning (8.2.PS)</p> <p>Adult Supports:</p> <ul style="list-style-type: none"> Adults consciously use words such as several, some, many, a few, as they ask children to assist them with tasks throughout the classroom. Children are asked to “put sets together” and “take them apart” through daily activities. For example, “Would we have enough blocks if we put together all of the short ones and all of the long ones?” Ava was playing with the box of colored counting bears. She made a pattern with the red and blue bears. After she showed it to the adult, she was asked to tell about it. Ava read the pattern. The adult asked Ava how many bears she had used. Ava counted 19 of the 20 bears she had used. Ava made another pattern beside her red and blue one, using the green and yellow bears. She extended it so that it was longer than her first one. When she was finished, the adult said, “Which pattern is the longest?” Ava pointed to the green and yellow pattern.

Alignment of Early Childhood Mathematical Practices

3. CONSTRUCT VIABLE ARGUMENTS AND CRITIQUE THE REASONING OF OTHERS.

Embedded in the following standards:

Infant/Toddler	Preschool
<p>Self (1.1.IT) Self-Regulation (1.2.IT) Relationships with Adults (1.3.IT) Relationships with Children (1.4.IT) Curiosity and Initiative (3.1.IT) Reasoning and Problem Solving (3.3.IT) Scientific Investigations (8.1.IT) Scientific Reasoning (8.2.IT) Scientific Communication (8.3.IT)</p> <p>Adult supports:</p> <ul style="list-style-type: none"> • Throughout the day, children observe the adult model think -lounds, which include, “I wonder why...?” or “It makes sense to me that...” or “When I ____, this happens because....” The adult models possible responses. • Zachary (6 months) is playing with a toy that lights up when a button is pushed. The adult sits down next to him and says, “I wonder what happens when we push the button?” She then directs his hand to push the button and explains, “When you push the button, it lights up.” • Two-year-old children are observing birds at the bird feeder. The adult says, “The birds are eating. They are hungry.” 	<p>Self (1.1.PS) Self-Regulation (1.2.PS) Relationships with Adults (1.3.PS) Relationships with Children (1.4.PS) Curiosity and Initiative (3.1.PS) Reasoning and Problem Solving (3.3.PS) Scientific Investigations (8.1.PS) Scientific Reasoning (8.2.PS) Scientific Communication (8.3.PS)</p> <p>Adult Supports:</p> <ul style="list-style-type: none"> • Children are provided with opportunities on a daily basis to respond to “I wonder what would happen if...?” or “Why do you think this is happening?” questions during free choice play opportunities, small group investigations, and/or adult -led demonstrations. • Children are given opportunities to represent their learning through drawings and then to explain to adults and peers what they have learned and are thinking (hypothesizing). • Zoey, Samantha, and a familiar adult were playing Tic-tac-toe during center time. Zoey took an extra turn and Samantha got upset. The adult models, “I feel mad because you took too many turns, Zoey.” They discuss how to solve the problem together.

Alignment of Early Childhood Mathematical Practices

4. MODEL WITH MATHEMATICS.

Embedded in the following standards:

Infant/Toddler	Preschool
<p>Curiosity and Initiative (3.1.IT) Reasoning and Problem Solving (3.3.IT) Comparison, Number, and Operation (7.1.IT) Patterns (7.2.IT) Shapes and Spatial Relationships (7.3.IT) Scientific Reasoning (8.2.IT) Scientific Communication (8.3.IT)</p> <p>Adult supports:</p> <ul style="list-style-type: none"> When children arrive in the morning, they or an adult place their photo on a piece of felt. After all children arrive, the adult arranges the photos to create a bar graph. The adult models a think-aloud to explain what the bar graph displays. During center time, Ava (26 months) plays with colored cubes. She stacks them by color and the adult helps her count them and line them from smallest to largest so they look like a bar graph. 	<p>Curiosity and Initiative (3.1.PS) Reasoning and Problem Solving (3.3.PS) Comparison, Number, and Operation (7.1.PS) Patterns (7.2.PS) Shapes and Spatial Relationships (7.3.IT) Measurement (7.4.PS) Data Analysis (7.5.PS) Scientific Reasoning (8.2.IT) Scientific Communication (8.3.IT)</p> <p>Adult Supports:</p> <ul style="list-style-type: none"> Children are given opportunities to develop and use simple charts and graphs to document their findings during periods of investigation. Adults model the use of simple graphs and charts throughout the course of daily work such as charting present and absent, charting type of drink for snack, charting answers to questions of the day, and growth charts. Adults use drawings and manipulatives as they talk about mathematical problems such as "We need to have enough room for 'x' people in our library area. How can we find out if we have enough room?" Discussions, drawings, and real life 'check-it-outs' can follow. Kayden is in the housekeeping center, standing in front of the stove for several minutes turning the knobs in different directions. The adult asked what he is doing. He says. "I made a pattern." When the adult investigates more closely, he had turned the knobs so they alternated in an AB pattern with one knob up and one turned to the side across the front of the oven. The adult asks Kayden to share the pattern with his classmates.

Alignment of Early Childhood Mathematical Practices

5. USE APPROPRIATE TOOLS STRATEGICALLY.

Embedded in the following standards:

Infant/Toddler	Preschool
<p>Curiosity and Initiative (3.1.IT) Reasoning and Problem Solving (3.3.IT) Play and Senses (3.4.IT) Comparison, Number, and Operation (7.1.IT) Scientific Investigations (8.1.IT) Scientific Reasoning (8.2.IT) Scientific Communication (8.3.IT)</p> <p>Adult supports:</p> <ul style="list-style-type: none"> • The adult provides a variety of nonstandard ways to measure such as strings, blocks, people, real feet, and hollow objects; and models how to use such items to make conclusions about size. • The adult provides technology tools for use in dramatic play including cash registers, adding machines, and calculators. • Olivia (22 months) plays in the dramatic play area which is designed as a grocery store. The adult notices children in this area put items in the shopping cart, so the adult joins them and models going through check-out while Olivia pushes the buttons on the cash register. The adult asks, "How much are the groceries? Here is \$20, is that enough or do I need more?" 	<p>Curiosity and Initiative (3.1.PS) Reasoning and Problem Solving (3.3.PS) Play and Senses (3.4.PS) Comparison, Number, and Operation (7.1.PS) Measurement (7.4.PS) Data Analysis (7.5.PS) Scientific Investigations (8.1.PS) Scientific Reasoning (8.2.PS) Scientific Communication (8.3.PS)</p> <p>Adult Supports:</p> <ul style="list-style-type: none"> • The adult provides a variety of standard measures for use in exploration of any learning environment and helps children identify nonstandard ways to measure such as string, blocks, people, real feet, and hollow objects; and provides multiple opportunities for children to use the tools. • The adult provides technology tools for use in dramatic play, including cash registers, adding machines, calculators, and calculators on computers and mobile devices. • The adult models, daily, the use of paper and pencil to document and solve mathematical problems. • Three children play in the discovery center with a bathroom scale, a yardstick, and Learning Links. The adult used the scale and the yardstick the day before to weigh and measure each child in the classroom and posted a documentation board with each measurement. The children begin using the tools to weigh and measure themselves again. • Two children link Learning Links together across the classroom and work together for several minutes. One child said, "I am taller than this." The adult suggests the child lie down on the floor to see if she is correct.

Alignment of Early Childhood Mathematical Practices

6. ATTEND TO PRECISION.

Embedded in the following standards:

Infant/Toddler	Preschool
<p>Language Understanding and Use (6.1.IT) Comparison, Number, and Operation (7.1.IT) Scientific Reasoning (8.2.IT) Scientific Communication (8.3.IT)</p> <p>Adult supports:</p> <ul style="list-style-type: none"> • The adult models “counting again” and double checks the counting/measuring to the children. • The adult checks herself/himself with words such as “Does this make sense?” The adult models a think-aloud to the children. • MeiWei (14 months) plays with soft blocks and the adult joins her on the floor. The adult begins counting the blocks as MeiWei stacks them. The adult recounts the blocks when another child joins them. 	<p>Language Understanding and Use (6.1.PS) Comparison, Number, and Operation (7.1.PS) Data Analysis (7.5.PS) Scientific Reasoning (8.2.PS) Scientific Communication (8.3.PS)</p> <p>Adult Supports:</p> <ul style="list-style-type: none"> • Children count and then count again to be sure they counted correctly. • Adults encourage children to “check to be sure we counted and measured correctly”. • An adult and children check themselves with words such as “Does this make sense to me?” • The adult encourages children to check mathematical ‘guesses’ with manipulatives before the children finalize their answers. • Chase lines stuffed animals and counts each one as he sits them in a line. He tells the adult he lined nine stuffed animals. The adult says, “Are you sure?” He counts again while pointing at each one and responds, “Yes, there are nine.”

Alignment of Early Childhood Mathematical Practices

7. LOOK FOR AND MAKE USE OF STRUCTURE.

Embedded in the following standards:

Infant/Toddler	Preschool
<p>Curiosity and Initiative (3.1.IT)</p> <p>Reasoning and Problem Solving (3.3.IT)</p> <p>Comparison, Number, and Operation (7.1.IT)</p> <p>Patterns (7.2.IT)</p> <p>Shapes and Spatial Relationships (7.3.IT)</p> <p>Scientific Investigations (8.1.IT)</p> <p>Scientific Reasoning (8.2.IT)</p> <p>Scientific Communication (8.3.IT)</p> <p>Adult supports:</p> <ul style="list-style-type: none"> • The adult posts a picture version of the daily schedule to remind children of the routine. • At lunch, the adult talks about what children did in the morning and what they will do after lunch (with regard to the daily routine). • Ruby (9 months) and her dad have a routine when they arrive home each day. He unbuckles her from the car seat and says, “Time to get the mail.” Ruby becomes visibly excited and bounces in her dad’s arms. One day her Grandma picks her up from childcare and takes her home. When she gets Ruby unbuckled from the car seat and begins walking to the house, Ruby begins fussing and squirming. Her Grandma asks, “Ruby, what’s wrong?” Ruby fusses a little more, points in the direction of the mailbox, and says, “Da-Da.” 	<p>Curiosity and Initiative (3.1.PS)</p> <p>Reasoning and Problem Solving (3.3.PS)</p> <p>Comparison, Number, and Operation (7.1.PS)</p> <p>Patterns (7.2.PS)</p> <p>Shapes and Spatial Relationships (7.3.PS)</p> <p>Measurement (7.4.PS)</p> <p>Data Analysis (7.5.PS)</p> <p>Scientific Investigations (8.1.PS)</p> <p>Scientific Reasoning (8.2.PS)</p> <p>Scientific Communication (8.3.PS)</p> <p>Adult Supports:</p> <ul style="list-style-type: none"> • Children make comments about patterns they see in the environment. Unusual patterns are pointed out to children as the adult encourages patterning by a variety of common and uncommon attributes. • The adult provides multiple opportunities to categorize according to multiple attributes and for the children to explain thinking to peers and an adult. • Lindy takes all white lids out of the container of colored lids. She places the lids in a row. The adult asks Lindy what she notices about the lids. She says, “Some have red on the top.” The adult asks her how she can sort the lids she has on the table. Lindy places the white lids with red on top on one side and the plain white lids on the other side of her. Together, they label the two groups.

Alignment of Early Childhood Mathematical Practices

8. LOOK FOR AND EXPRESS REGULARITY IN REPEATED REASONING.

Embedded in the following standards:

Infant/Toddler	Preschool
<p>Curiosity and Initiative (3.1.IT) Reasoning and Problem Solving (3.3.IT) Patterns (7.2.IT) Shapes and Spatial Relationships (7.3.IT) Scientific Investigations (8.1.IT) Scientific Reasoning (8.2.IT) Scientific Communication (8.3.IT)</p> <p>Adult supports:</p> <ul style="list-style-type: none"> • The adult shares his/her thinking while interacting with Melissa. “This reminds me of when we...” or “This is just like when I/we...” • Joey sits in his high chair while his mom gets dinner ready. She looks at him, smiles, and then taps the spoon twice and slaps the counter. Joey smiles back and begins banging his spoon on his high chair tray. His mom makes the pattern again and waits for him to try it. He smiles at her, and bangs his spoon several times. After several more repetitions from his mom, Joey makes a pattern like hers by banging his spoon twice and then slapping his tray. 	<p>Curiosity and Initiative (3.1.PS) Reasoning and Problem Solving (3.3.PS) Patterns (7.2.PS) Shapes and Spatial Relationships (7.3.PS) Scientific Investigations (8.1.PS) Scientific Reasoning (8.2.PS) Scientific Communication (8.3.PS)</p> <p>Adult Supports:</p> <ul style="list-style-type: none"> • The adult asks children to verbalize things like, “This is like when we.....” • During morning group time, Cason says. “I have a pattern.” He demonstrates it as he says. “Punch, kick, punch, kick, punch, kick.” Raymie says. “I have a pattern, too.” He demonstrates by spreading his arms out and brings them back together., and says. “In, out, in, out, in, out.” • Cam, Mikie, and Oren build block towers again. Today the challenge is to see who can build the tallest tower. After several structures fall down, the adult asks the children to describe why the structures fell. They discussed what size the blocks are necessary on the bottom to make the structure sturdy enough to get as tall as they wanted it . The children make a mental relationship between the size of the foundation and the height of the tower.

Infant/Toddler Birth - 3 Years	Preschool 3 - 5 Years	End of Kindergarten
Approaches to Learning (Area 3) Social Studies (Area 4) Communication, Language, and Literacy (Area 6) Mathematics (Area 7) Science (Area 8)	Approaches to Learning (Area 3) Social Studies (Area 4) Communication, Language, and Literacy (Area 6) Mathematics (Area 7) Science (Area 8)	Access the Iowa CORE at www.iowacore.gov
Area 3: Approaches to Learning	Area 3: Approaches to Learning	<i>Students who demonstrate understanding can:</i>
<p>Standard 3.1.IT Curiosity and Initiative Infants and toddlers express curiosity and initiative in exploring the environment and learning new skills. (p 122)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> shows interest in people including other infants, objects, and events. uses their senses to choose, explore, and manipulate a variety of objects or toys in a variety of ways. actively plays with or near adults, other children, and materials. 	<p>Standard 3.1.PS Curiosity and Initiative Children express curiosity, interest, and initiative in exploring the environment, engaging in experiences, and learning new skills. (p 124)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> deliberately chooses to explore a variety of materials and experiences, seeking out new challenges. participates in experiences with eagerness, flexibility, imagination, independence, and inventiveness. asks questions about a variety of topics. repeats skills and experiences to build competence and support the exploration of new ideas. 	<p>Motion and Stability: Forces & Interactions</p> <p><u>K-PS2-1.</u> Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.</p> <p><u>K-PS2-2.</u> Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.*</p>

Area 3: Approaches to Learning	Area 3: Approaches to Learning	<i>Students who demonstrate understanding can:</i>
<p>Standard 3.2.IT Engagement and Persistence Infants and toddlers purposefully choose, engage, and persist in play, experiences, and routines. (p 126)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> holds attention of familiar adult; for example, through eye contact or vocalizations. repeats familiar and newly learned experiences. maintains, if interested, focus on people or objects, play experiences, or novel events. demonstrates persistence with challenging materials and experiences. 	<p>Standard 3.2.PS Engagement and Persistence Children purposefully choose and persist in experiences and play. (p 128)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> maintains concentration on a task despite distractions and interruptions. stays engaged and completes a variety of both adult-directed and self-initiated tasks, projects, and experiences of increasing degrees of difficulty. sets goals and follows a plan in order to complete a task. chooses to participate in play and learning experiences 	<p>Energy:</p> <p><u>K-PS3-1.</u> Make observations to determine the effect of sunlight on Earth’s surface.</p> <p><u>K-PS3-2.</u> Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.*</p> <p>From Molecules to Organisms: Structures & Processes</p> <p><u>K-LS1-1.</u> Use observations to describe patterns of what plants and animals (including humans) need to survive.</p> <p>Earth’s Systems:</p> <p><u>K-ESS2-1.</u> Use and share observations of local weather conditions to describe patterns over time.</p> <p><u>K-ESS2-2.</u> Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.</p>

Area 3: Approaches to Learning	Area 3: Approaches to Learning	<i>Students who demonstrate understanding can:</i>
<p>Standard 3.3.IT Reasoning and Problem Solving Infants and toddlers demonstrate strategies for reasoning and problem solving. (p 130)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. uses an object, action, or adult to accomplish tasks, such as pulling a blanket to reach a toy or pushing a button to hear a sound. 2. experiments to find a solution to a problem. 3. imitates an adult action to solve a problem. 4. recognizes difficulties and adjusts actions, as needed. 5. seeks and accepts help when encountering a problem beyond his/her ability to solve independently. 	<p>Standard 3.3.PS Reasoning and Problem Solving Children demonstrate strategies for reasoning and problem solving. (p 132)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. shows interest in and finds a variety of solutions to questions, tasks, or problems. 2. recognizes and solves problems through active exploration, including trial and error, and through interactions and discussions with peers and adults. 3. shares ideas or makes suggestions of how to solve a problem presented by another person. 	<p>Earth and Human Activity:</p> <p><u>K-ESS3-1.</u> Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.</p> <p><u>K-ESS3-2.</u> Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather. *</p> <p><u>K-ESS3-3.</u> Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.*</p>

Area 3: Approaches to Learning	Area 3: Approaches to Learning	<i>Students who demonstrate understanding can:</i>
<p>Standard 3.4.IT Play and Senses Infants and toddlers engage in play to learn. (p 134)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. uses sights, smells, sounds, textures, and tastes to explore and experience routines and materials within the environment. 2. chooses and participates in a variety of play experiences. 3. imitates behaviors of others in play. 4. repeats experiences with materials, adults, and peers to build knowledge and understanding of the world around them. 	<p>Standard 3.4.PS Play and Senses Children engage in play to learn. (p 136)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. engages in a variety of indoor and outdoor play experiences. 2. uses sights, smells, sounds, textures, and tastes to discriminate between and explore experiences, materials, and the environment. 3. engages in self-initiated, unstructured play. 4. plans and executes play experiences alone and with others. 	<p>Engineering Design:</p> <p><u>K-2-ETS1-1.</u> Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.</p> <p><u>K-2-ETS1-2.</u> Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.</p> <p><u>K-2-ETS1-3.</u> Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.</p> <p>* Integrates traditional science content with engineering concepts.</p>

Area 4: Social Studies	Area 4: Social Studies
<p>Standard 4.1.IT Awareness of Family and Community Infants and toddlers demonstrate a sense of belonging within their family, program, and other social settings or groups. (p 140)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> expresses enjoyment at being in a familiar setting or group. recognizes familiar adults and uses them to determine safety during exploration. explores and plays freely within familiar settings. 	<p>Standard 4.1.PS Awareness of Family and Community Children demonstrate an increasing awareness of belonging to a family and community. (p 142)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> demonstrates understanding that communities are composed of groups of people who live, play, or work together. demonstrates ability to identify communities to which they belong. recognizes his or her family is an important group to which they belong. demonstrates responsibility as a member of a family or community. shows confidence in expressing individual opinions and thoughts while respecting the thoughts and opinions of others. participates in creating and following rules and routines. demonstrates an initial awareness of the concepts of fairness, individual rights, and welfare of family and community members.

Area 4: Social Studies	Area 4: Social Studies	
<p>Standard 4.3.IT Exploration of the Environment Infants and toddlers explore new environments with interest and recognize familiar places. (p 148)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. demonstrates interest and curiosity within familiar and unfamiliar settings. 2. explores and plays with new, as well as familiar objects, in the environment using all five senses. 3. chooses and participates in unfamiliar experiences. 	<p>Standard 4.3.PS Exploration of the Environment Children demonstrate an increasing awareness of the environment in which they live, especially how people (including themselves) relate to that environment. (p 150)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. interacts with the world, first with familiar settings and then with less familiar ones; first in simple ways and then in more complex, exploratory ways. 2. constructs meaning about him/herself and the world through relevant and meaningful experiences with objects and their environment. 3. recognizes aspects of the environment, such as roads, buildings, trees, gardens, bodies of water, or land formations. 4. recognizes that people share the environment with other people, animals, and plants. 5. understands that people can take care of the environment through activities and experiences, such as cleaning, conserving, reusing, and recycling. 6. recognizes a variety of jobs and the work associated with them. 	

Area 4: Social Studies	Area 4: Social Studies	
	<p>Standard 4.4.PS Awareness of the Past Children demonstrate an increasing awareness of past events and how those events relate to one's self, family, and community. (p 152)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. differentiates between past, present, and future. 2. represents events and experiences that occurred in the past through words, play, and art. 3. uses past events to construct meaning of the world. 4. understands that events happened in the past and that the events relate to oneself, family, community, and culture. 	

Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
<p>Standard 6.1.IT Language Understanding and Use Infants and toddlers understand and use communication and language for a variety of purposes. (p 172)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. responds to the vocalizations and communications, verbal and nonverbal, of familiar adults. 2. uses vocalizations and gestures to gain attention from others. 3. uses vocalizations and gestures to communicate wants and needs. 4. increases both listening (receptive) and speaking (expressive) vocabulary. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 5. progresses to using words then simple sentences to communicate. 6. participates in conversations that include turn-taking, using both receptive (listening) and expressive (speaking) language skills. 7. answers simple questions. 8. follows simple directions. 	<p>Standard 6.1.PS Language Understanding and Use Children understand and use communication and language for a variety of purposes. (p 174)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. demonstrates a steady increase in listening (receptive language) and speaking (expressive language) vocabulary. 2. initiates, listens, and responds in relationship to the topics of conversations with peers and adults. 3. speaks in phrases and sentences of increasing length and complexity. 4. follows oral directions that involve several actions. 5. asks and answers a variety of questions. 6. demonstrates knowledge of the rules of conversations such as taking turns while speaking. <p><i>The child, who is an English language learner, also:</i></p> <ol style="list-style-type: none"> 7. uses his or her home language, sometimes in combination with English, to communicate with people. 8. demonstrates ongoing development and improvement in vocabulary and complexity in use of home language. 	

Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
	<p>Standard 6.1.PS Language Understanding and Use: Children understand and use communication and language for a variety of purposes. [cont'd] (p 174)</p> <p>9. demonstrates engagement at home or the classroom in literacy activities to relate to her or his home language.</p> <p>10. demonstrates receptive (listening) and expressive (speaking) English language skill to be able to comprehend the English language.</p> <p>11. demonstrates engagement in English literacy activities to be able to understand and respond to books, storytelling, and songs presented in English.</p>	

Area 6: Communication, Language, and Literacy	Area 6: Communication, Language, and Literacy	
<p>Standard 6.3.IT Early Writing Infants and toddlers engage in early writing experiences. (p 184)</p> <p>Benchmarks: <i>The infant:</i> 1. grasps and/or manipulates a variety of objects in his/her environment. <i>The older infant and toddler also:</i> 2. scribbles spontaneously, usually using a fist grip. 3. shows increasing skill in manipulating objects such as stacking several items, using pegboards, and mastering the use of eating utensils.</p>	<p>Standard 6.3.PS Early Writing Children engage in early writing experiences. (p 186)</p> <p>Benchmarks: <i>The child:</i> 1. attempts to communicate with others using scribbles, shapes, pictures, letter-like forms and/or letters in writing. 2. experiments with a variety of writing tools such as pencils, crayons, brushes, markers, and digital tools. 3. uses expressive (speaking) language to share intended meaning of drawings and writing. 4. starts to demonstrate interest in learning to write letters, especially the letters in his/her name. 5. uses invented spelling consisting of beginning sounds to represent a whole word.</p>	

Area 7: Mathematics	Area 7: Mathematics	
<p>Standard 7.2.IT Patterns Infants and toddlers begin to recognize patterns. (p 194)</p> <p>Benchmarks: <i>The infant:</i></p> <ol style="list-style-type: none"> 1. demonstrates expectations for familiar sequences of routines and experiences such as crying when it is near feeding time. <p><i>The toddler:</i></p> <ol style="list-style-type: none"> 2. shows recognition of sequence in events or objects. 3. repeats actions in sequence, such as finger plays. 4. notices patterns and objects in the environment. 5. organizes objects into groups during play and exploration. 	<p>Standard 7.2.PS Patterns Children understand patterns. (p 196)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. recognizes, reproduces and creates patterns moving from simple to complex. 2. extends patterns by predicting what comes next. 3. describes patterns seen in natural and designed settings. 	

Area 7: Mathematics	Area 7: Mathematics	
<p>Standard 7.3.IT Shapes and Spatial Relationships Infants and toddlers show increasing understanding of spatial relationships. (p 198)</p> <p>Benchmarks: <i>The infant:</i></p> <ol style="list-style-type: none"> 1. takes objects apart. 2. fills and empties containers. <p><i>The toddler:</i></p> <ol style="list-style-type: none"> 3. takes objects apart and attempts to put them together. 4. shows awareness of his/her own body space. 5. matches similar shapes. 6. follows simple direction related to positions such as in, on, under, up and down. 	<p>Standard 7.3.PS Shapes and Spatial Reasoning Children understand shapes and spatial relationships. (p 200)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. demonstrates understanding of spatial words such as up, down, over, under, top, bottom, inside, outside, in front and behind. 2. identifies and describes two- and three-dimensional shapes. 3. notices characteristics, similarities, and differences among shapes, such as corners, points, edges, and sides. 4. notices how shapes fit together and can be taken apart to form other shapes. 	

Area 7: Mathematics	Area 7: Mathematics	
	<p>Standard 7.4.PS Measurement Children understand comparisons and measurement. (p 202)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. sorts, classifies, and puts objects in series, using a variety of properties. 2. makes comparisons between several objects based on one or more attributes, such as length, height, weight, and area, using words such as taller, shorter, longer, bigger, smaller, heavier, lighter, full, empty, length, height, and weight. 3. measures objects using non-standard units of measurement, such as using blocks to determine how tall a child is. 4. explores objects using standard measuring tools such as rulers, measuring cups, and balance scales. 5. begins to demonstrate knowledge that measurement requires a 'fair' comparison starting at the same baseline or measuring the same property such as length, height, volume. 6. develops an awareness of simple time concepts within his/her daily life such as day, night, sequence of usual daily events such as breakfast, lunch, dinner, bedtime; outdoor time follows snack; and brushing teeth after a meal. 	

Area 7: Mathematics	Area 7: Mathematics	
	<p>Standard 7.5.PS Data Analysis Children demonstrate the process of data analysis by sorting and classifying, asking questions, and finding answers. (p 204)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. sorts collections of objects into sets such as lines, piles, or groups by color, size, shape, or kind. 2. sorts and resorts in a variety of ways. 3. compares and orders such as most to least, same amount as, and least to most. 4. sorts data into two groups such as big and not big; green and not green; and pets and not pets. 5. asks questions, collects, records, and organizes classroom data to find answers to questions. 	

Area 8: Science	Area 8: Science	
<p>Standard 8.1.IT Scientific Investigations Infants and toddlers gather and interpret information from the environment around them. (p 208)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. begins to notice objects and events in the indoor and outdoor environments. 2. engages in a variety of play experiences and exploration when provided open-ended materials such as toys or household items that can be taken apart/put together, a container of water and various objects, or seeds of different sizes/textures/shapes. 3. uses one or more senses to make observations of their environment. 4. reacts to changes in the environment. 5. attempts to manipulate/understand his or her environment through repetitive play. 6. identifies and interacts with new objects placed in her or his environment. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 7. asks simple questions about observations of the environment using language (may be home language), behavior, and interactions. 	<p>Standard 8.1.PS Scientific Investigations Children gather information and conduct investigations to address their wonderings and test solutions to problems. (p 210)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. asks questions about his/her environment, and begins to identify and look for information that will help answer those questions or solve problems. 2. plans and conducts simple investigations alone or in collaboration with peers to answer questions or design solutions to scientific or engineering problems. 3. begins to use appropriate scientific tools/technology in conducting investigations such as scales, tape measure, magnifying glass, tweezers, or eye dropper. 4. observes, investigates, and describes objects, materials, and other physical science phenomena such as shadows, or reflections in the classroom and outdoor environments. 5. observes, investigates, and describes the characteristics, behavior, and habitats of living things. 6. asks questions based on observations of weather-related phenomena and begins to notice relationships and patterns over time such as it is warmer in the summer and colder in the winter. 	

Area 8: Science	Area 8: Science	
	<p><i>Standard 8.1.PS Scientific Investigations</i> Children gather information and conduct investigations to address their wonderings and test solutions to problems. [cont'd] (p 210)</p> <p>7. develops an awareness of nature through the exploration of natural environments and materials or through caring for animals or plants.</p>	

Area 8: Science	Area 8: Science	
<p>Standard 8.2.IT Scientific Reasoning Infants and toddlers use reasoning to make sense of information in their environment. (p 214)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. uses trusted relationships to gain understanding of the living and nonliving world. 2. explores cause and effect relationships by engaging in problem solving through trial and error. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 3. shows understanding of object permanence (that people exist when they cannot be seen, and objects exist even when out of sight). 4. makes a choice to reach a desired outcome. 	<p>Standard 8.2.PS Scientific Reasoning Children use reasoning to make sense of information and design solutions to problems in their environment.</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. begins to make comparisons and categorize nonliving things based on characteristics they can observe such as texture, color, size, shape, temperature, sound, odor, usefulness, weight. 2. uses information from investigations to identify similarities and differences in characteristics and behavior of living things and make inferences about their needs and how they get met such as caterpillars eat leaves. 3. uses prior experiences and/or data from observations to identify patterns in how living and nonliving things stay the same or change over time and/or when conditions change such as plants grow when they get the proper amounts of water and light; combine substances; heat/cool an item; and baby animals generally resemble their parents. 	

Area 8: Science	Area 8: Science	
	<p>Standard 8.2.PS Scientific Reasoning Children use reasoning to make sense of information and design solutions to problems in their environment. [cont'd] (p 127)</p> <p>4. begins to identify ways humans positively and negatively impact the environment such as beginning awareness of conservation and respect for the environment, based on investigations.</p> <p>5. describes and compares the properties and motions of objects in terms of speed and direction such as faster, down, beside, based on exploration; and begins to notice cause and effect relationships such as a ball rolls faster on a steeper incline.</p> <p>6. begins to notice patterns such as differences in weather in different seasons and how different types of weather influence people and the environment, based on long-term explorations of weather and observations of the earth and sky.</p>	

Area 8: Science	Area 8: Science	
<p>Standard 8.3.IT Scientific Communication Infants and toddlers share information and understanding about experiences in their environment. (p 219)</p> <p>Benchmarks: <i>The infant or toddler:</i></p> <ol style="list-style-type: none"> 1. produces questions using gestures and/or facial expressions. 2. expresses vocalizations and gestures to gain attention from others. 3. shows repetitive actions to demonstrate new learning experiences. <p><i>The toddler also:</i></p> <ol style="list-style-type: none"> 4. composes simple verbal questions in English or home language. 5. verbally responds to other's questions, statements in English or home language. 6. draws pictures to represent his/her observations of objects and/or of changes to objects/the environment. 7. engages in scientific conversations, using both receptive (listening) and expressive (speaking) language skills. 	<p>Standard 8.3.PS Scientific Communication Children share information and understanding about experiences in their environment. (p 221)</p> <p>Benchmarks: <i>The child:</i></p> <ol style="list-style-type: none"> 1. shares observations and ideas about the properties and behavior of nonliving and living things through a variety of modalities such as language, drawing, modeling, gesturing, and dramatizing. 2. obtains, evaluates, and uses age-appropriate text and online resources, with support, to gather information related to a topic of study and makes connections to own observations and experiences. For example, when studying butterflies, she or he may evaluate a variety of books and begin to identify which ones are most useful for learning about real butterflies. 3. begins to ask questions of others to seek out more information on a topic. Participates in generating questions to ask a visiting expert on a topic of interest. 	

Area 8: Science	Area 8: Science	
	<p><i>Standard 8.3.PS Scientific Communication</i> Children share information and understanding about experiences in their environment. [cont'd] (p 221)</p> <p>4. offers evidence to explain the thought process he/she used to make conclusions/claims and listens to the claims, conclusions, and evidence of others to begin to identify areas of agreement and disagreement.</p> <p>5. participates in creating a final product such as a panel, classroom book, or newsletter that communicates what was learned during one exploration or during the study of a topic over time. Individual children may contribute through language, drawing, writing, or choosing items to be included.</p>	

