

Cognition and General Knowledge

Cognition and General Knowledge describes how children think, explore, remember, solve problems, make connections, and build understanding about themselves, their families, communities, and the world. From birth through age five, children are learning to:

- Observe people, objects, materials, and events
- Notice what happens when they act
- Remember familiar people and routines
- Use reasoning and persistence to solve problems
- Explore quantity, number, patterns, measurement, shapes, and space
- Wonder about the natural and physical world
- Understand family, community, time, place, roles, responsibilities, wants, needs, choices, and resources

To show what they know and make meaning, children also use:

- Imitation
- Symbols
- Movement
- Language
- Drawing
- Building
- Pretend play

All children are capable thinkers and knowledge-builders, and they develop in this area at different rates and in different ways. Children's background, language, family routines, community experiences, abilities, temperament, interests, lived experiences, and opportunities for exploration all shape how they investigate, remember, reason, show ideas, and build knowledge.

Adults support Cognition and General Knowledge by creating responsive, welcoming environments where children can safely explore, wonder, test ideas, solve problems, and make connections to their real lives.

Inside This Learning and Development Area

This area includes 15 strands and 33 learning goals. To make the area easier to use, the table below groups related strands into four connected parts and shows how children build knowledge through relationships, play, exploration, routines, and meaningful experiences.

Strands cover...	Children are learning to...	Adults support learning by...
Cognition: Exploration, memory, reasoning, problem-solving, imitation, symbolic representation, and play	Explore, remember, solve problems, imitate, pretend, and show ideas through movement, language, drawing, materials, and play.	Offering open-ended materials, familiar routines, repeated experiences, time to revisit ideas, and support for problem-solving without taking over.
Mathematics Development: Quantity, counting, operations, patterns, measurement, shapes, and spatial sense	Count, compare, sort, measure, notice patterns, explore number relationships, and use shapes and space in meaningful ways.	Providing real objects, blocks, loose parts, outdoor materials, math language, adapted tools, and everyday opportunities to count, compare, build, sort, and measure.
Scientific Reasoning: Inquiry, investigation, prediction, observation,	Observe, wonder, ask questions, compare, test ideas, notice patterns, use tools, and share discoveries.	Providing hands-on investigations, outdoor and nature-based experiences, accessible tools, time for close observation, and

Strands cover...	Children are learning to...	Adults support learning by...
comparison, and explanation		opportunities to talk about or show what children notice.
Social Systems: Identity, family, community, time, place, roles, responsibilities, wants, needs, choices, and resources	Build understanding of themselves as part of families and communities and learn how people live, work, care for one another, make choices, and use resources.	Connecting learning to children's real lives through family stories, photos, books, maps, pretend play, classroom roles, shared responsibilities, community experiences, and respectful conversations.

Play Across Cognition and General Knowledge

The play continuum shows how children build cognitive and general knowledge through a balance of child-directed, shared, and adult-supported play experiences. Across the continuum, children have opportunities to:

- Explore
- Remember
- Investigate
- Count
- Compare
- Build
- Sort
- Measure
- Notice patterns
- Ask questions
- Solve problems
- Pretend
- Show ideas
- Make choices
- Collaborate
- Learn about themselves, their families, communities, and the world

Play Across Cognition and General Knowledge

Children build cognition and general knowledge through many kinds of play that invite exploration, memory, reasoning, early math, scientific inquiry, symbolic play, and understanding of families, communities, and the world.



Children benefit from a balance of child-directed, shared, and adult-supported play experiences that help them explore, remember, reason, investigate, solve problems, and build understanding of math, science, and social life.



Learning and Development Area. Cognition and General Knowledge (C)**Strand 1. Exploration and Discovery****Goal 1. Child actively explores and observes people, objects, materials, and events to build understanding of self, others, and the world.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Uses senses and actions to explore and investigate people, objects, and materials.	Acts intentionally to solve a problem and reach a goal, including using objects to obtain another object.	Observes, asks questions, and experiments to learn how things work.	Children continue to build on early sensory exploration, intentional action, and problem-solving as they grow. They begin by exploring through repeated actions and simple problem-solving. Over time, they observe more closely, ask questions, and try out ideas. These skills support more purposeful investigation and a growing understanding of how the world works.	
Examples of Children’s Observable Behaviors				
• Uses hands, mouth, eyes, movement, or other senses to explore people, objects, and materials. • Looks at, reaches for, touches, mouths, shakes, bangs, or moves objects during play and routines. • Repeats actions, such as dropping, shaking, or banging objects, to see what happens.	• Uses objects or actions to reach a goal, such as pulling a cloth to get a toy or using a spoon to scoop. • Tries different actions with objects, such as stacking, filling, dumping, opening, closing, or pushing buttons. • Explores how objects work during play, routines, outdoor experiences, and familiar activities.	• Explores how things work through play, such as building, water play, pretend cooking, sensory play, or outdoor exploration. • Seeks information using simple questions, gestures, signs, facial expressions, movement, AAC, or other familiar communication modes. • Engages in longer exploration activities across settings with support as needed.		
Examples of Supportive Strategies				
• Follow children’s focus, describe what they are doing, and add one new idea, word, action, or material when they are ready. • Provide safe, varied materials, such as textured toys, household items, containers, blocks, water, sand, natural objects, and familiar materials. • Model and narrate actions, questions, and cause-and-effect, such as “You are shaking the bell — it makes a sound” or “What do you think will happen?” • Position materials within reach and arrange spaces so children can explore, move, try ideas, solve simple problems, and use support as needed. • Use play, everyday routines, outdoor experiences, and open-ended materials to encourage exploration, persistence, and problem-solving with gentle guidance.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 1. Exploration and Discovery****Goal 2. Child uses understanding of cause and effect to ask questions, gather information, make predictions, and try ideas during play, routines, and interactions.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Repeats actions to see what happens and to get others to respond.	Uses actions to make things happen and begins to notice cause and effect in the environment.	Identifies why events happen and predicts outcomes based on observations and experiences.	Children continue to build cause-and-effect thinking as they grow. They begin by repeating actions to see what happens. Over time, they predict outcomes, ask questions, and use what they have experienced before to explain or influence events in their environment.	
Examples of Children’s Observable Behaviors				
• Repeats actions such as kicking, shaking, banging, dropping, vocalizing, or moving to see what happens or get a response. • Watches, stills, smiles, vocalizes, moves, or changes expression when an adult responds to the child’s action. • Uses movement, gaze, facial expression, sound, or repeated action to continue an interesting effect or interaction.	• Uses actions to make things happen, such as pushing a button, dumping a container, pulling a string, splashing water, or making a toy move. • Repeats or changes an action to see whether the same thing happens again. • Looks to an adult, gestures, vocalizes, signs, moves, or otherwise communicates interest in what happened.	• Uses words, gestures, signs, movement, AAC, actions, or other familiar communication modes to show what might happen next. • Tries an action, notices the result, and tries something different based on what happened. • Uses simple cause-and-effect words, actions, or communication, such as “fall,” “again,” “too big,” “more,” or showing what happened.		
Examples of Supportive Strategies				
• Provide materials and routines that let children make things happen, such as rattles, containers, ramps, water, sand, pull toys, light switches, doors, lids, and cause-and-effect toys. • Use cause-and-effect language during routines and play, such as “When you push the button, the light turns on” or “The cup tipped, so the water spilled.” • Follow children’s actions and add simple comments, gestures, signs, or questions that help them notice what happened. • Give children time to repeat actions, change their approach, try again, and use support as needed.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 2. Memory****Goal 1. Child recognizes familiar people, objects, actions, routines, and events and distinguishes them from unfamiliar ones.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Recognizes familiar people, voices, routines, and caregiving actions and may respond differently to unfamiliar people or experiences.	Anticipates familiar routines, recognizes familiar people and places, and begins to show awareness that familiar people continue to exist when out of sight.	Recalls familiar people, routines, locations, and recent events and uses those memories to participate in play, routines, and simple problem-solving.	Children continue to build memory through familiar people, objects, and routines. They begin by recognizing what is familiar. Over time, they remember past experiences and describe what happened. Children use what they remember to guide behavior, solve problems, and participate in new situations.	
Examples of Children’s Observable Behaviors				
• Responds differently to familiar and unfamiliar people, voices, faces, routines, or caregiving actions. • Looks toward, quiets, smiles, moves, or shows comfort in response to familiar voices, faces, songs, objects, or routines. • Shows recognition of familiar routines through repeated responses, body movements, attention, or expressions.	• Anticipates familiar routines, such as moving toward the table at mealtime or reaching for an expected object. • Recognizes familiar people, objects, places, songs, and settings during play and routines. • Uses objects based on prior experience and shows awareness that familiar people or objects may continue to exist when out of sight.	• Recalls familiar people, places, routines, and recent events during play, conversation, or daily activities. • Anticipates familiar steps in routines, such as bringing a dish before snack time or moving toward the door before going outside. • Uses memories of familiar experiences to participate in routines, solve simple problems, or connect past events to what is happening now.		
Examples of Supportive Strategies				
• Use consistent routines, familiar songs, photos, objects, names, voices, gestures, and repeated cues to help children recognize people, places, objects, and events. • Maintain predictable caregiving routines, consistent object locations, and familiar interactions so children can anticipate what comes next. • Name people, actions, objects, routines, and places during everyday care, play, transitions, and family-connected experiences. • Encourage children to participate in familiar activities and routines by offering cues, choices, objects, or roles they recognize. • Talk about past, current, and upcoming events, and connect familiar experiences to new situations with support as needed.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 2. Memory****Goal 2. Child recognizes that familiar people and objects continue to exist when they are out of sight.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Shows emerging awareness that familiar people and objects may continue to exist when partly hidden or briefly out of sight.	Searches for familiar people or objects that are hidden, covered, or out of sight in familiar places.	Uses memory of routines and locations to look for hidden or missing people, objects, or materials and tries more than one search strategy with adult support.	Children continue to build on early object permanence and searching skills as they grow. They begin by looking for hidden people or objects in familiar places. Over time, they use memory and simple strategies to find what is missing and solve more complex problems.	
Examples of Children’s Observable Behaviors				
• Looks for, reaches toward, or shifts attention to a familiar person or object that is partly hidden or briefly out of sight. • Looks toward or reaches for a familiar adult who moves out of view. • Shows interest when objects disappear, reappear, are covered, or are uncovered during play and routines.	• Searches for familiar people, objects, or materials that are hidden, covered, or out of sight in familiar places. • Looks toward the door, calls, gestures, moves, or otherwise communicates when a familiar adult has left the room. • Engages in simple search games, such as peekaboo, hiding games, or finding covered objects.	• Searches in more than one place for missing objects, materials, or familiar people. • Looks in places where an object was last used or stored, such as checking a cubby for a coat or a shelf for a favorite toy. • Uses adult support, memory of routines, or familiar search strategies to solve simple problems when something is missing.		
Examples of Supportive Strategies				
• Play peekaboo, hiding games, and “find it” routines that help children notice that people and objects continue to exist when covered, hidden, or out of sight. • Partially hide objects during play and encourage children to look, reach, search, uncover, or ask for help. • Use familiar routines and consistent locations for important objects so children can remember where things belong and look for them. • Encourage children to search for missing items by using cues, questions, gestures, signs, visuals, or prompts such as “Where did you last see it?” • Support persistence by giving children time to look in more than one place and offering help, modeling, or reassurance as needed.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 2. Memory****Goal 3. Child recalls past experiences and uses memory to guide actions, play, routines, and problem-solving.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Shows recognition of familiar people, objects, actions, or events from recent experiences.	Uses memory of familiar actions and routines to repeat actions, anticipate next steps, or participate in similar situations.	Talks about past experiences, repeats actions observed earlier, and uses what happened before to guide play, routines, or problem-solving.	Children continue to build memory through people, objects, and routines. They begin by recognizing and anticipating familiar experiences. Over time, they recall past experiences, describe what happened, and use what they remember to plan actions and solve problems.	
Examples of Children’s Observable Behaviors				
• Shows recognition of familiar people, objects, actions, songs, routines, or events from recent experiences. • Anticipates familiar actions, such as feeding, caregiving, play routines, or repeated interactions. • Reacts to familiar experiences through attention, movement, facial expression, calming, excitement, or repeated responses.	• Uses objects based on past experience during play, routines, or familiar activities. • Anticipates routines through actions, gestures, movement, attention, or familiar responses. • Applies previous learning by repeating actions, using familiar materials, or trying a strategy that worked before.	• Uses words, gestures, signs, actions, play, or other familiar communication modes to recall something that happened earlier and connect it to what is happening now. • Recalls and repeats familiar sequences of actions during routines, play, stories, songs, or problem-solving. • Uses a remembered action to solve a new problem, such as trying a latch seen earlier or repeating a building strategy that worked before.		
Examples of Supportive Strategies				
• Use photos, familiar objects, songs, names, gestures, and repeated routines to help children recall what happened before and anticipate what will happen next. • Connect past experiences to current routines and play, such as “Yesterday you used the big scoop for sand. What could you use today?” • Provide consistent experiences and familiar materials while also allowing children to apply what they remember in new situations. • Encourage children to recall and repeat sequences through songs, stories, caregiving routines, pretend play, cleanup, meals, and outdoor experiences. • Ask simple questions, offer cues, and give children time to show, tell, act out, or use remembered actions to solve problems with support as needed.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 3. Reasoning and Problem-Solving****Goal 1. Child uses reasoning, planning, and investigation to understand problems and possible solutions.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Uses actions, movements, or objects to explore simple problems and notice what happens with adult support nearby.	Tries different actions during play and routines to solve simple problems and notices which actions work.	Uses observation, questions, trial-and-error, and adult or peer support to investigate problems, make simple plans, and try solutions.	Children continue to build on early cause-and-effect exploration and problem-solving as they grow. They begin by trying different actions to see what happens. Over time, they use reasoning, planning, and collaboration to investigate problems, test ideas, and explain outcomes.	
Examples of Children’s Observable Behaviors				
• Uses actions, movement, or objects to explore simple problems, such as rolling, reaching, shifting position, or moving toward a toy. • Repeats actions, such as dropping, banging, moving, or reaching, to see what happens. • Watches, pauses, or changes actions in response to what happens.	• Tries different actions, such as pulling, pushing, stacking, dumping, filling, splashing, or knocking objects down, to solve simple problems. • Repeats or changes actions to see whether the same thing happens again. • Explores cause and effect during play, routines, sensory exploration, and everyday problem-solving.	• Makes a simple plan before acting, such as choosing materials, deciding what to try first, or asking for help. • Explains or shows why something happened using words, gestures, signs, actions, AAC, or other familiar communication modes. • Shows or communicates a simple prediction about what may happen next using familiar communication modes.		
Examples of Supportive Strategies				
• Provide safe spaces, open-ended materials, and cause-and-effect experiences, such as water, balls, ramps, containers, blocks, loose parts, and movement play. • Respond to children’s repeated actions and use simple cause-and-effect language, such as “The ball rolled down” or “The cup tipped, so the water spilled.” • Encourage children to try different approaches, repeat actions, change strategies, ask for help, and use support as needed. • Think aloud during problem-solving, such as “The tower keeps falling. I wonder what would happen if we put the big blocks on the bottom.” • Ask simple planning, prediction, and reasoning questions, such as “What could we try first?,” “What do we need?,” “What do you think will happen?,” or “How could we find out?”				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 3. Reasoning and Problem-Solving****Goal 2. Child uses a variety of strategies and persistence to solve problems.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Repeats simple actions during play or routines to reach a goal, explore cause and effect, or continue an interesting result.	Uses trial-and-error during play and routines, repeating or changing actions to see what helps.	Persists in solving problems by trying again, changing strategies, using tools or materials, imitating others, or accepting adult scaffolding.	Children continue to build on early repetition, exploration, and problem-solving as they grow. They begin by repeating actions to see how things work. Over time, they try multiple strategies, adjust their approach, and keep working through more complex problems.	
Examples of Children’s Observable Behaviors				
• Repeats actions, such as reaching, grasping, kicking, banging, moving, or vocalizing, to reach a goal or continue an interesting result. • Tries again when an action does not work right away. • Explores cause and effect through repeated actions during play, routines, and interactions.	• Tries a slightly different action when the first attempt does not work, such as pushing, pulling, turning, reaching, or moving another way. • Explores how things work through repeated play, trial-and-error, and everyday routines. • Tries again after unsuccessful attempts with support as needed.	• Stays with a challenging activity for a short period, tries again, or uses help to continue after frustration. • Uses more than one strategy to solve a problem, such as asking for help, trying another material, changing the plan, or watching how another person does it. • Persists after challenges during play, routines, problem-solving, or social interaction with adult support as needed.		
Examples of Supportive Strategies				
• Provide materials and experiences that invite repeated attempts, trial-and-error, flexible strategy use, and problem-solving during play and routines. • Allow time for children to try before offering help; then provide a hint, model a strategy, reduce the challenge, or support the next step while keeping the child engaged. • Stay nearby, acknowledge effort, and prompt another strategy, such as “That didn’t work yet. What else could you try?” • Invite children to watch and imitate a peer or adult strategy, then try it in their own way. • Model persistence and flexible problem-solving by trying another material, changing the plan, asking for help, or watching how someone else solves a similar problem.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 4. Imitation, Symbolic Representation, and Play****Goal 1. Child observes and imitates sounds, words, gestures, actions, and behaviors.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Imitates sounds and movements in back-and-forth interactions with others.	Imitates actions observed earlier.	Imitates actions, words, or signs later to communicate or complete an activity.	Children continue to build imitation skills through interactions and routines. They begin by copying actions, words, and behaviors right away. Over time, they remember and repeat what they have seen or heard to communicate, learn, and participate in activities.	
Examples of Children’s Observable Behaviors				
• Imitates or responds to familiar sounds, facial expressions, body movements, or gestures during back-and-forth interactions. • Repeats a sound, movement, smile, or action after an adult models it. • Participates in simple imitation games, such as copying sounds, facial expressions, clapping, waving, or peekaboo actions with adult support.	• Imitates actions observed earlier, such as stirring, wiping, feeding a doll, stacking, opening, closing, or using a familiar object. • Copies gestures, movements, sounds, or simple actions during play, routines, songs, or social games. • Uses imitation to participate in familiar routines or play with adults and other children.	• Imitates actions, words, signs, gestures, or behaviors later to communicate, join play, or complete an activity. • Repeats familiar words, signs, movements, pretend actions, or routines observed from adults, peers, family members, or stories. • Uses imitation during pretend play, self-care routines, songs, movement games, caregiving play, or problem-solving with support as needed.		
Examples of Supportive Strategies				
• Engage children in warm back-and-forth interactions that invite imitation, such as copying sounds, facial expressions, gestures, movements, and actions. • Use songs, finger plays, movement games, caregiving routines, pretend play, and social games that include repeated actions and familiar words. • Model actions slowly and clearly, then pause so children have time to watch, respond, imitate, or participate in their own way. • Provide realistic and familiar materials, such as kitchen items, caregiving props, household objects, dolls, tools, clothing, or outdoor materials, that invite imitation and pretend actions. • Notice and describe children’s imitation, and extend it by adding one new word, action, gesture, sign, or material when they are ready.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 4. Imitation, Symbolic Representation, and Play****Goal 2. Child uses objects or symbols to represent something else.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Uses senses and actions to explore objects and materials in the environment.	Uses familiar objects in ways that reflect their real-life purpose or function.	Uses objects, actions, sounds, or gestures to represent other objects, ideas, or experiences during play.	Children continue to build symbolic thinking as they grow. They begin by using objects in familiar ways. Over time, they use objects, pictures, drawings, gestures, or pretend actions to stand for other objects, ideas, and experiences during play.	
Examples of Children’s Observable Behaviors				
• Explores objects and materials using senses and actions, such as looking, touching, mouthing, shaking, patting, or moving them. • Engages with materials during sensory play, routines, indoor play, outdoor play, or exploration of natural objects. • Repeats actions with objects to explore how they feel, sound, move, or respond.	• Uses familiar objects in ways that reflect their real-life purpose, such as holding a toy phone to ear, stirring with a spoon, or brushing hair. • Imitates everyday actions during play, such as feeding a doll, wiping a table, cooking, carrying a bag, or using familiar household items. • Uses familiar objects during pretend, routine-based, or social play with adults or other children.	• Uses objects, actions, sounds, gestures, or movements to represent other objects, ideas, roles, or experiences during pretend play. • Uses one object to stand for another, such as using a block as a phone, a stick as a spoon, or a box as a vehicle. • Combines objects, actions, and simple roles during pretend play scenarios, such as cooking, shopping, caregiving, building, or going somewhere.		
Examples of Supportive Strategies				
• Provide safe, varied materials such as sensory toys, household items, natural objects, fabrics, containers, blocks, recycled materials, and familiar objects. • Offer opportunities for sensory, functional, and pretend play across settings, including indoor play, outdoor play, routines, water play, nature play, and dramatic play. • Model exploration and object use by touching, shaking, describing, stirring, feeding, carrying, pretending, or showing how familiar materials can be used. • Include realistic and open-ended props that reflect children’s home experiences and community life. • Join children’s play by following their ideas, modeling symbolic use of objects, and adding one simple action, role, word, gesture, or material when they are ready.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 4. Imitation, Symbolic Representation, and Play****Goal 3. Child uses pretend play to increase understanding of communities, environments, and experiences.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Uses senses and social interaction to explore people, routines, and experiences.	Imitates familiar actions, routines, and behaviors during play.	Acts out familiar routines, roles, relationships, stories, or experiences during pretend play with increasing detail and sequence.	Children continue to build imitation and pretend play skills as they grow. They begin by acting out familiar routines. Over time, they use pretend play about family, background, community, and environmental experiences. They build shared stories and explore the roles, relationships, and experiences of themselves and others.	
Examples of Children’s Observable Behaviors				
• Imitates simple sounds, facial expressions, gestures, or movements during back-and-forth interactions. • Engages in simple social play, such as clapping, vocalizing, patting, handing objects, or responding to familiar actions. • Responds to familiar people, routines, songs, caregiving actions, or repeated play experiences.	• Imitates familiar actions, routines, or behaviors seen earlier, such as wiping, stirring, closing a door, feeding a doll, or carrying a bag. • Uses imitation during pretend or routine-based play with familiar objects and people. • Repeats observed actions during play, caregiving routines, family routines, songs, or daily activities.	• Acts out familiar routines, roles, relationships, stories, or experiences during pretend play. • Uses props, actions, sounds, gestures, words, signs, movement, or other familiar communication modes to show play ideas. • Engages in pretend or role play with adults or peers, such as cooking, caregiving, shopping, building, visiting, celebrating, or going somewhere.		
Examples of Supportive Strategies				
• Provide pretend play materials connected to children’s home routines, languages, families, caregiving experiences, and community life. • Engage in imitation games, songs, gestures, sounds, movement, and back-and-forth play that invite children to copy and participate. • Model familiar routines and actions during play, such as feeding, cooking, cleaning, caring for a baby, shopping, building, dressing, or going somewhere. • Offer realistic and open-ended props, such as kitchen items, fabric, dolls, containers, dress-up materials, background items, family photos, outdoor materials, and community-related objects. • Join children’s pretend play by following their ideas, supporting social interaction, and adding one simple role, action, word, sign, story detail, or material when they are ready.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 5. Emergent Mathematical Thinking****Goal 1. Child compares, sorts, and measures objects and people by their attributes.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Explores and notices differences between people, objects, and features of the environment.	Matches or pairs objects that are the same or go together during play and routines.	Sorts or categorizes objects into two or more groups based on one characteristic, such as color, size, type, shape, texture, or function.	Children continue to build sorting and comparing skills as they grow. They begin by noticing differences and grouping objects in simple ways. Over time, they sort, compare, and describe objects by attributes such as size, shape, color, texture, or use. These skills build the foundation for classification, patterning, and measurement.	
Examples of Children’s Observable Behaviors				
• Looks at, reaches for, touches, mouths, or explores objects with different attributes, such as soft, hard, big, small, smooth, rough, heavy, or light. • Shows interest in different people, objects, materials, or features of the environment. • Explores differences through touch, sight, sound, movement, or repeated sensory exploration.	• Matches or pairs objects during play or routines, such as putting a lid on a container or placing similar toys together. • Pairs familiar objects that go together, such as a spoon with a bowl or a bottle with a doll. • Uses familiar objects in ways that show awareness of how they are alike, different, or used together.	• Sorts objects into two or more groups based on one characteristic, such as color, size, type, shape, texture, or function. • Uses gestures, actions, signs, simple words, or other familiar communication modes to show how objects are alike or different. • Sorts or groups materials during play, cleanup, pretend play, outdoor exploration, or routines.		
Examples of Supportive Strategies				
• Offer contrasting materials and objects with varied attributes, such as textures, sizes, shapes, colors, weights, sounds, functions, natural materials, and familiar objects. • Narrate similarities and differences during play and routines, such as “This one is soft, and this one is hard” or “These both go in the basket.” • Provide matching, pairing, grouping, and simple sorting experiences using everyday objects, toys, blocks, shells, utensils, containers, dramatic play materials, and cleanup routines. • Model matching, grouping, and sorting one attribute at a time, such as by color, size, type, shape, texture, or function. • Encourage children to show, gesture, point, use words, or otherwise communicate how objects are alike, different, or grouped.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 5. Emergent Mathematical Thinking****Goal 2. Child develops a sense of number and quantity and understands the relationship between numbers and quantities.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Notifies and explores quantity in play and daily routines.	Uses gestures, words, or signs such as “more,” “less,” or “all gone” to communicate about amounts during play and routines.	Uses informal quantity words such as “more,” “less,” “many,” “few,” “a little,” “a lot,” or “too much,” and begins to use number words in meaningful routines and play.	Children continue to build early number sense as they grow. They begin by noticing amounts and using simple quantity words, such as “more,” “all gone,” “big,” or “little.” Over time, they use number words, compare quantities, and begin to understand number relationships. These skills build the foundation for counting and cardinality.	
Examples of Children’s Observable Behaviors				
• Looks at, reaches for, or explores more than one object during play and routines. • Shows interest in amounts, such as noticing several toys, more food, or that a familiar item is gone. • Engages with quantity through looking, reaching, vocalizing, movement, or repeated actions during caregiving, meals, and play.	• Uses gestures, words, signs, sounds, or actions such as “more,” “less,” “all gone,” or reaching to communicate about amounts. • Requests or responds to additional food, toys, materials, or actions during play and routines. • Responds to quantity-related language during meals, cleanup, caregiving, songs, and play.	• Uses gestures, words, signs, or other familiar communication modes such as “more,” “less,” “all gone,” “many,” “a little,” “a lot,” or “too much” during everyday routines. • Talks about or shows awareness of amounts during meals, play, cleanup, caregiving, block play, songs, or pretend play. • Uses or responds to number words in meaningful situations, such as taking one more cracker, giving two blocks, or noticing three cups on the table.		
Examples of Supportive Strategies				
• Use quantity language during snack, meals, cleanup, block play, caregiving routines, songs, and play, such as “one more,” “all gone,” “many blocks,” or “a little water.” • Provide opportunities to explore, gather, fill, dump, separate, share, and compare amounts using everyday objects and materials. • Model gestures, signs, words, and number words that children can use to communicate about amounts. • Encourage children to show, gesture, sign, say, point, or otherwise communicate when they want more, are all done, notice less, or see many. • Talk about quantities in meaningful contexts rather than isolated drills, including food, blocks, toys, cups, outdoor materials, family routines, and cleanup.				

Learning and Development Area. Cognition and General Knowledge (C)**Strand 5. Emergent Mathematical Thinking****Goal 3. Child uses spatial awareness to explore and understand the positions and movement of objects in space.**

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Watches and tracks objects as they move.	Explores how objects fit together and move through space.	Predicts how objects move through space or fit inside other objects.	Children continue to build spatial reasoning skills as they grow. They begin by tracking movement and exploring how objects fit together. Over time, they predict how objects will move, change how objects fit or connect, and reason about where objects are in space. These skills build the foundation for geometry, spatial reasoning, and problem-solving.	
Examples of Children’s Observable Behaviors				
• Watches people or objects move, such as a rolling ball, moving toy, mobile, or caregiver movement. • Tracks moving objects with eyes, head, body, or attention. • Reaches, swipes, or moves toward objects that move or change position.	• Explores how objects fit together, such as stacking, nesting, placing, filling, dumping, or putting objects in and out. • Moves objects through space by pushing, rolling, sliding, carrying, dropping, or pulling. • Engages in physical play that supports awareness of where objects, people, and the body are in space.	• Predicts or tries how objects move, fit, or go together, such as choosing a container, opening, puzzle space, or building piece. • Uses trial and adjustment to fit objects together, move them through space, or solve spatial problems. • Engages in constructive play with materials such as blocks, containers, puzzles, loose parts, ramps, or pretend play props.		
Examples of Supportive Strategies				
• Provide moving objects and materials, such as balls, mobiles, scarves, rolling toys, ramps, containers, puzzles, blocks, nesting cups, and stacking materials. • Encourage children to watch, reach, track, move, push, roll, slide, carry, drop, fit, stack, nest, fill, dump, and build with objects. • Model spatial language during play and routines, such as “in,” “out,” “on,” “off,” “under,” “over,” “beside,” “between,” “through,” “around,” “near,” “far,” “up,” “down,” “roll,” “fit,” and “stuck.” • Offer opportunities to predict, test, and adjust how objects move, fit, or relate in space. • Use movement play, constructive play, outdoor exploration, and everyday routines to support spatial problem-solving with support as needed.				

Learning and Development Area. Cognition and General Knowledge (C)

Strand 6. Counting and Cardinality

Goal 1. Child can show understanding of quantities with objects, drawings, marks, and numerals in meaningful contexts.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with objects and amounts help children begin to notice quantity and communicate what they see. Children begin by exploring objects and noticing amounts in simple ways. Over time, they connect quantities with marks, symbols, and number words. These skills build the foundation for understanding numbers.			Shows small counted quantities using objects, drawings, marks, gestures, or emerging symbols and begins to connect them to number words or written numerals in meaningful contexts.	Connects counted quantities to objects, drawings, marks, tallies, labels, or written numerals during play, and problem-solving contexts.
			Examples of Children’s Observable Behaviors	
			• Shows small quantities using objects, drawings, marks, fingers, gestures, or other child-generated symbols. • Begins to connect a counted quantity to a written numeral or label in meaningful contexts, such as a sign, list, game, or pretend-play record. • Uses drawings, marks, objects, or number language to label quantities during play, routines, or problem-solving.	• Matches written numerals to counted quantities during play, recording, labeling, organizing materials, or problem-solving. • Uses drawings, marks, tallies, labels, or numerals to label quantities in meaningful contexts. • Writes, traces, copies, selects, or uses numerals when helping to label a quantity, making a list, recording information, or supporting pretend play.
			Examples of Supportive Strategies	
			• Provide number-rich environments and materials, such as labels, charts, lists, signs, recipes, calendars, games, and pretend-play props. • Model showing counted quantities with objects, drawings, marks, tallies, labels, and numerals, explaining that they show how many were counted. • Invite children to draw, mark, tally, select, trace, copy, or write numerals to label quantities during play, routines, projects, and problem-solving. • Connect numerals to real quantities and purposes, such as counting children, labeling collections, making signs, recording scores, or creating menus and lists. • Include print, symbols, groups of objects, and everyday number uses from children’s homes, families, and communities.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 6. Counting and Cardinality

Goal 2. Child compares quantities.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with objects and amounts help children begin to notice differences in quantity. Children begin by comparing groups in simple ways, such as noticing more, less, or the same. Over time, they use actions and early counting to compare groups. These skills build the foundation for comparing numbers and understanding number relationships.			With adult support, compares small quantities in meaningful contexts using noticing, matching, subitizing, counting, and informal comparison language.	Compares quantities in meaningful contexts using subitizing, matching, counting, equalizing, and comparison language, including when objects differ in size, spacing, or arrangement.
			Examples of Children’s Observable Behaviors	
			• Compares clearly different small groups by noticing which has more, fewer, the same, enough, or not enough. • Uses noticing, matching, subitizing, or counting with adult support to compare quantities in meaningful contexts. • Uses comparison words such as “more,” “fewer,” “same,” “different,” “enough,” or “not enough” during play, routines, or problem-solving.	• Compares quantities by matching, subitizing, counting, or equalizing groups, including when objects differ in size, spacing, or arrangement. • Determines which group has more, fewer, the same, enough, not enough, extras, or leftovers during play, routines, or problem-solving. • Explains how they know which group has more, fewer, or the same using actions, words, counting, matching, or objects.
			Examples of Supportive Strategies	
			• Provide small groups of meaningful objects for children to compare during play, routines, outdoor exploration, and problem-solving. • Model comparison language such as “more,” “fewer,” “less,” “same,” “enough,” “not enough,” “extra,” and “left over” in real contexts. • Invite children to compare by looking, subitizing small sets, matching one-to-one, moving objects, counting, or equalizing groups. • Use varied materials, including natural items, classroom objects, pretend-play materials, and familiar objects, so children compare quantities in different contexts. • Ask children to explain how they know which group has more, fewer, the same, enough, or not enough using words, gestures, objects, drawings, or counting.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 6. Counting and Cardinality

Goal 3. Child develops a sense of number and quantity and understands the relationship between numbers and quantities.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with objects, routines, and amounts help children begin to notice quantity. Children begin by showing general awareness of amount concepts, such as “more,” “less,” or “all gone.” Over time, they match number words with objects as they count and begin to understand that the last number tells how many. These skills build the foundation for one-to-one correspondence and cardinality.			Counts small collections of about five objects using emerging one-to-one correspondence and begins to understand that the last number said tells how many are in the set.	Counts collections of about 10 or more objects, and up to about 31 when appropriate for the child and context, using one-to-one correspondence and understanding that the last number spoken is the total quantity.
			Examples of Children’s Observable Behaviors	
			• Counts small collections of about five objects using emerging one-to-one correspondence, with support as needed. • Says number words while gesturing to, touching, moving, or organizing objects during play, routines, or counting activities. • Begins to tell or show “how many” after counting a small collection within their working range.	• Counts collections of about 10 or more objects using one-to-one correspondence during play, routines, or problem-solving. • Counts larger collections, up to about 31 when appropriate for the child and context, with support as needed. • Answers “how many” after counting and shows understanding that the last number said is the total quantity.
			Examples of Supportive Strategies	
			• Model counting by touching, moving, or gesturing to one object at a time and emphasizing that the last number said tells the total. • Use counting collections as a repeatable routine with collections that are meaningful and within each child’s working range. • Provide counting opportunities during play, routines, outdoor exploration, building, dramatic play, snack, cleanup, and small-group activities. • Invite children to make, show, count, organize, re-count, or draw sets using objects, fingers, movements, marks, or math sketches. • Use familiar objects and meaningful materials so children can connect counting to real experiences, family practices, and everyday problem-solving.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 6. Counting and Cardinality

Goal 4. Child knows number names and the count sequence.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with number words in songs, routines, and interactions help children notice patterns in counting language. Children begin by listening, moving, or joining in during counting. Over time, they use number words in sequence. These skills build the foundation for stable counting and understanding the count sequence.			Says number words in order up to 10 and understands that each number word is said separately when counting.	Uses number words or signs in sequence during play, routines, songs, and counting situations, building understanding that each number word has a stable order and each next number means one more.
			Examples of Children’s Observable Behaviors	
			• Says or signs number words in order during songs, routines, movement, and play, sometimes skipping or repeating numbers while understanding of the sequence is developing. • Joins in counting songs, finger plays, chants, or routines that use number words in order. • Uses counting words during play or attempts to count objects with support as needed.	• Says or signs number words in sequence during play, routines, songs, and counting situations. • Continues a counting sequence after an adult starts it or notices what number comes next in familiar counting routines. • Uses the next number when one more object is added, building understanding that each next number means one more.
			Examples of Supportive Strategies	
			• Use counting songs, finger plays, chants, movement, and routines that invite children to hear and join in number sequences. • Model number words in stable order during play, routines, counting collections, games, and everyday problem-solving. • Invite children to count along, continue a counting sequence, or use number words while counting objects, actions, movements, or people. • Connect number names to quantities and one-more relationships, such as “Five is one more than four” or “We had four cups and added one more; now we have five.” • Gently scaffold counting sequences by repeating, extending, pausing, or modeling without interrupting participation.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 6. Counting and Cardinality

Goal 5. Child recognizes the number of objects in a small set.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with small groups of objects help children begin to notice quantity without counting. Children begin by recognizing one object or one item at a time. Over time, they identify small groups of objects. These skills build the foundation for quickly recognizing quantities and building number sense.			Begins to understand whole numbers and recognizes the number of objects in small groups without counting (referred to as “subitizing”).	Quickly recognizes the number of objects in a small set without counting.
			Examples of Children’s Observable Behaviors	
			• Recognizes small quantities, usually 1–3 objects, without counting. • Identifies “how many” quickly in small groups during play, routines, games, or outdoor exploration. • Notices, matches, or shows small quantities using objects, fingers, gestures, or familiar materials.	• Quickly recognizes the number of objects in a small set without counting. • Recognizes that the same quantity can be shown in different arrangements, such as dots, fingers, game pieces, or small collections. • Tells or shows “how many” after a brief look at a small set and may explain how they saw the quantity, such as “I saw two and two.”
			Examples of Supportive Strategies	
			• Provide frequent opportunities to recognize small groups of objects during play, routines, games, snack, outdoor exploration, and classroom jobs. • Use brief-look experiences with dot patterns, fingers, dice, game pieces, natural items, or small collections and ask, “How many do you see?” and “How do you see them?” • Show the same quantity in multiple arrangements using objects, dots, fingers, drawings, or game materials. • Encourage children to show small amounts using fingers, gestures, objects, drawings, or other familiar ways. • When children recognize a small quantity without counting, invite them to describe how they saw the amount rather than asking them to count by ones.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 7. Operations and Algebraic Thinking

Goal 1. Child understands addition as adding to and understands subtraction as taking away from.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with combining, separating, and changing small groups of objects help children notice how quantities change. Children begin by acting on objects in simple ways, such as putting objects together or taking them apart. Over time, they begin to understand that adding makes more and taking away makes fewer. These skills build the foundation for addition and subtraction.			With adult support, adds to or takes away from very small groups of objects and determines the new total.	Solves simple addition by joining groups and subtraction by separating groups using objects or fingers.
			Examples of Children’s Observable Behaviors	
			• Acts out simple joining or separating stories with concrete objects, such as one more animal joining a group or one object leaving a group. • Counts or shows how many objects there are after adding to or taking away from a small group, with support as needed. • Uses objects, fingers, drawings, gestures, or actions to show simple quantity changes during play, routines, or problem-solving.	• Uses manipulatives, fingers, drawings, or actions to solve simple addition problems by joining groups. • Uses manipulatives, fingers, drawings, or actions to solve simple subtraction problems by separating groups. • Describes quantity changes using action-based language such as “more,” “joined,” “came,” “left,” “fell off,” “gave away,” “lost,” or “How many are left?”
			Examples of Supportive Strategies	
			• Pose simple stories about joining and separating groups and help children act them out with concrete materials that match the story context when possible. • Use everyday situations, such as snack, play, cleanup, building, sharing, and serving food, to explore adding to and taking away. • Model language that describes quantity changes, such as “add,” “take away,” “more,” “fewer,” “joined,” “left,” and “How many are left?” • Invite children to show their thinking using objects, fingers, drawings, gestures, movement, or math sketches. • Focus first on acting out and explaining the story situation, using symbols such as +, -, and = only when children use them meaningfully in play or documentation.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 7. Operations and Algebraic Thinking

Goal 2. Child understands simple patterns.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with repeated actions, sounds, and movements help children notice regularity and repetition. Children begin by joining repeated sequences in songs, routines, movement, and play. Over time, they recognize, expect, and continue simple patterns. These skills build the foundation for creating, extending, and describing patterns.			With adult support, identifies a repeating pattern and fills in missing elements or extends the pattern.	Creates, identifies, duplicates, and extends simple repeating patterns using objects, numbers, sounds, or movements.
			Examples of Children’s Observable Behaviors	
			• Notices repeating parts of simple patterns in objects, sounds, movements, stories, routines, or nature, with adult support. • Copies or extends simple patterns using objects, sounds, movements, or actions. • Fills in a missing part of a familiar pattern with support during play, music, movement, or routines.	• Creates and extends repeating patterns by repeating the whole core unit, such as “red-blue-blue, red-blue-blue.” • Duplicates patterns using different materials, movements, sounds, numbers, or locations. • Describes what part repeats in a pattern using words, sounds, gestures, actions, or materials.
			Examples of Supportive Strategies	
			• Provide patterning opportunities across music, movement, art, block play, dramatic play, outdoor exploration, routines, and games. • Model creating, copying, and extending patterns using objects, sounds, movements, rhythms, nature materials, and familiar materials. • Use core-unit language such as “This part repeats” and “I see red-blue-blue, then it happens again.” • Invite children to notice, describe, copy, extend, and create patterns in play, stories, songs, nature, classroom routines, and the environment. • Support children in creating patterns with objects, drawings, movement, sounds, gestures, or other familiar communication modes.	

Strand 8. Measurement

Goal 1. Child compares, sorts, and measures objects and people by their attributes.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early sensory exploration helps children notice differences in size, shape, and other attributes. Children begin by exploring objects through looking, touching, mouthing, moving, or listening. Over time, they group and compare objects by shared characteristics. These skills build the foundation for measurement, classification, and comparison.			With adult support, recognizes that attributes such as height or size can be compared.	With adult support, compares objects using measurable attributes, such as “longer,” “shorter,” “taller,” “shorter,” “heavier,” “lighter,” “bigger,” “smaller,” “holds more,” “holds less,” “the same,” or “different” in a named attribute.
			Examples of Children’s Observable Behaviors	
			• Notices and compares attributes of objects or people, such as “bigger,” “smaller,” “taller,” “shorter,” “heavier,” “lighter,” “longer,” “shorter,” “holds more,” or “holds less.” • Gestures to, selects, or groups objects by size, shape, type, or another visible attribute during play, routines, or outdoor exploration. • Uses informal words, gestures, or actions to compare objects in meaningful contexts, such as building, pretend play, cooking, or nature exploration.	• Compares objects using measurable attributes, such as “longer,” “shorter,” “taller,” “heavier,” “lighter,” “bigger,” “smaller,” “holds more,” “holds less,” “same length,” or “same size.” • Sorts or groups objects by named attributes, such as size, shape, type, length, weight, capacity, or other shared characteristics. • Explains comparisons during play, routines, building, cooking, outdoor exploration, or shared activities using words, gestures, objects, or drawings.
			Examples of Supportive Strategies	
			• Provide varied materials for comparison and sorting, such as blocks, cooking tools, pretend-play materials, natural items, classroom objects, and familiar materials. • Start with children’s own comparison language and bridge toward more precise attribute language, such as “You said this tower is big. It is taller than the other tower.” • Invite children to compare, sort, and describe objects during building, cooking, pretend play, outdoor exploration, routines, and collaborative activities. • Model attribute language across contexts, such as longer, shorter, taller, heavier, lighter, holds more, holds less, same size, and different shape. • Clarify whether children are comparing how many objects are in a set or comparing an attribute of objects or people.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 9. Geometry and Spatial Sense

Goal 1. Child identifies, describes, compares, and composes shapes.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with objects help children begin to notice shapes, forms, and outlines. Children begin by handling objects, turning them, stacking them, and exploring how they fit together. Over time, they recognize and match shapes. These skills build the foundation for identifying, comparing, and describing geometric properties.			Recognizes and names basic shapes such as “circle” and “square” and, with adult support, matches shapes of different sizes or orientations.	Recognizes and compares shapes of different sizes and orientations and begins to identify sides and angles as parts of shapes.
			Examples of Children’s Observable Behaviors	
			- Names, matches, or sorts common shapes, such as circles, squares, and other familiar shapes, with support as needed. - Identifies shapes in the environment, including classroom objects, outdoor spaces, buildings, signs, art, or nature designs. - Explores shapes through building, drawing, tracing, matching, sorting, and play with shape materials.	- Recognizes, compares, and composes two-dimensional shapes of different sizes and orientations during play, building, art, or design activities. - Describes shapes using informal or formal attribute language, such as “pointy,” “boxy,” “straight,” “flat,” “curvy,” “sides,” “corners,” or “angles.” - Builds, composes, or decomposes shapes using pattern blocks, sticks, tiles, paper shapes, blocks, recycled items, drawings, or other materials.
			Examples of Supportive Strategies	
			- Provide shape materials in varied sizes and orientations, including shapes found in children’s homes, communities, art, buildings, and nature designs. - Invite children to name, match, sort, build, trace, compare, compose, and describe shapes during construction, art, dramatic play, games, and outdoor exploration. - Connect shapes to real-world objects by asking what shapes children notice on doors, books, clocks, windows, signs, baskets, buildings, patterns, or natural materials. - Encourage children to trace sides, count corners, compare straight and curved edges, and describe shapes in their own words before introducing formal names. - Support children to build, compose, and decompose shapes using pattern blocks, sticks, tiles, paper shapes, blocks, recycled items, drawings, or other meaningful materials.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 9. Geometry and Spatial Sense

Goal 2. Child uses spatial awareness to explore and understand the positions and movement of objects in space.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early movement and exploration help children begin to understand position and direction. Children begin by responding to simple location words and movement cues. Over time, they use actions and emerging language to describe where things are, where they are going, and how objects move in space. These skills build the foundation for spatial reasoning and understanding how objects relate in space.			With adult support, uses movement and simple spatial words to explore where the body or objects are in relation to other people, objects, and spaces.	Uses spatial language and actions to describe, follow, give, build, arrange, move, and fit objects in relation to self, other objects, and spaces.
			Examples of Children’s Observable Behaviors	
			• Uses simple spatial words, gestures, or actions to describe where their body or an object is, such as “up,” “down,” “in,” “out,” “on,” “under,” or “next to.” • Moves their body or objects in response to spatial directions during play, routines, obstacle courses, building, or movement activities. • Explores position, direction, and fit by building, moving, arranging, sliding, turning, stacking, or placing objects.	• Follows or gives directions using positional language such as “over,” “under,” “beside,” “between,” “next to,” “behind,” “in front of,” “around,” “through,” “above,” or “below.” • Uses spatial words, gestures, drawings, or actions to describe where they are, where objects are, or how objects move. • Arranges, builds, turns, slides, fits, or moves objects with attention to position, orientation, direction, and fit during block play, puzzles, maps, pathways, or construction.
			Examples of Supportive Strategies	
			• Model spatial language while children build, move, draw, map, solve puzzles, try obstacle courses, and arrange objects. • Pair spatial words with gestures, movement, visuals, objects, and repeated modeling so children can understand and use positional language. • Ask questions such as “Where does this go?”, “Will it fit?”, “What if we turn it?”, and “How can we get from here to there?” • Provide blocks, puzzles, loose parts, obstacle courses, drawing materials, and mapping experiences that support reasoning about position, direction, distance, orientation, and fit. • Invite children to follow, give, and describe spatial directions during games, movement, routines, building, outdoor exploration, and pretend play.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 10. Scientific Inquiry

Goal 1. Child actively explores and observes people, objects, materials, and events to build understanding of self, others, and the world.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with people, objects, materials, and events help children notice and respond to the world around them. Children begin by using their senses and actions to explore. Over time, they observe more intentionally, ask questions, and describe what they notice. These skills build the foundation for scientific inquiry and investigation.			Uses senses and simple tools to notice, explore, describe, and ask questions through words, gestures, actions, signs, AAC, or other familiar communication modes about objects, materials, living things, and events with adult support.	Uses senses and simple tools to investigate, describe details, and ask questions through words, gestures, actions, signs, AAC, or other familiar communication modes about objects, materials, living things, and events with adult support.
			Examples of Children’s Observable Behaviors	
			• Uses senses during play to explore objects, materials, living things, or events, such as touching sand, smelling herbs, watching insects, or listening to sounds. • Describes or asks simple questions about what they notice using words, gestures, signs, movement, AAC, or other familiar communication modes. • Shows what they notice through words, gestures, drawings, marks, movement, pretend play, or other familiar ways.	• Notices details during play or investigation, such as changes in plants, materials, mixtures, weather, light, shadows, or living things. • Asks questions to find out more about objects, materials, living things, events, or changes. • Describes or shares observations with more detail through drawings, models, photos, charts, gestures, signs, AAC, words, movement, or play.
			Examples of Supportive Strategies	
			• Provide sensory-rich environments and experiences with safe, accessible materials, such as water, sand, natural objects, cooking materials, light, shadows, or outdoor spaces. • Model observation language during play and routines, such as “You noticed it is wet,” “This leaf feels smooth,” or “That sound is loud.” • Wonder aloud with children by asking questions such as “What do you notice?”, “I wonder why that happened?”, or “What question could we ask?” • Encourage children to show observations in multiple ways, such as drawing, building, gesturing, sorting, photographing, using AAC, acting out, or talking about what they notice. • Provide opportunities for extended observation over time, such as watching plants grow, observing insects, exploring weather, mixing materials, building structures, or revisiting a science center.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 10. Scientific Inquiry

Goal 2. Child uses words, gestures, signs, or other communication modes to talk about what they notice and wonder.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early exploration gives children opportunities to communicate about what they notice. Adults support this by responding to and modeling simple words, sounds, and gestures. Over time, children move from labeling and repeating words to using more specific vocabulary to describe observations and ideas. These skills build the foundation for scientific communication.			Uses simple words, gestures, signs, or other communication modes to name or describe things noticed, with adult support.	Uses more specific words, gestures, signs, or other communication modes to describe observations, ask questions, and share ideas with support as needed.
			Examples of Children’s Observable Behaviors	
			• Uses simple science-related words, gestures, signs, AAC, movement, drawings, or home language(s) to name or describe what they notice. • Repeats or uses new words, signs, gestures, or communication modeled by adults during meaningful play, routines, or exploration. • Communicates observations while exploring materials, such as water, sand, food, plants, blocks, ramps, light, shadows, or natural objects.	• Uses more specific science-related words, gestures, signs, AAC, drawings, movement, or home language(s) to describe objects, materials, living things, events, tools, patterns, or changes. • Asks about or uses new vocabulary related to what they notice, wonder, compare, or investigate during play and routines. • Shares observations or questions using familiar communication modes during investigations, book sharing, outdoor experiences, and group discussion.
			Examples of Supportive Strategies	
			• Model science-related words, signs, gestures, and descriptive language during play, routines, investigations, book sharing, and outdoor experiences. • Repeat and reinforce new vocabulary in meaningful contexts, such as cooking, water play, building, outdoor exploration, noticing patterns, or caring for plants. • Encourage children to communicate what they notice and wonder using words, gestures, signs, AAC, movement, drawings, home languages, or other familiar communication modes. • Provide broad-based, meaningful, and accessible materials that invite children to describe, compare, ask, and wonder. • Use real-world examples, stories, songs, movement, and conversations that connect scientific language to children’s home, community, and classroom experiences.	

Strand 10. Scientific Inquiry

Goal 3. Child compares, sorts, and notices patterns in objects, materials, living things, and events.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early adult-supported exploration helps children notice similarities and differences. Children begin by handling and exploring objects. Over time, they sort, group, and compare objects by attributes. They also begin to use tools to compare size, length, weight, or other features. These skills build the foundation for classification and measurement.			Sorts and compares objects, materials, or living things by simple features, notices simple patterns, and uses tools or materials to compare with adult support.	Sorts and compares objects, materials, living things, or events by more than one feature, notices and describes simple patterns, and uses tools with support as needed to compare observable characteristics.
			Examples of Children’s Observable Behaviors	
			• Sorts objects, materials, or living things by simple features, such as color, size, shape, texture, sound, type, or use. • Compares objects, materials, or living things using words, gestures, signs, AAC, or other communication modes to indicate they are “the same,” “different,” “bigger,” “smaller,” “rough,” “smooth,” “loud,” or “quiet.” • Notices simple patterns in objects, sounds, movements, routines, or nature, such as stripes, repeating colors, repeated sounds, or daily changes.	• Sorts objects, materials, living things, or events by more specific or multiple features, such as texture, weight, sound, size, shape, material, movement, or change. • Explains or shows how objects are grouped using words, signs, gestures, AAC, drawings, models, or other communication modes. • Describes or extends simple patterns noticed in materials, nature, movement, sounds, weather, routines, or investigations.
			Examples of Supportive Strategies	
			• Provide varied materials for sorting, comparing, and noticing patterns, such as natural objects, classroom objects, fabric, blocks, beads, shells, leaves, rocks, containers, or recycled materials. • Invite children to notice similarities, differences, and repeated features by asking, “What is the same?”, “What is different?”, “What keeps happening?”, or “What do you see again?” • Model comparison and pattern language in natural contexts, such as “same,” “different,” “again,” “next,” “repeats,” “bigger,” “smaller,” “heavy,” “light,” “rough,” “smooth,” “before,” and “after.” • Encourage children to describe or show why they grouped objects in a certain way and to try grouping the same objects in a different way. • Support children in using tools and materials, such as charts, drawings, photos, models, graphs, balance scales, magnifiers, measuring tapes, or nonstandard measurement objects, to compare and share what they notice.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 11. Reasoning and Problem-Solving

Goal 1. Child notices what happens during investigations and shares discoveries.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early adult-supported experiences help children notice what happens during actions and interactions. Children begin by recognizing simple outcomes, such as what changed or what happened next. Over time, they describe what happened and share simple ideas about why it happened. These skills build the foundation for analyzing results and communicating findings.			With adult support, notices what happened during play or simple investigations and shares discoveries through words, gestures, drawings, marks, movement, models, or play.	Notifies and talks about what happened during investigations, compares what happened with an earlier prediction, and asks new questions with adult support as needed.
			Examples of Children’s Observable Behaviors	
			• Helps gather information during play or investigations by watching, counting, sorting, comparing, drawing, or noticing changes. • Describes what happened using words, gestures, signs, movement, AAC, home languages, or other familiar communication modes. • Shows what happened through drawings, marks, models, movement, pretend play, photos, gestures, or other familiar ways with support as needed.	• Shares what happened during an investigation using words, signs, gestures, drawings, models, photos, charts, movement, AAC, home languages, or play. • Compares what happened to what they thought might happen and talks about what changed, what stayed the same, or what they might try next. • Asks new questions based on what they noticed, found out, or did not expect.
			Examples of Supportive Strategies	
			• Guide children in gathering simple information during play, routines, and investigations by watching, counting, sorting, comparing, testing, or drawing what they notice. • Use simple language to help children describe what happened, such as “The block fell,” “The water spilled,” “The ice melted,” or “The seed grew.” • Ask open-ended questions that help children reflect, such as “What happened?”, “What changed?”, “What did you notice?”, or “What could we try again?” • Support children in comparing guesses and results using language such as “You thought it would sink, and it floated. What do you think made that happen?” • Provide multiple ways for children to share findings, such as drawings, models, simple charts, photos, storytelling, gestures, signs, AAC, home languages, or group discussions.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 11. Reasoning and Problem-Solving

Goal 2. Child uses reasoning and planning to investigate and solve problems.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early play and exploration help children understand cause and effect. Children begin by using trial and error to see how their actions change what happens. Over time, they try different approaches and begin to plan their actions. These skills build the foundation for investigation and problem-solving.			With adult support, tries simple investigations, notices cause and effect, and shows what happened through words, gestures, drawings, marks, movement, models, or play.	Takes part in longer or multi-step investigations with adult support as needed, describes steps taken, and gathers or shows information in different ways.
			Examples of Children’s Observable Behaviors	
			• Participates in simple investigations during play, such as building, water play, cooking, mixing, sorting, ramp play, or testing materials. • Notices cause and effect, such as “It fell,” “It broke,” “It melted,” “It sank,” “It rolled,” or “It made a sound.” • Tries more than one way to explore materials or solve a simple problem with support as needed.	• Takes part in investigations with more than one step, such as building structures, mixing materials, observing nature, exploring shadows, testing ramps, or cooking. • Describes or shows the steps they tried during an activity or investigation. • Uses tools, materials, drawings, photos, marks, models, simple charts, movement, gestures, signs, AAC, words, or play to gather or show information.
			Examples of Supportive Strategies	
			• Provide open-ended materials for investigation and problem-solving, such as blocks, ramps, water, sand, tubes, containers, natural objects, light, shadows, fabric, magnets, or recycled materials. • Model cause-and-effect language during play, such as “When you pushed it, it rolled,” “The tower fell when it got too tall,” or “The water moved through the tube.” • Encourage children to try different approaches when something does not work the first time. • Scaffold planning by asking, “What could we try first?”, “What happened?”, “What could we try next?”, or “What do you need?” • Help children explain what they tried, what worked, what did not work, and what they might do differently next time using words, gestures, drawings, photos, AAC, home languages, or other familiar communication modes.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 11. Reasoning and Problem-Solving

Goal 3. Child asks questions, gathers information, makes predictions, and tests ideas through play and exploration.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early cause-and-effect experiences help children begin to form ideas about what might happen. Adults support this learning by answering questions, modeling curiosity, and helping children notice what happens. Over time, children move from simple reactions and questions to making predictions and testing ideas through play and interaction. These skills build the foundation for scientific reasoning and inquiry.			Asks simple questions, seeks information from adults or familiar materials, and makes simple predictions with adult support.	Asks more detailed questions, gathers information from people, books, tools, observations, or peers, and uses current knowledge to make predictions and try ideas.
			Examples of Children’s Observable Behaviors	
			• Asks simple questions during play or routines, such as “What is that?”, “Why?”, “What happened?”, “Where did it go?”, or “What will happen?” • Makes simple predictions with adult support, such as “It will fall,” “This one will roll,” “It will melt,” or “This one is bigger.” • Tests ideas through pretend play, building, sensory play, outdoor exploration, movement, or hands-on materials.	• Asks more detailed questions during investigations, play, routines, book sharing, or outdoor experiences. • Uses people, books, pictures, tools, observations, peers, or prior experiences to gather information and make predictions. • Tests ideas during play and exploration, such as building, cooking, gardening, observing nature, mixing, measuring, or exploring materials.
			Examples of Supportive Strategies	
			• Encourage children to ask questions during play, routines, outdoor exploration, book sharing, cooking, building, sensory play, and problem-solving. • Respond to children’s questions with interest and curiosity, and help them explore possible answers rather than giving answers too quickly. • Model prediction and investigation language, such as “What do you think will happen?”, “How could we find out?”, “What happened last time?”, or “What should we try?” • Provide access to people, books, pictures, tools, natural materials, classroom materials, and outdoor spaces that help children investigate questions. • Support children in explaining and testing ideas using words, signs, gestures, drawings, models, movement, AAC, home languages, or play.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 12. Self-Identity, Family, and Community

Goal 1. Child identifies self as part of a family and community and describes roles, relationships, and ways people live and work together, with adult support as needed.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early relationships and daily routines help children understand themselves as part of a family, community, and larger story of belonging. Children begin by recognizing familiar people, forming relationships, and participating in routines. Over time, they identify relationships, notice similarities and differences, and take part in family, classroom, background, and community experiences. These skills build the foundation for understanding roles, relationships, shared responsibilities, and ways people help, care for one another, represent their families and communities, and stay connected across generations.			With adult support, identifies self as part of a family and community and describes familiar roles and relationships, and ways people help and care for one another.	Describes roles, relationships, shared responsibilities, and ways people help, care for one another, work together, represent their families and communities, and participate in family, classroom, and community life, with support as needed.
			Examples of Children’s Observable Behaviors	
			• Identifies self and shares simple information about family, home, classroom, or community experiences. • Names familiar people and describes basic relationships, such as family members, caregivers, friends, neighbors, or classroom adults. • Participates in group routines, activities, or classroom roles with support as needed.	• Describes roles of familiar people in family, classroom, or community settings. • Communicates how people help, care for one another, work together, share responsibilities, or contribute to a group. • Recognizes similarities and differences among people, families, roles, traditions, communities, and experiences, and may describe connections to relatives, ancestors, language, land, or community practices when these are part of the child’s life.
			Examples of Supportive Strategies	
			• Provide opportunities for children to share about family, home, classroom, community, traditions, languages, and meaningful experiences in ways that feel comfortable to them. • Use books, photos, stories, dramatic play materials, classroom displays, maps, music, objects, and family- or community-shared materials that reflect Wisconsin families, Tribal Nations, communities, home language(s), roles, and ways of living. • Model language that describes relationships, roles, responsibilities, helping, caring, working together, belonging, and contributing to family, classroom, and community life. • Invite children to participate in group routines, classroom jobs, collaborative projects, caring for materials, helping others, and community-based play with support matched to the child, setting, and role. • Support respectful conversations about similarities and differences among people, families, communities, roles, traditions, languages, and experiences, including the idea that families and communities may be connecting or reconnecting with practices, languages, stories, relationships, and responsibilities over time.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 13. Concept of Time

Goal 1. Child shows understanding of time by describing familiar events in sequence and recognizing differences between past and present, with adult support.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Predictable routines and repeated events help children begin to understand order and sequence. Children begin by knowing what comes next in familiar routines. Over time, they recall and describe events in order and notice how things change. These skills build the foundation for understanding sequence, past and present, and how time is organized.			With adult support, describes familiar events in sequence and identifies simple differences between past and present.	Describes events in sequence and explains differences between past and present experiences with support as needed.
			Examples of Children’s Observable Behaviors	
			• Describes familiar routines or events using simple sequence words, such as “first,” “next,” “then,” and “after.” • Talks about recent events, familiar experiences, or changes in routines with adult support. • Participates in daily routines, transitions, and classroom activities that help build understanding of order and sequence.	• Describes familiar events or experiences in order using multiple sequence words, such as “first,” “next,” “then,” “after,” “before,” and “last.” • Talks about past, present, or upcoming events using time-related language, such as “yesterday,” “today,” “tomorrow,” “before,” or “later.” • Participates in planning, anticipating, recalling, or comparing events across routines, stories, classroom projects, or personal experiences.
			Examples of Supportive Strategies	
			• Provide consistent routines, visual schedules, photos, objects, songs, and other familiar cues that help children anticipate what happens now and next. • Use sequence and time-related words during daily routines, transitions, stories, play, and conversations. • Invite children to recall recent events, describe what happened first or next, and notice changes in familiar routines or experiences. • Provide opportunities for children to plan, anticipate, and discuss upcoming activities, classroom events, family experiences, or community events. • Use books, photos, stories, calendars, timelines, drawings, and conversations to support understanding of sequence, past, present, and future.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 14. Environment, Geography, and Our Role in Society

Goal 1. Child describes features of familiar environments and explains how people use, care for, and move within their community, with adult support.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with familiar spaces help children begin to understand places and how they are used. Children begin by exploring, moving through, and recognizing familiar environments. Over time, they describe features of places and take part in caring for shared spaces. These skills build the foundation for understanding how people use, move within, and take responsibility for their environment and community.			With adult support, identifies features of familiar environments and describes how people use and move within them.	Describes features of familiar environments and explains how people use, care for, and move within their community with support as needed.
			Examples of Children’s Observable Behaviors	
			- Identifies familiar places, such as home, classroom, playground, neighborhood, or community spaces. - Describes how people use familiar spaces, such as places to play, eat, learn, rest, gather, work, or care for one another. - Participates in caring for classroom, outdoor, or shared spaces with support as needed.	- Describes features of familiar environments, such as buildings, roads, paths, signs, natural areas, gathering places, or shared community spaces. - Explains how people use different spaces for different purposes, such as learning, playing, walking, gathering, or helping care for the community. - Uses positional or directional language, maps, drawings, models, or movement to describe familiar places and how people get from one place to another.
			Examples of Supportive Strategies	
			- Create opportunities and environments where children can explore, observe, draw, build, map, and talk about familiar places, including home, classroom, outdoor, neighborhood, and community spaces. - Model language related to place, direction, movement, features, and use of space during play, routines, walks, stories, and investigations. - Use maps, drawings, photos, block structures, dramatic play, signs, and models to represent familiar places and routes. - Invite children to discuss how people use, share, care for, and move within familiar spaces and community places. - Support children in caring for shared materials, classroom spaces, outdoor areas, and community environments through meaningful routines and responsibilities.	

Learning and Development Area. Cognition and General Knowledge (C)

Strand 15. Economics: Wants, Needs, and Choices

Goal 1. Child identifies wants and needs and makes choices about resources to solve problems and participate in everyday activities, with adult support as needed.

Birth to 9 months	8 to 18 months	16 to 36 months	3–4 years	4–5 years
Early experiences with needs, choices, and materials help children begin to understand how people meet needs and use resources. Children begin by expressing wants and needs, making simple choices, and using objects during play. Over time, they participate in sharing materials, making decisions, and using tools to complete tasks. These skills build the foundation for understanding resources, decision-making, and the use of tools in everyday life.			Identifies wants and needs, makes simple choices about resources, and uses familiar resources or strategies to solve problems and complete tasks with support as needed.	Distinguishes between wants and needs, explains choices about how to use available resources, and considers what may be gained or given up when making a choice, with support as needed.
			Examples of Children’s Observable Behaviors	
			• Identifies wants and needs and communicates simple reasons for choices during play, routines, or problem-solving. • Makes choices about materials, activities, tools, or roles based on preference, purpose, or available resources. • Engages in play involving sharing, exchanging materials, community roles, jobs, or everyday decision-making.	• Identifies wants and needs and explains simple reasons for choices about resources, materials, tools, or activities. • Describes how people use resources, tools, roles, or strategies to meet needs and solve everyday problems. • Uses available materials, tools, media, or technology as one option to complete tasks, solve problems, or participate in play and routines.
			Examples of Supportive Strategies	
			• Provide opportunities for children to make meaningful choices during routines, play, projects, and problem-solving. • Model language related to wants, needs, choices, resources, tools, sharing, and decision-making. • Support play that involves sharing, exchanging materials, jobs, community roles, caregiving, making, building, buying, selling, or solving everyday problems. • Invite children to explain choices, consider available resources, and think about what they need to complete a task or solve a problem. • Guide appropriate use of tools, media, and technology as optional resources that support participation, communication, creation, or problem-solving.	