Observing and Documenting for the DRDP Measures by Level: Cognition (COG) Measures

COG 1: Spatial Relationships

Child increasingly shows understanding of how objects move in space or fit in different spaces

Developmental Levels and Descriptors	**Responding Earlier** Moves body parts in basic ways	**Responding Later** Attends or responds as objects, people, or own body move through space	**Exploring Earlier** Explores how self or objects fit in or fill up different spaces	**Exploring Later** Explores spatial relationships (e.g., distance, position, direction), or movement of self or objects through space, trying a variety of possibilities	**Building Earlier** Takes into account spatial relationships (e.g., distance, position, direction) and physical properties (e.g., size, shape) when exploring possibilities of fitting objects together or moving through space	**Building Middle**	**Building Later**	**Integrating Earlier**
Examples from DRDP	Stretches while lying on back.	Turns toward an adult who enters the room.	Fills a purse or bucket, sometimes until it is overflowing.	Attempts to put a starshaped piece into the square-, triangle-, and star-shaped openings of a shape sorter.	Chooses puzzle pieces that are approximately the right size and shape to fit into a puzzle.			
Could look like this in virtual interaction	Child can lay on a blanket during a video chat.	An adult can move an object in front of the child encouraging the child to visually track the object.	The child can be given a plastic cup and objects to place in the cup.	The parent can move kitchen chairs or sofa cushions for the child to move around like an obstacle course.	Child can complete a homemade puzzle made out of cardboard.			
Support learning and development: Ideas to share with families	When he starts reaching for things, you can place a few simple toys within his reach.	Even non-mobile babies enjoy time outside. You can put a blanket on the grass or another surface at the park, where your infant can lay and experience the sounds of birds, the wind moving	As children are becoming mobile, it is useful for them to have low, safe things to pull up on and walk around. Couches and couch cushions placed on the floor can be an interesting	Children also enjoy carrying things, such as small baskets or purses with handles that they can use to fill and carry—recycled water bottles, or other things they find. They love	Toddlers love to push things, including boxes, small strollers and carts.			

		the leaves and the feel of the fresh air.	obstacle course where they can walk from one thing to the next, holding on.	dumping as much as they love filling, so they may turn the container over as soon as they get it filled.				
How to support learning and development at this level: Ideas for teachers	Encourage the family to arrange the environment to encourage exploration.	Encourage families to notice the learning that takes place in the everyday experiences of very young children, teachers can help foster families' deeper understanding of infant/toddler cognitive development and strategies for supporting it.	Suggest ideas for simple, inexpensive, homemade toys that families can use with their children to enhance cognitive development (e.g., empty toilet-paper rolls that fit into holes cut in a cardboard box give children an opportunity to explore spatial relationships).	Identify toys or objects in the home that support an understanding of spatial relationships through nesting and stacking.	Allow ample time for children to make sense of experiences			

COG 2: Classification

Child shows an increasing ability to compare, match, and sort objects into groups according to their attributes

Developmental Levels and Descriptors	**Responding Earlier** Attends to people, objects, or events	**Responding Later** Interacts differently with familiar people and objects than with unfamiliar people and objects	**Exploring Earlier** Associates a person or object with another person or object, based on a similarity or relationship between them	**Exploring Later** Selects some objects that are similar from a collection of objects	**Building Earlier** Sorts objects into two groups based on one attribute, but not always accurately	**Building Middle** Sorts objects accurately into two or more groups based on one attribute	**Building Later** Sorts objects into two or more groups based on one attribute, then puts all the objects together and re-sorts the entire collection into new groups	**Integrating Earlier** Sorts objects into groups based on at least two attributes, sometimes sorting by one attribute and then subdividing those groups based on a second attribute
Examples from DRDP	Quiets in response to an adult's voice.	Smiles at a familiar adult's face or voice.	Looks for the hammer that goes with the pounding bench.	Selects the shovels from among toys in the sandbox.	Separates blocks into a blue pile and a green pile, leaving a few green blocks in the blue pile.	Separates a pile of toy animals by kind (e.g., dogs, cats, and birds).	Sorts shoes based on color, and then re-sorts by type (e.g., slippers, boots, tennis shoes).	Removes utensils from the play kitchen and sorts them into groups: big spoons, small spoons, big forks, and small forks.
Could look like this in virtual interaction	Tell a story with visuals.	Put on a puppet show for the children.	Play a virtual matching game (e.g., picture of baby and picture of a bottle).	Play a virtual sorting game with pictures of animals (e.g., farm animals vs. ocean animals).	Play a game where the child helps to sort two groups of materials.	Play a game where the child helps to sort two or more groups of materials.	Play a game where the child helps to sort two or more groups of materials, then invite children to re-sort the materials.	Invite children to gather together a group of toys and sort them by size and color.
Support learning and development: Ideas to share with families	Talk to child during feedings.	Place familiar and unfamiliar objects and/or toys in child's reach. Observe which object the child reaches for.	Play match game with objects at home (e.g., a spoon and a bowl).	Go on a nature walk and collect items that can be found on a tree.	Go for a nature walk and collect rocks. Once home sort rocks into two piles, big and small.	While cleaning child's room, have them sort toys and stuffed animals.	Play a sorting game with materials and objects at home (e.g., shoes, blocks, cups). During the game encourage children to re-sort the objects in a new way.	Encourage children to sort socks based on attributes (size, color, design).
How to support learning and development at	Respond to child's cues through actions, words,	Encourage caregivers to arrange objects/toys	Talk about similarity and relationship between objects.	Talk about the different attributes of objects (e.g.,	Organize materials into categories (e.g.,	Provide opportunities for children to sort household items	Ask children to explain and describe their sorting and	Identify opportunities for sorting and classifying in

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this level: Ideas for teachers	and facial expression.	within child's reach.		color, size, texture).	markers, crayons, pencils).	while cleaning (e.g., putting away spoons and forks).	classifying. "It seems that you have two groups of animals. Why did you put these animals together and those animals together?" "Tell me how you sorted these rocks."	everyday routines (e.g., clean-up, recycling, setting the tables).

COG 3: Number Sense of Quantity

Child shows developing understanding of number and quantity

Developmental Levels and Descriptors	**Responding Earlier** Responds to people or objects in basic ways	**Responding Later** Responds to changes in the number of objects observed or interacted with	**Exploring Earlier** Demonstrates awareness of quantity	**Exploring Later** Uses number names, but not always correctly, in situations related to number or quantity	**Building Earlier** Identifies small quantities without counting, up to three	**Building Middle** Counts up to five objects using one-to one correspondence; and Recites numbers in order, one through ten	**Building Later** Shows understanding that the last number counted is the total number of objects in the group	**Integrating Earlier** Solves simple everyday problems involving numbers by counting up to 10 objects using one-to-one correspondence; and Recites numbers correctly, up to 20
Examples from DRDP	Looks at objects that are hanging from a mobile.	Attends to one moving toy on a mobile, then to another.	Communicates, "More," during lunch.	Communicates, "Dos," ["Two," in Spanish] and holds up two cups in the play kitchen.	Communicates, "Three dogs," while looking at a picture of three dogs.	Counts out loud, "一, 二, 三, 四, 五," ["One, two, three, four, five," in Chinese] saying the next number as the next cup is placed on the table.	Counts four pencils and says, "Apat," ["Four," in Tagalog] when asked how many pencils there are.	Counts accurately to 20 while marching.
Could look like this in virtual interaction	An adult can touch each of the child's fingers as the child watches.	Put on puppet show using 1-2 puppets.	Have a virtual snack time.	Tell number related flannel stories (e.g., Five Green and Speckled Frogs).	Play a subitzing game (e.g., dots on plates).	Read "Ten Little Ladybugs."	Read "Ten Little Ladybugs" during the reading invite children to count the ladybugs, after they count ask, "How many?"	Use dice and/or spinners to play math games.
Support learning and development: Ideas to share with families	You can point to your nose and then point to your baby's nose: "Here is my nose and here is your nose." This begins to introduce the concept of one-to-one correspondence.	Play a toy hide and seek game.	During snack time serve 2 bowls with food and ask your child which bowl has more or less.	Play board games (e.g., Candy Land).	Throughout the day hand child 1-3 objects (markers, crayons, spoons) and ask child how many objects they have.	Allow children to set up the table for mealtime and encourage children to count plates, spoons, napkins as they set the table.	Encourage counting during everyday interactions and routines. After children count objects ask, "How many?"	Play a counting game, counting how many steps from the kitchen to other rooms in the house.

	"One person/one nose. Each person has a nose."							
How to support learning and development at this level: Ideas for teachers	By approaching the active learning of infants and toddlers with a sense of wonder, teachers nurture the children's sense of wonder and their growing understanding of and fascination with the people and things in their immediate environment	Observe child interacting with multiple toys.	Use quantity words (e.g., more, less).	Use number names throughout the day.	Play games with dice.	Invite children to count objects throughout the day.	Ask children "How many" after the count items.	

COG 4: Number Sense of Math Operations
Child shows increasing ability to add and subtract small quantities of objects

Developmental Levels and Descriptors	**Responding Earlier**	**Responding Later**	**Exploring Earlier** Demonstrates awareness of quantity	**Exploring Later** Manipulates objects and explores the change in the number in a group	**Building Earlier** Demonstrates understanding that adding objects to a group makes more or that taking away objects makes fewer or less	**Building Middle** Identifies the new number of objects after one object is added to or removed from a set of two or three objects	**Building Later** Uses counting to add or subtract one or two objects to or from a group of at least four objects	**Integrating Earlier** Solves simple addition or subtraction word problems by using fingers or objects to represent numbers or by mental calculation
Examples from DRDP			Gestures for more when playing with play dough.	Puts objects in a dump truck or container, dumps them out, then puts them back in one at a time.	Communicates, "Ahora tenemos más," ["Now we have more," in Spanish] when an adult combines markers from the shelf with some on the table.	Gives one of two cars to another child, and then communicates, "Tôi có một cái và bạn có một cái," ["I have one and you have one," in Vietnamese].	Counts out five small crackers, "One... two... three... four... five." After eating two, counts, "One... two... three," and communicates, "Now, I've got three."	Holds up five fingers and then one finger, counts them, and communicates, "Six," when asked, "If you had five crackers, and you took one more, how many crackers would you have?"
Could look like this in virtual interaction			During stories, show children pictures in the book and discuss different quantity.	Invite children to gather building materials and build together.	Use flannel board stories to demonstrate adding and taking away. Create virtual graphs (e.g., favorite animal, movie, vegetable).	Use crackers to practice simple addition and subtraction problems. Then, enjoy the snack!	Tell the story "Five Little Ducks." During the song, ask children how many ducks are left.	Snack Chat! Have a virtual snack time with children. During that time, ask children how many crackers they have left after eating one.
Support learning and development: Ideas to share with families			Make breakfast together. While making breakfast, use words related to quantity (e.g., more milk, less bananas).	Play with sand/water using sand toys, buckets, and cups.	Create a sticker book. While making the book ask children to add one more sticker.	Use snack time to practice simple addition and subtraction.	Play a homemade bowling game.	Make a pizza. Incorporate simple math problems when adding toppings to pizzas.
How to support learning and development at this level: Ideas for teachers			Use comparison terms (more, same as, fewer, or less) through everyday interactions.	Provide children the opportunity to serve themselves during mealtime.	Introduce children to the concepts of addition and subtraction through literature, songs, and games.	Use everyday interactions and routines to illustrate and discuss addition and subtraction.	Use everyday interactions and routines to illustrate and discuss addition and subtraction.	Make number related books, games, and other materials accessible.

COG 5: Measurement

Child shows an increasing understanding of measurable properties such as size, length, weight, and capacity (volume), and how to quantify those properties

Developmental Levels and Descriptors	**Responding Earlier**	**Responding Later**	**Exploring Earlier** Demonstrates awareness that objects differ by properties (e.g., size, length, weight, or capacity)	**Exploring Later** Explores how objects differ by properties (e.g., size, length, weight, capacity)	**Building Earlier** Shows understanding of some measurable properties (e.g., size, length, weight, capacity) or uses words (e.g., "big," "heavy") to describe some measurable properties	**Building Middle** Identifies differences in size, length, weight, or capacity between two objects, using comparative words (e.g., "bigger," "smaller") or showing understanding of comparative words	**Building Later** Orders three or more objects by directly comparing them using a measurable property (e.g., size, length, weight, capacity)	**Integrating Earlier** Explores the properties of objects (e.g., size, length, weight, capacity) through either the use of measurement tools with standard units (e.g., ruler, scale) or the use of non-standard units (e.g., footsteps, blocks)
Examples from DRDP			Gestures by holding one hand high in the air to indicate that an adult is tall.	Makes repeated attempts to put different-sized trucks into a small tunnel.	Gestures to indicate how big the family dog is, when asked.	Communicates, "Mine is taller," when building a block tower next to another child's block tower.	Lines up several stuffed animals from smallest to largest, during pretend play.	Fills a measuring cup twice to add two cups of oatmeal during a cooking activity.
Could look like this in virtual interaction			Play Simon Says! (e.g., Simon says make yourself tall).	Play measurement show and tell! (e.g., bring something small, heavy, tall).	Place a "mystery item" in a paper bag and give children clues describing some measurable properties (big, small, heavy).	Scavenger Hunt! Ask children to find something small then something bigger.	Have a virtual picnic with stuffed animals. During the picnic invite children to line up stuffed animals from smallest to largest.	Introduce standard and non-standard units of measurements (e.g., rulers, measuring tape, blocks, markers).
Support learning and development: Ideas to share with families			Create a growth chart to measure children.	Invite child to compare items around the house. Which is small? Which is longer?	Water Play! Use a variety of measuring cups, spoons, and containers.	Build with children using blocks and/or boxes.		Measure items in the house using children's hands.

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How to support learning and development at this level: Ideas for teachers			Provide children access to measuring tools (e.g., measuring cups, spoons, and different sized containers).		"Which ribbon is longer?" "Which beanstalk is taller?" "Which is heavier, the foam block or the wood block?" "Which container holds more?"	"Which ribbon is longer?" "Which beanstalk is taller?" "Which is heavier, the foam block or the wood block?" "Which container holds more?"	Model the use of comparison vocabulary. "This is a very tall tree. Which tree do you think is taller?" "This is a big box. I think we a need a bigger box.	Provide families with simple recipes to make with children. While cooking invite children to help measure by using measuring cups and spoons.

COG 6: Patterning

Child shows an increasing ability to recognize, reproduce, and create patterns of varying complexity

Developmental Levels and Descriptors	**Responding Earlier**	**Responding Later**	**Exploring Earlier** Notices and responds to simple repeating sequences	**Exploring Later** Participates in some parts of simple repeating sequences in language, movement, music, everyday routines, or interactions	**Building Earlier** Matches simple sequences that are seen, heard, or experienced	**Building Middle** Attempts to create simple repeating patterns (with two elements)	**Building Later** Extends a simple repeating pattern (with two elements) by adding one or more repetitions of an existing pattern	**Integrating Earlier** Creates, copies, or extends complex patterns (with three or more elements)
Examples from DRDP			Watches intently and waves hands while adult sings "Open, shut them" song.	Pays attention to and attempts to follow the sequence as an adult claps, taps, claps, and taps.	Repeats series of actions of touching head, shoulders, knees, and toes during the song "Head, Shoulders, Knees, and Toes.	Claps, stomps, and then repeats.	Continues a simple repeating pattern of drumbeats, started by an adult.	Makes up a rhythmic sequence by clapping, patting, and stomping.
Could look like this in virtual interaction			Sing songs that follow a pattern.	Create a routine to start virtual interactions. Have a pattern dress up day.	Read or tell stories that have repeating phrases like *"Brown bear, brown bear, what do you see?"*	Ask children to create their own movement for "Head, Shoulders, Knees, and Toes"	Use whiteboard to show children simple pattern and invite children to repeat the existing pattern.	During mealtime challenge children to eat in a pattern (e.g., cereal, banana, milk).
Support learning and development: Ideas to share with families			Patterns through movement. (e.g., "If You're Happy and You Know It, Clap Your Hands," or "Hokey Pokey")	Create a mealtime routine (wash hands, get snack, and sit at table).	Play Head, Shoulders, Knees, and Toes.	Have a dance party! While dancing repeat movements to make a pattern (clap, spin, clap, spin).	While playing with playdough start a pattern (green, blue, green) invite child to continue the pattern.	Create a family band with instruments and/or materials like pots, pans, and spoons.
How to support learning and development at this level: Ideas for teachers			Point out patterns in the environment.	Create routines (e.g., brush teeth, put on pajamas, bedtime story). Create visual for the routines.	Point out patterns in song, and stories. Ask "what is he going to say next" while reading a story.	Encourage children to make a pattern using two different objects.	Start reading the story Brown Bear, Brown Bear and have the child tell you the next part.	Ask questions about patterns: "What would come next?" "What happens over and over again?" "Do you see a pattern?" "Is this a pattern? Why?"

COG 7: Shapes

Child shows an increasing knowledge of shapes and their characteristics

Developmental Levels and Descriptors	**Responding Earlier**	**Responding Later**	**Exploring Earlier** Explores shapes of objects	**Exploring Later** Manipulates objects based on shape	**Building Earlier** Matches similar shapes and distinguishes them from dissimilar shapes without necessarily naming them	**Building Middle** Identifies or names several shapes in the environment (e.g., circles, squares, triangles)	**Building Later** Recognizes shapes when they are presented in different orientations or as parts of other objects	**Integrating Earlier** Describes several shapes and the differences between them
Examples from DRDP			Feels along the edges of a triangle.	Puts a square-shaped puzzle piece into the correct hole of a form board.	Chooses blocks of the same shape to build a tower with another child.	Names "square," "circle," and "triangle" after exploring each shape piece with hands.	Communicates that the face in a figure drawing is a circle.	Communicates that a triangle has three sides and a square has four sides.
Could look like this in virtual interaction			Before meeting, invite children to collect different shaped items (e.g., balls, boxes, blocks).	Invite families to cut out shapes during meeting.	Draw shape on whiteboard and have children share the same shaped object from their home.	Play I Spy using shapes.	Read shape books (e.g., *Mouse Shapes*, *Color Zoo*, *Shapes, Shapes, Shapes*).	Shape Scavenger Hunt! Describe a shape and have the children bring something that shape to the screen.
Support learning and development: Ideas to share with families			Make cookies using shape cookie cutters.	Play with blocks or boxes.	Play shape BINGO!	Go on a shape hunt! Allow children to take picture of items indoor/outdoor of shapes in their environment.	Play Pictionary! Use a whiteboard to draw a picture using different shapes. Encourage children to guess the shape and the picture.	Mystery Bag! Have child place a shape in a bag then describe the shape as you guess.
How to support learning and development at this level: Ideas for teachers			Provide list of materials that encourage pre-school shape exploration and manipulation (e.g., shape sponges, cookie cutters, stickers, magnets).	Encourage children to trace objects (using chalk, pencils, etc.).	Provide children with a collection of shapes varying in size and color. Ask children to put all the same kind of shapes together. Discuss with children why a shape belongs to a group.	Sing a Song about different types of shapes (octagons, hexagons, pentagons, trapezoids) "traffic signs, road signs, etc.).	Encourage children to draw pictures using only 2 shapes. "triangles for shoes, diamonds for trees."	Talk about shapes and discuss their attributes: "Let's find out how many straight sides are in a rectangle." "One, two, three, four. How many straight sides do we have in a triangle? Can you help me find out?

COG 8: Cause and Effect

Child demonstrates an increasing ability to observe, anticipate, and reason about the relationship between cause and effect

Developmental Levels and Descriptors	**Responding** Earlier Responds or shows anticipatory excitement to people, objects, or actions	**Responding Later** Repeats actions that have effects	**Exploring Earlier** Tries out different behaviors to cause effects	**Exploring Later** Searches for possible causes of actions, events, or behaviors	**Building Earlier** Acts on objects to cause a specific result	**Building Middle**	**Building Later**	**Integrating Earlier**
Examples from DRDP	Orients to a music toy nearby.	Shakes a rattle, pauses, then shakes it again.	Makes a game of pushing different objects off a table, watching or listening as they fall.	Looks up in the sky and points when hearing a loud noise from a plane flying overhead.	Pours water into a water wheel to make it spin			
Could look like this in virtual interaction	Child might look at adult on screen singing a song during a video conference.	Child might lift arms to get tickled by parent again.	Child might push his food bowl off of his high-chair tray.	Child might look at family dog when he barks.	Child might build and then knock over a small tower of blocks.			
Support learning and development: Ideas to share with families	Provide a wide variety of materials for them to explore.	Look around the floor carefully to be sure that everything she can reach and pick up is safe for her to explore and put in her mouth.	Beginning walkers love to push things, including boxes, small strollers and carts.	When your toddler points to the airplane in the sky, you can explain, "Wow, you noticed the airplane. It is high in the sky. Now we can't hear it anymore. It is gone."	Toddlers love to build and stack things (and knock them down). They will do this with almost anything they can find—cans and boxes from the cupboard, sticks and leaves from outside, small scraps of wood from the lumber store, or sets of building blocks.			
How to support learning and development at this level: Ideas for teachers	The extent to which infants develop as confident, competent, compassionate thinkers and problem solvers is influenced by the types of play and care experiences that teachers offer.	Suggest playing with musical instruments such as simple flutes, drums, xylophones, pianos, chimes, and bells enhance the play space with delightful sounds as children shake, tap, pluck, or blow them.	Suggest toys that support cause and-effect experimentation	Encourage the family to identify objects that encourage toddlers to notice the cause-and-effect relationships with the wind and the sun include windsocks, chimes, or sun reflectors attached to an outdoor fence.	Encourage children try out behaviors to cause things to happen. For instance, they may try to figure out how things open, such as a lid on a box, a cupboard door, or a book.			