

P-MELDS

Domain: Cognitive Development

This document can be used for planning within the Social Emotional Development Domain. You can type directly into the “My Planning” boxes.

Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
Mathematical Practices and Reasoning	Numeracy and Operations	Mathematical Practices	12a	Participates in whole group and small group math-focused activities (e.g. joins in singing a counting/sequential song such as “Going on a Bear Hunt”)		Identifies math concepts within their learning environments.	
				Uses math for “problem solving” in the physical and social world.		Recognizes the usefulness of math in everyday tasks.	
				Communicates math ideas verbally and non-verbally.		Uses math to solve problems in the context of classroom and home experiences.	
						Represents mathematical concepts using classroom materials.	
						Uses math-related skills, such as sorting, counting, and matching in the course of	

Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
						everyday classroom experiences.	
						Uses math terms in the course of everyday conversations.	
				Counts to 10 and beyond by ones with increasing accuracy.		Counts to 20 and beyond by ones with increasing accuracy.	
				Recognizes and labels written numerals 0-5.		Recognizes and labels written numerals 0-10.	
						Begins to recognize small quantities immediately (subitize) to determine how many.	
						Counts items to 10, recognizing the last number tells how many (cardinality).	
						Begins to write number symbols 0-10.	
						Identifies whether the number of objects in one group is more than, less than, or equal to the number of objects in another group up to 10.	
						Counts using 1:1 correspondence with increasing accuracy.	
Mathematical Practices and Reasoning	Numeracy and Operations	Counting and Cardinality Cluster	12b	Counts items to 5, recognizing the last number tells a total (cardinality).			
Mathematical Practices and Reasoning	Numeracy and Operations	Operations and Algebraic Thinking	12c	Transitions from rote counting to 1:1 correspondence.			



Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
Mathematical Practices and Reasoning	Geometric Reasoning	Geometry	13a	Responds with number words and/or counting strategy, when asked the question, How many?		Represents addition and subtraction with materials, drawing, and role play.	
						Uses concrete objects to model real-world addition and subtraction up to 10 (composing and decomposing numbers).	
						Solves story problems using sets of up to 10 objects.	
				Recognizes and names/ describes simple shapes.		Describes, sorts and classifies shapes using some attributes such as size, sides, and other properties.	
				Matches similar shapes.		Breaks down shapes into parts and whole.	
				Explores three-dimensional and two-dimensional shapes in the environment.		Discovers connections between formal geometric shapes and the surrounding environment to make three-dimensional and two-dimensional shapes by building, drawing, or labeling.	
				Uses puzzles and other learning		Demonstrates understanding of	

Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
Mathematical Practices and Reasoning	Statistical Reasoning	Measurement and Data	14a	materials to demonstrate beginning part/whole, shape and orientation concepts to solve problems.		directionality describing positions of objects in relationship to each other.	
				Uses physical movement to gain understanding of orientation and directionality (i.e., near, far, beside, up, over, left).			
				Matches and groups similar objects.		Describes, sorts and names groups (classifies) of objects using one or more attributes.	
				Recognizes measurable features of objects.		Identifies and compares measurable features of everyday objects, using appropriate vocabulary.	
				Explores and begins to use measurement tools.		Begins to use words such as “first”, “next”, and “last.”	
				Sorts, orders and groups familiar objects by a single feature and explains the reason.		Uses measurable features to order materials sequentially.	

Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
				Recognizes and copies simple patterns in the environment, including sound and movement patterns.		Recognizes, copies, creates, and continues simple patterns using objects.	
				Demonstrates an understanding of time periods.		Uses past and future tenses and time words appropriately.	
				Relates concepts of past, present and future to daily activities.		Begins to understand concepts such as yesterday, today, and tomorrow.	
				Participates in data collection activities.		Responds to questions that can be answered through data analysis.	
						Is able to show data using simple charts and graphs.	
						Uses non-standard units of measurement such as cubes, links, counting bears or hands, to measure objects.	
						Uses measurement terms and concepts in everyday life.	
Scientific Reasoning	Scientific Practices and Reasoning	Exploration	15a	Explores and describes the immediate environment (materials, living		Uses new vocabulary when investigating materials, living things, patterns and cycles in nature.	

Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
				things, patterns and cycles in nature).			
				Experiments with new materials, technology and equipment.		Uses and/or describes tools and technology that aid in solving a problem or performing a task.	
				Investigates and problem solves through active exploration.		Plans and cooperatively carries out investigations to answer questions, test ideas and/or solve problems.	
				Explores and describes changes in materials and cause and effect.		Experiments with materials to change outcomes.	
Scientific Reasoning	Scientific Practices and Reasoning	Application of Science Concepts and Practices	15b	Poses questions about objects and events.		Begins to use evidence gathered during play/project work and books/media to answer questions.	
				Seeks answers to questions as children explore through play and projects.		Begins to classify objects and living things into categories.	
				Describes or shows how objects and events are the same and different.		Describes what can be discovered using different senses and tools.	

Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
				Observes using senses and simple tools to explore properties of objects and living things safely (color, scent, shape, size, texture, weight).		Plans and carries out investigations with others.	
				With teacher guidance, participates in science-based explorations.		Makes and tests predictions.	
				With teacher guidance, shares ideas and discoveries through conversations with peers and adults, simple drawings, dictation, early writing, and symbol charts.		Collects and records information through drawing, writing, dictation and taking photographs.	
						Draws conclusions and shares explanations based on evidence, prior knowledge, and the ideas of others.	
Scientific Reasoning	Physical Science and Engineering	Motion and Stability: Forces and Interactions	16a	Using senses, tools and observation, begins to experiment with objects in motion and pushing/pulling.		Uses senses and tools (including technology) to observe and describe the strength and direction of forces.	
				Begins to observe that matter can change state (i.e. solid to liquid, liquid to gas).		Plans and carries out comparisons of motion and force using common objects and materials (e.g., which	

Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
						objects move faster or slower, which object goes faster or further when you just let go or give it a push).	
				Compares and contrasts light and shadow in outdoor and indoor environments.		Recognizes different types of matter (e.g., solid, liquid).	
				Begins to explore how the size, shape and material of objects impact the sounds they make.		Explores different sources of light, how light reflects, and what happens when light is blocked.	
						Creates and describes sounds and what makes them change.	
Scientific Reasoning	Physical Science and Engineering	Engineering	16b	Uses common objects that function as simple machines during play.		Compares tools or solutions and reflects on what works well.	
						Uses common objects to build simple machines that solve a problem.	
Scientific Reasoning	Earth Science	Earth's Systems	17a	Using simple tools, explores differences between soil, sand and water under different conditions.		Uses senses and tools (including technology) to describe and discuss how weather changes over time.	



Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
				Observes, describes, and compares different weather conditions (rainy, cold, warm, snowy, cloudy).		Plans and carries out simple experiments with rocks, sand, water or soil and records observations using drawings, discussions, graphs and technology such as digital microscopes.	
				Suggests how weather affects human activities.			
Scientific Reasoning	Earth Science	The Earth and Human Activity	17b	Begins to describe how human activity affects the environment.		Demonstrates, through observation and investigation, an understanding that human activity impacts the earth (uses of resources to make products).	
				Uses water and energy responsibly (e.g. turning off lights when not in use, not wasting water.)			
Scientific Reasoning	Life Science	Organisms: Structures and Processes	18a	Uses senses to observe and describe properties of familiar plants and animals.		Compares how people and other animals grow and change (life cycles).	
				Begins to use vocabulary for naming and describing plants and animals moving from general to specific labels.		Uses vocabulary for naming plants and animals moving beyond general labels and begins to connect how they look to where and how they live.	
				Compares properties and needs of similar		Develops plans, based on observations and	

Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
Social Sciences	People, Communities, and their Environment	Civics and Government	19a	and different plants and animals.		guided inquiry, to care for plants and animals in the classroom and surrounding area.	
				Cares for plants and animals in the classroom and surrounding area and describes their needs.		Begins to describe how animals adapt to weather conditions.	
						Identifies problems affecting the lives of plants and animals (including themselves) and generates possible solutions.	
				Recognizes the importance of their role as a member of their family, class, and community.		Demonstrates a basic understanding of how people can positively affect their family, class and community.	
				Identifies activities that people can participate in to take care of the environment.		Understands and discusses why responsibilities are important.	
				Participates in developing classroom rules.		Recognizes different rules apply to different environments (e.g., classroom vs field trips).	
				With prompting and support, children participate in the classroom community by interacting with		Assists, with support and guidance, in developing and participating in activities designed to	

Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
				other children and adults in a formal or group setting.		care for the environment and/or community.	
Social Sciences	People, Communities, and their Environment	Economics	19b	Identifies different types of employment, including work done in the home, school, and community.		Explores and discusses differences between basic wants and needs.	
				Explores materials that build a foundation for understanding economic concepts such as using money to buy goods and services, trading, and sustainability.		Identifies and explains how basic human needs of food, clothing, shelter, and transportation are met.	
						Begins to recognize money and its uses.	
Social Sciences	People, Communities, and their Environment	Geography	19c	Recognizes that people share the environment with other people, animals, and plants.		With support recognizes that environmental changes can impact people, animals, and plants.	
				Recognizes various ways people communicate, travel, live, and work.		Describes and sequences physical features of the community through visual representation.	
				Recognizes aspects of the environment, such as roads, buildings, trees,		Develops an understanding of the use and representation of simple maps, globes,	

Sub-Domain	Goal Topic	Element	Code	Indicators- 34-48 Months	My Planning	Indicators- 46-60 Months	My Planning
Social Sciences	People, Communities, and their Environment	History and Culture	19d	gardens, wildlife, bodies of water, or land formations.		and other geographic tools.	
						Displays awareness that geographic features influence how people experience, navigate and work in their community and in other geographic regions.	
				Uses words to describe time (e.g., yesterday, names of seasons, before).		Uses words and phrases correctly to indicate changes that take place over time.	
				With prompting and support, recognizes differences and commonalities in culture, ethnicity, and abilities within the classroom and immediate communities.		Observes and recognizes changes that take place over time in the family, classroom and community.	
						Recalls events that happened in the past, such as a family or personal history.	
						Displays awareness of similarities and differences among individuals and families.	