



Head Start Child Development and Learning Framework Alignment with Zula Exploration Mission Modules

SM = Simple Machines Exploration Mission Module

MSCR = Mixtures, Solutions, and Chemical Reactions Exploration Mission Module

FR = Force Exploration Mission Module

HB = Habitats Exploration Mission Module

MA = Matter Exploration Mission Module

LT = Light Exploration Mission Module

H₂O = Water Exploration Mission Module

PALC = Plants, Animals, and Life Cycles Mission Module

RS = Rocks and Soil Mission Module

WE = Weather Mission Module

Language Development

Receptive Language

- Attends to language during conversations, songs, stories, or other learning experiences. (SM, MSCR, FR, HB, MA, LT, H₂O, PALC, RS, WE)
- Comprehends increasingly complex and varied vocabulary. (SM, MSCR, FR, HB, MA, LT, H₂O, PALC, RS, WE)
- Comprehends different forms of language, such as questions or exclamations. (SM, MSCR, FR, HB, MA, LT, H₂O, PALC, RS, WE)
- Comprehends different grammatical structures or rules for using language. (SM, MSCR, FR, HB, MA, LT, H₂O, PALC, RS, WE)

Expressive Language

- Engages in communication and conversations with others. (SM, MSCR, FR, HB, MA, LT, H₂O, PALC, RS, WE)
- Uses language to express ideas and needs. (SM, MSCR, FR, HB, MA, LT, H₂O, PALC, RS, WE)

- Uses increasingly complex and varied vocabulary. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Uses different forms of language. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Uses different grammatical structures for a variety of purposes. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Engages in storytelling. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Engages in conversations with peers and adults. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Literacy Knowledge & Skills

Book Appreciation and Knowledge

- Shows interest in shared reading experiences and looking at books independently. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Recognizes how books are read, such as front-to-back and one page at a time, and recognizes basic characteristics, such as title, author, and illustrator. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Asks and answers questions and makes comments about print materials. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Demonstrates interest in different kinds of literature, such as fiction and non-fiction books and poetry, on a range of topics. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Retells stories or information from books through conversation, artistic works, creative movement or drama. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Print Concepts & Conventions

- Recognizes print in everyday life, such as numbers, letters, one's name, words, and familiar logos and signs. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Understand that print conveys meaning. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Understands conventions, such as print moves from left to right and top to bottom of a page. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Recognizes words as a unit of print and understands that letters are grouped to form words. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Recognizes the association between spoken or signed and written words. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Early Writing

- Experiments with writing tools and materials. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Recognizes that writing is a way of communicating for a variety of purposes, such as giving information, sharing stories, or giving an opinion. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Uses scribbles, shapes, pictures, and letters to represent objects, stories, experiences, or ideas. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Copies, traces, or independently writes letters or words. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Mathematics Knowledge and Skills

Number Concepts & Quantities

- Recognizes numbers and quantities in the everyday environment. (SM, FR, H2O, RS, HB, PALC, MSCR)
- Recites numbers in the correct order and understands that numbers come “before” or “after” one another. (SM, MA, RS, HB, PALC, MSCR, H2O)
- Associates quantities and the names of numbers with written numerals. (PALC)
- Uses one-to-one counting and subitizing (identifying the number of objects without counting) to determine quantity. (SM, FR, H2O, RS, HB, PALC, MSCR)
- Uses the number name of the last object counted to represent the number of objects in the set. (SM, MA, RS, HB, MSCR, H2O, PALC)

Number Relationships & Operations

- Uses a range of strategies, such as counting, subitizing, or matching, to compare quantity in two sets of objects and describes the comparison with terms, such as more, less, greater than, fewer or equal to. (SM, FR, HB, MSCR, H2O, WE)
- Recognizes that numbers (or sets of objects) can be combined or separated to make another number through the grouping of objects. (SM, FR, MSCR, H2O, HB, RS)

Geometry & Spatial Sense

- Recognizes and names common shapes, their parts and attributes. (SM, FR, H2O, LT, MA)
- Combines and separates shapes to make other shapes. (SM)
- Compares objects in size and shape. (SM, FR)
- Understands directionality, order, and positions of objects, such as up, down, in front, behind. (SM, FR, MSCR)

Patterns

- Sorts, classifies, and serializes (puts in a pattern) objects using attributes, such as color, shape, or size. (SM, FR, HB, RS, MSCR, PALC, H2O, LT)
- Recognizes, duplicates and extends simple patterns. (SM, FR)

Measurement & Comparison

- Compares objects using attributes of length, weight and size (bigger, longer, taller, heavier). (SM, FR, H2O, MSCR, RS)
- Orders objects by size or length. (SM, FR, RS, MSCR)
- Uses nonstandard and standard techniques and tools to measure and compare (SM, FR, LT, MSCR, HB, H2O, WE, MA)

Science Knowledge and Skills

Scientific Skills & Methods

- Uses senses and tools, including technology, to gather information, investigate materials, and observe processes and relationships. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Observes and discusses common properties, differences and comparisons among objects. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

- Participates in simple investigations to form hypotheses, gather observations, draw conclusions and form generalizations. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Collects, describes, and records information through discussions, drawings, maps and charts. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Describes and discusses predictions, explanations, and generalizations based on past experience. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Conceptual Knowledge of the Natural & Physical World

- Observes, describes, and discusses living things and natural processes. (PALC, HB, WE, RS, H2O)
- Observes, describes, and discusses properties of materials and transformation of substances. (SM, MSCR, FR, MA, LT, H2O, RS, WE)

Social & Emotional Development

Social Relationships

- Communicates with familiar adults and accepts or requests guidance. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Cooperates with others. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Uses socially appropriate behavior with peers and adults, such as helping, sharing, and taking turns. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Self Concept & Self-Efficacy

- Identifies personal characteristics, preferences, thoughts, and feelings. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Demonstrates age-appropriate independence in a range of activities, routines, and tasks. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Shows confidence in a range of abilities and in the capacity to accomplish tasks and take on new tasks. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Demonstrates age-appropriate independence in decision making regarding activities and materials. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Self-Regulation

- Follows simple rules, routines, and directions. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Shifts attention between tasks and moves through transitions with minimal direction from adults. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Approaches To Learning

Initiative & Curiosity

- Demonstrates flexibility, imagination, and inventiveness in approaching tasks and activities. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Demonstrates eagerness to learn about and discuss a range of topics, ideas, and tasks. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Asks questions and seeks new information. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Persistence & Attentiveness

- Maintains interest in a project or activity until completed. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Sets goals and develops and follows through on plans. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Resists distractions, maintains attention, and continues the task at hand through frustration or challenges. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Cooperation

- Plans, initiates, and completes learning activities with peers. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Joins in cooperative play with others and invites other to play. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Models or teaches peers. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Helps, shares, and cooperates in a group. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Logic & Reasoning

Reasoning & Problem Solving

- Seeks multiple solutions to a question, task or problem. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Recognizes cause and effect relationships. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Classifies, compares, and contrasts objects, events, and experiences. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Uses past knowledge to build new knowledge. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)

Symbolic Representation

- Represents people, places, or things through drawings, movement, and three-dimensional objects. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)
- Recognizes the difference between pretend or fantasy situations. (SM, MSCR, FR, HB, MA, LT, H2O, PALC, RS, WE)