



Zula Exploration Mission Module Alignment with Oklahoma Pre-K Priority Academic Student Skills

SM = Simple Machines Exploration Mission Module

FR = Force Exploration Mission Module

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

MA = Matter Exploration Mission Module

LT = Light Exploration Mission Module

H2O = Water Exploration Mission Module

WE = Weather Exploration Mission Module

RS = Rocks and Soil Exploration Mission Module

HB = Habitats Exploration Mission Module

PALC = Plants, Animals, and Life Cycles Mission Module

Language Arts

Oral Language

Standard 1: Listening - The child will listen for information and for pleasure.

1. Listens with interest to stories read aloud. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
2. Understands and follows oral direction. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)

Standard 2: Speaking - The child will express ideas or opinions in group or individual settings.

1. Uses language for a variety of purposes (e.g., expressing needs and interests). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)

2. Recalls and repeats simple poems, rhymes, and songs. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
3. Uses sentences of increasing length (three or more words) and grammatical complexity in everyday speech. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
4. Shares simple personal narrative. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
5. Participates actively in conversations. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)

Literacy

Standard 3: Print Awareness - The child will understand the characteristics of written language.

1. Demonstrates increasing awareness of concepts of print. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
2. Identifies the front cover and back cover of a book. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
3. Follows book from left to right and from top to bottom on the printed page. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
4. Shows increasing awareness of print in classroom, home and community settings. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
5. Begins to recognize the relationship or connection between spoken and written words by following the print as it is read aloud. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
6. Understands that print carries a message by recognizing labels, signs, and other print forms in the environment. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
7. Develops growing understanding of the different functions of forms of print (e.g., signs, letters, newspapers, lists, messages, and menus). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
8. Begins to understand some basic print conventions (e.g., the concept that letters are grouped to form words and that words are separated by spaces). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
9. Role plays reading. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)

Standard 7: Vocabulary - The child will develop and expand knowledge of words and word meanings to increase vocabulary.

1. Shows a steady increase in listening and speaking vocabulary. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
2. Understands and follows oral directions (e.g., use of position words: under, above, through). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
3. Links new learning experiences and vocabulary to what is already known about a topic. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)

Standard 8: Comprehension - The child will associate meaning and understanding with reading.

1. Begin to use prereading skills and strategies (e.g., connecting prior knowledge to text, making predictions about text and using picture clues). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
2. Demonstrates progress in abilities to retell and dictate stories from books and experiences. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
3. Remembers and articulates some sequences of events. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
4. Connects information and events to real-life experiences when being read a story. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
5. Demonstrates understanding of literal meaning of story being told through questions and comments. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
6. Tells what is happening in a picture. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)

Writing

Standard 9: Writing Process - The child will use the “writing process” to express thoughts and feelings.

1. Develops understanding that writing is a way of communicating for a variety of purposes. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
2. Progresses from using scribbles, shapes, or pictures to represent ideas to using letter-like symbols, or writing familiar words such as their own name. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
3. Participates in writing opportunities. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
4. Begins to remember and repeat stories and experiences through drawing and dictation to the teacher. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)

Mathematics

Standard 1: Algebraic Reasoning: Patterns and Relationships - The child will sort and classify objects and analyze simple patterns.

1. Sorts and groups objects into a set and explains verbally what the objects have in common (e.g., color, size, shape). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
2. Recognize patterns, repeat them, and explain them verbally. (SM, FR)

Standard 2: Number Sense – The child will understand the relationship between numbers and quantities.

1. Begins to associate number concepts, vocabulary, quantities, and written numerals in meaningful ways. (SM, FR, MSCR, H2O, RS, HB, PALC)
2. Begins to make use of one-to-one correspondence in counting objects and matching groups of objects. (SM, FR, MSCR, H2O, RS, HB, PALC)

3. Develops increasing ability to count in sequence to ten. (SM, FR, MSCR, MA, H2O, RS, HB, PALC)
4. Counts objects in a set one-by-one from one through ten. (SM, FR, MSCR, MA, H2O, RS, HB, PALC)
5. Identifies and creates sets of objects one through ten. (SM, FR, MSCR, MA, H2O, RS, HB, PALC)
6. Identifies numerals one through ten. (SM, FR, MSCR, MA, H2O, RS, HB, PALC)
7. Recognizes the numerical value of sets of objects through ten. (SM, FR, MSCR, MA, H2O, RS, HB, PALC)

Standard 3: Geometry and Spatial Sense – The child will identify common geometric shapes and explore the relationship of objects in the environment.

1. Recognize, describe, compare, and name common shapes (e.g., circle, square, rectangle). (SM, FR, MA, LT, H2O)
2. Demonstrate an understanding of directionality, order and position of objects, and words (e.g., on, under, above). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)

Standard 4: Measurement – The child will explore the concepts of measurement.

1. Linear Measurement.
 - a. Measure objects using nonstandard units of measurement (e.g., pencil, paper clip, block). (SM, FR, MSCR, MA, LT, H2O, WE, HB)
 - b. Compare objects according to observable attributes (e.g., long, longer, longest; short, shorter, shortest; big, bigger, biggest; small, smaller, smallest; small, medium, large). (SM, FR, H2O, MSCR, RS)
 - c. Compare and order objects in graduated order (e.g., shortest to tallest, thinnest to thickest). (SM, FR, RS, MSCR)
2. Time. Develop an awareness of simple time concepts within his/her daily life (e.g., yesterday, today, tomorrow; morning, afternoon, night). (MA, LT, WE, PALC, HB)

Standard 5: Data Analysis – The child will collect, organize, and display data in a group setting.

1. Begins to use numbers and counting as a means for solving problems and measuring quantity. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
2. Develops growing abilities to collect, describe, and record information through a variety of means, including discussion, drawings, maps, charts, and graphs. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
3. Describes similarities and differences between objects. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)

Science

Science Processes and Inquiry

Standard 1: The child will investigate and experiment with objects to discover information.

1. Develops increasing abilities to classify, compare, and contrast objects, events and experiences. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
2. Explores and becomes familiar with simple scientific tools (e.g., magnifying glass, magnet). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
3. Participates in simple experiments to discover information (e.g., bottles of water or homemade telephone to explore the vibration and sound, simple scale to determine heavy and light). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
4. Ask questions, makes predictions, and communicates observations orally and/or in drawings. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
5. Explores cause and effect (e.g., temperature determines clothing choices). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)

Physical Science

Standard 2: The child will investigate and describe objects that can be sorted in terms of physical properties.

1. Develops an awareness of the sensory attributes of objects according to taste, smell, hearing, touch, and sight. (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
2. Develops an awareness of the properties of some objects (e.g., float-sink, heavy-light, rough-smooth, hard-soft, magnetic-nonmagnetic, solid- liquid, wet-dry). (SM, FR, MSCR, MA, LT, H2O, WE, RS, HB, PALC)
3. Observes and describes how objects move (e.g., slide, turn, twirl, roll). (SM, FR, MSCR, MA, LT, RS, HB)

Life Science

Standard 3: The child will observe and investigate plants and animals.

1. Develops an awareness of what various plants and animals need for growth. (H2O, RS, HB, PALC)
2. Demonstrates a beginning awareness of the changes that plants and animals go through during their life (e.g., seed/plant, egg/chicken). (RS, HB, PALC)
3. Demonstrates a beginning awareness for the care of the plant and animal life around them. (RS, HB, PALC)

Earth/Space Science

Standard 4: The child will investigate and observe the basic concepts of the Earth.

1. Develops an awareness of the properties of common earth materials (e.g., soil, rocks, water). (MSCR, MA, H2O, RS)
2. Develops an awareness of daily weather (e.g., sunny, cloudy, rainy, snowy, windy, hot, warm, cold). (LT, WE, HB)
3. Develops an awareness of the four seasons (e.g., temperature, weather, appropriate clothing, changing leaves). (WE, PALC)
4. Observes and participates in a variety of activities related to preserving the environment. (H2O, RS, HB, PALC)