



MARIETTA CITY SCHOOLS KINDERGARTEN SCIENCE PACING GUIDE

Instructional Segment	Physical Attributes	Motion	Living/Non-Living	Earth Materials	Time Patterns and Organisms
Estimated Time	7weeks	7 weeks	6 weeks	7 weeks	9 weeks
Crosscutting Concepts	<ul style="list-style-type: none"> • Patterns • Scale, Proportion, and Quantity 	<ul style="list-style-type: none"> • Patterns • Cause and Effect • Energy and Matter • System and System Models 	<ul style="list-style-type: none"> • Patterns • Energy and Matter • Structure and Function • Stability and Change 	<ul style="list-style-type: none"> • Patterns • Energy and Matter • Structure and Function 	<ul style="list-style-type: none"> • Patterns • Cause and Effect • System and System Models • Structure and Function
Anchoring Phenomenon	Aircraft Carrier	A change in motion requires a force Push or Pull (<i>Play without sound</i>)	Living Plant, Previously Living Plant, Fake Plant Time Lapse of Plant Growing	Bucket Wheel Excavator	Day and Night Time lapse , Mother and Baby Elephant Photo
Core Ideas	<ul style="list-style-type: none"> • Properties of Matter • Physical Attributes • Floating and Sinking 	<ul style="list-style-type: none"> • Objects pull or push each other when they collide or are connected. • Pushes and pulls can have different strengths and directions. • Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it. 	<ul style="list-style-type: none"> • All animals need food to live and grow. • Plants need water and light to live and grow. • Animals can move around, but plants cannot. • Living things can survive only where their needs are met. • Living things exist in different places on land and in water. 	<ul style="list-style-type: none"> • Rocks, soils, and sand • Plants and animals (including humans) depend on the land, water, and air to live and grow. • Living things need water, air, and resources from the land, and they try to live in places that have the things they need. 	<ul style="list-style-type: none"> • Patterns of the motion of the Sun, moon, and stars in the sky, can be observed, described, and predicted. • Some events on Earth occur in cycles, like day & night • Animals and plants have different parts • Plants and animals have predictable characteristics at different stages of development. Plants and animals grow and change. Adult plants and animals can have young
Science and Engineering Practices	<ul style="list-style-type: none"> • Asking questions and defining problems • Planning and carrying out investigation • Constructing explanations and designing solutions • Obtaining, evaluating, and communicating 	<ul style="list-style-type: none"> • Planning and carrying out investigations • Developing and using models • Engaging in argument from evidence • Obtaining, evaluating, and communicating 	<ul style="list-style-type: none"> • Asking questions • Developing and using models • Planning and carrying out investigations • Engaging in argument from evidence • Obtaining, evaluating, and communicating 	<ul style="list-style-type: none"> • Asking questions • Planning and carrying out investigations • Constructing explanations • Engaging in argument from evidence • Obtaining, evaluating, and communicating 	<ul style="list-style-type: none"> • Asking questions • Developing and using models • Planning and carrying out investigations • Engaging in argument from evidence • Obtaining, evaluating, and communicating
GSE	SKP1a, b, c	SKP2a, b	SKL1a, b	SKE2a, b, c	SKE1a, b; SKL2a, b, c