

**UNION CITY SCHOOLS
CURRICULUM MAPPING**

Course: 5th Grade Science (BCAMS Kits)

UNIT ID	September	October	November	December	January
Topic/ Big Idea/Essential Questions	Topic: Unit Kit 1 - Systems Big Idea: Organisms are diverse. Essential Question: How are organisms classified and what is their role in ecosystems? How do systems work together?	MEAP	Topic: Unit Kit 1 - Systems Essential Question: How are organisms diverse? How do systems work together?	Topic: Unit Kit 2 - Matter Matters Big Idea: All matter is made up of tiny particles called atoms and can be measured in mass, volume, and density. Essential Question: What is matter?	Topic: Unit Kit 2 – Matter Matters Big Idea: all matter is made up of tiny particles called atoms and can be measured in mass, volume, and density. Essential Question: What is matter?
Content	<ul style="list-style-type: none"> Organisms are classified on the basis of their structure. Organisms play different roles in a food web. 		<ul style="list-style-type: none"> Ecosystems undergo a gradual change, succession, over a long period of time. The number of organisms an ecosystem can support depends on the natural resources available. • Body systems and processes work together in animals to perform life’s functions. 	<ul style="list-style-type: none"> All matter has mass, volume, and density. Scientists use various tools to measure properties of matter. Matter exists in three states. Molecules are always in motion and the arrangement and motion of molecules is different in each state of matter. 	<ul style="list-style-type: none"> Mixtures can be physically separated. Conclusions are supported by evidence. Scientists learn by observing and analyzing data.
Benchmarks	<ul style="list-style-type: none"> Compare and classify organisms into major groups on the basis of their structure. Predict the effects of changes in one population in a food web on other populations,. Generate scientific questions about the world based on observation 	▪	<ul style="list-style-type: none"> Describe the likely succession of a given ecosystem over time. Describe common patterns of relationships among populations. Design and conduct simple investigations. Describe ways in which humans alter the environment. Explain how humans use and benefit from plant and animal materials 	<ul style="list-style-type: none"> Describe and compare objects in terms of mass, volume, and density. Explain when length, mass, weight, area, volume, or temp. are appropriate to describe size/amount. Describe arrangement and motion of molecules in 3 states of matter. Describe physical changes in materials and arrangement of molecules 	<ul style="list-style-type: none"> Classify substances as elements, compounds, or mixtures. Write and follow procedures in instructions, recipes, formulas, flow diagrams, and sketches. Develop descriptions, explanations, predictions and models using evidence. Evaluate strengths and weaknesses of claims, arguments, or data. Design and conduct simple investigations.
Assessment	<ul style="list-style-type: none"> Unit Kit Pre & Post Tests Formative Assessment 	▪	<ul style="list-style-type: none"> Unit Kit Pre & Post Tests Formative Assessment 	<ul style="list-style-type: none"> Unit Kit Pre & Post Tests Formative Assessment 	<ul style="list-style-type: none"> Unit Kit Pre & Post Tests Formative Assessment

UNIT ID	February	March	April	May
Topic/Big Idea/ Essential Questions	Topic: Unit Kit 3 – Simple Machines and Sound Big Idea: A simple machine makes a job easier. Essential Question: How do simple machines make a job easier?	Topic: Unit Kit 3 – Simple Machines and Sound Big Idea: Sound is a form of energy that can be observed. Essential Question: What is sound?	Topic: Unit Kit 4 – Caretakers of the Earth Big Idea: The Earth is unique because of its capacity to sustain life, as we know it. Essential Question: How is the earth able to sustain life?	Topic: Unit Kit 4 – caretakers of the Earth Big Idea: The Earth is unique because of its capacity to sustain life, as we know it. Essential Question: How is the earth able to sustain life:
Content	<ul style="list-style-type: none"> • When using a simple machine, a smaller force is applied over a longer distance. • The scientific meaning of work is the force of an object multiplied by the distance the object moves. $W = F \times D$ Be able to design a strategy for moving an object using simple machines.	<ul style="list-style-type: none"> • Vibration objects produce sound. • Sound can only travel through a material or medium. • Sound travels faster and with less reduction of sound in substances, which are denser. • Echoes are an example of reflection of sound. 	<ul style="list-style-type: none"> • Rocks and Fossils help determine the history of the earth. • The composition and characteristics of the atmosphere can be described as air, molecules, gas, water vapor, humidity, and dust particles. • Humans alter the environment in positive and negative ways. • Minerals and rocks make up some of the earth’s surface. 	<ul style="list-style-type: none"> • Weather is an action that causes minerals and rocks to become smaller. • Minerals and rocks are formed in a cyclic manner. • Rocks undergo a continuous change in which old rocks are being made into new rocks. • The surface of the Earth is continually changing.
Benchmarks	<ul style="list-style-type: none"> • Design strategies for moving objects by application of forces, including the use of simple machines. • Design and conduct simple investigations. • Use tools and equipment appropriate to scientific investigations. • Use metric meas. Devices to provide consistency in an investigation. 	<ul style="list-style-type: none"> • Describe common energy transformations in everyday situations. • Explain how sound travels through different media. • Explain how echoes occur and how they are used. 	<ul style="list-style-type: none"> • Recognize and describe different types of earth materials and their origins. • Describe the composition and characteristics of the atmosphere. • Describe health effects of polluted air. • Describe ways in which humans alter the environment. • Describe the advantages and risks of new technologies or patterns of human activity. • Develop an awareness of and sensitivity to the natural world. 	<ul style="list-style-type: none"> • Explain how rocks are formed. • Explain how rocks and fossils are used to understand the age and geologic history of the Earth. • Design and conduct simple investigations. •
Assessment	<ul style="list-style-type: none"> • Unit Kit Pre & Post Tests • Formative Assessment 	<ul style="list-style-type: none"> • Unit Kit Pre & Post Tests • Formative Assessment 	<ul style="list-style-type: none"> • Unit Kit Pre & Post Tests • Formative Assessment 	<ul style="list-style-type: none"> • Unit Kit Pre & Post Tests • Formative Assessment