

Unit 1: Investigating Questions		Time: August-September
Standards Taught		
<ul style="list-style-type: none"> 3-PS2-1 Plan and carry out an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. 		
Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
<i>Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.</i>	<i>Our classroom is set up with each student having their own desk with whole group discussion. At the end of each unit we will conduct a lab experiment and students will work in small groups.</i>	<ul style="list-style-type: none"> Reading the lessons Answering comprehension questions Participating in class discussions Science Labs
Relevance	Vocabulary	Assessments
<i>Children will understand that scientists raise questions about Earth and the universe and seek answers to some of them by careful investigation.</i>	<ul style="list-style-type: none"> Observe Infer Predict Investigation Hypothesis Experiment Variable Microscope Graduated cylinder Temperature Data Evidence Data table Bar graph Chart Map Model 	<ul style="list-style-type: none"> Workbook comprehension questions Class discussions Observations
Essential Questions:		
<ul style="list-style-type: none"> How do scientists investigate questions? How can you use a model? How do scientists use tools? How can you measure length? How do scientists use data? How do your results compare? What kinds of questions can science answer? 		

Unit 2: Technology and Our World		Time: September
Standards Taught		
<ul style="list-style-type: none"> 3-PS2-4 Define a simple design problem that can be solved by applying scientific ideas about magnets.* 		
Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
<i>Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.</i>	<i>Our classroom is set up with each student having their own desk with whole group discussion. At the end of each unit we will conduct a lab experiment and students will work in small groups.</i>	<ul style="list-style-type: none"> Reading the lessons Answering comprehension questions Participating in class discussions Science Labs
Relevance	Vocabulary	Assessments
<i>Children will understand that technology is all around us and the design process is used to develop new types of technology to meet people's needs.</i>	<ul style="list-style-type: none"> Design process Technology 	<ul style="list-style-type: none"> Workbook comprehension questions Class discussions Observations
Essential Questions:		
<ul style="list-style-type: none"> How do engineers use the design process? How can you design a tree house? How are technology and society related? How can we improve a design? 		

Unit 3: Plants and Animals		Time: October
Standards Taught		
<ul style="list-style-type: none"> • 3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death. • 3-LS2-1 Construct an argument that some animals form groups that help members survive. • 3-LS3-1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variations of these traits exist in a group of similar organisms. • 3-LS3-2 Use evidence and reasoning to support the explanation that traits can be influenced by the environment. • 3-LS4-1 Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. 		
Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
<i>Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.</i>	<i>Our classroom is set up with each student having their own desk with whole group discussion. At the end of each unit we will conduct a lab experiment and students will work in small groups.</i>	<ul style="list-style-type: none"> • <i>Reading the lessons</i> • <i>Answering comprehension questions</i> • <i>Participating in class discussions</i> • <i>Science Labs</i>
Relevance	Vocabulary	
<i>Children will understand that all living things go through a cycle of growth and that living adaptations that help them survive in their environments.</i>	<ul style="list-style-type: none"> - <i>Life cycle</i> - <i>Germinate</i> - <i>Flower</i> - <i>Reproduce</i> - <i>Cone</i> - <i>Pollen</i> - <i>Pollination</i> - <i>Spore</i> - <i>Metamorphosis</i> - <i>Tadpole</i> 	<ul style="list-style-type: none"> - <i>Larva</i> - <i>Pupa</i> - <i>Adaptation</i> - <i>Camouflage</i> - <i>Mimicry</i> - <i>Behavior</i> - <i>Learned behavior</i> - <i>Instinct</i> - <i>Migration</i> - <i>Hibernate</i>
Assessments		
<ul style="list-style-type: none"> • <i>Workbook comprehension questions</i> • <i>Class discussions</i> • <i>Observations</i> 		
Essential Questions:		
<ul style="list-style-type: none"> • <i>What are some plant life cycles?</i> • <i>What are some animal life cycles?</i> • <i>How do living things change?</i> • <i>What are structural adaptations?</i> • <i>How can we model a physical adaptation?</i> • <i>What are behavioral adaptations?</i> 		

Unit 4: Ecosystems and Interactions		Time: November
Standards Taught		
<ul style="list-style-type: none"> • 3-LS4-2 Use evidence and reasoning to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. • 3-LS4-3 Construct an argument with evidence how some organisms thrive, some struggle to survive, and some cannot survive in a particular habitat. • 3-LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. 		
Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
<i>Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.</i>	<i>Our classroom is set up with each student having their own desk with whole group discussion. At the end of each unit we will conduct a lab experiment and students will work in small groups.</i>	<ul style="list-style-type: none"> • Reading the lessons • Answering comprehension questions • Participating in class discussions • Science Labs
Relevance	Vocabulary	
<i>Children will understand that all the living, once-living, and nonliving things interact in an ecosystem and how all living things need energy to survive and grow.</i>	<ul style="list-style-type: none"> - Environment - Ecosystem - Habitat - Population - Community - Producer - Consumer 	<ul style="list-style-type: none"> - Photosynthesis - Food chain - Decomposer - Erosion - Flood - Drought
Essential Questions:		
<ul style="list-style-type: none"> • What are ecosystems? • What's in an ecosystem? • What is a food chain? • What are some food chains? • How do environmental changes affect living things? 		

Unit 5: Changes to Earth's Surface		Time: <i>December</i>
Standards Taught		
<ul style="list-style-type: none"> 3-ESS3-1 Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard. 		
Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
<i>Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.</i>	<i>Our classroom is set up with each student having their own desk with whole group discussion. At the end of each unit we will conduct a lab experiment and students will work in small groups.</i>	<ul style="list-style-type: none"> <i>Reading the lessons</i> <i>Answering comprehension questions</i> <i>Participating in class discussions</i> <i>Science Labs</i>
Relevance	Vocabulary	
<i>Children will understand that processes on Earth can change Earth's landforms and some of these changes happen slowly, while others happen quickly.</i>	<ul style="list-style-type: none"> - <i>Landform</i> - <i>Valley</i> - <i>Canyon</i> - <i>Mountain</i> - <i>Plain</i> - <i>Plateau</i> 	<ul style="list-style-type: none"> - <i>Weathering</i> - <i>Erosion</i> - <i>Glacier</i> - <i>Earthquake</i> - <i>Volcano</i> - <i>Flood</i>
Assessments		
<ul style="list-style-type: none"> <i>Workbook comprehension questions</i> <i>Class discussions</i> <i>Observations</i> 		
Essential Questions:		
<ul style="list-style-type: none"> <i>What are some landforms?</i> <i>How does Earth's surface change slowly?</i> <i>How can we model erosion?</i> <i>How does Earth's surface change quickly?</i> 		

Unit 6: People and Resources		Time: January
Standards Taught		
<ul style="list-style-type: none"> 3-ESS3-1 Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard 		
Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
<i>Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.</i>	<i>Our classroom is set up with each student having their own desk with whole group discussion. At the end of each unit we will conduct a lab experiment and students will work in small groups.</i>	<ul style="list-style-type: none"> <i>Reading the lessons</i> <i>Answering comprehension questions</i> <i>Participating in class discussions</i> <i>Science Labs</i>
Relevance	Vocabulary	
<i>Children will understand that living things use Earth's resources to meet their needs and some of these resources can be recycled or reused.</i>	<ul style="list-style-type: none"> <i>Natural resource</i> <i>Renewable resource</i> <i>Nonrenewable resource</i> <i>Conservation</i> <i>Pollution</i> 	<ul style="list-style-type: none"> <i>Soil</i> <i>Humus</i> <i>Sand</i> <i>Silt</i> <i>Clay</i> <i>Nutrients</i>
Essential Questions:		
<ul style="list-style-type: none"> <i>What are some natural resources?</i> <i>How can we conserve resources?</i> <i>What is soil?</i> 		

Unit 7: Water and Weather		Time: February
Standards Taught		
<ul style="list-style-type: none"> • 3-LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. • 3-ESS2.2 Obtain and combine information to describe climates in different regions of the world. 		
Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
<i>Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.</i>	<i>Our classroom is set up with each student having their own desk with whole group discussion. At the end of each unit we will conduct a lab experiment and students will work in small groups.</i>	<ul style="list-style-type: none"> • <i>Reading the lessons</i> • <i>Answering comprehension questions</i> • <i>Participating in class discussions</i> • <i>Science Labs</i>
Relevance	Vocabulary	
<i>Children will understand that water is important to all living things in many different ways and that the sun is the source of energy for the water cycle and weather.</i>	<ul style="list-style-type: none"> - <i>Salt water</i> - <i>Fresh water</i> - <i>Evaporation</i> - <i>Condensation</i> - <i>Water cycle</i> 	<ul style="list-style-type: none"> - <i>Precipitation</i> - <i>Atmosphere</i> - <i>Oxygen</i> - <i>Weather</i> - <i>Temperature</i>
		<ul style="list-style-type: none"> • <i>Workbook comprehension questions</i> • <i>Class discussions</i> • <i>Observations</i>
Essential Questions:		
<ul style="list-style-type: none"> • <i>What is the water cycle?</i> • <i>What is weather?</i> • <i>How can we measure weather?</i> 		

Unit 8: Earth and Its Moon		Time: March
Standards Taught		
<ul style="list-style-type: none"> • 3-LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. • 3-ESS2.2 Obtain and combine information to describe climates in different regions of the world. 		
Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
<i>Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.</i>	<i>Our classroom is set up with each student having their own desk with whole group discussion. At the end of each unit we will conduct a lab experiment and students will work in small groups.</i>	<ul style="list-style-type: none"> • <i>Reading the lessons</i> • <i>Answering comprehension questions</i> • <i>Participating in class discussions</i> • <i>Science Labs</i>
Relevance	Vocabulary	
<i>Children will understand that the motion of Earth and the moon causes repeating patterns that can be seen in nature, including day and night, seasons, and other cycles.</i>	<ul style="list-style-type: none"> - <i>Axis</i> - <i>Rotation</i> - <i>Revolution</i> - <i>Tides</i> 	<ul style="list-style-type: none"> • <i>Workbook comprehension questions</i> • <i>Class discussions</i> • <i>Observations</i>
Essential Questions:		
<ul style="list-style-type: none"> • <i>How do Earth and the Moon move?</i> • <i>How can we model the Moon's phases?</i> 		

Unit 9: Matter		Time: April
Standards Taught		
<ul style="list-style-type: none"> • 3-PS2-3 Ask questions about cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. • 3-PS2-4 Define a simple design problem that can be solved by applying scientific ideas about magnets.* 		
Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
<i>Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.</i>	<i>Our classroom is set up with each student having their own desk with whole group discussion. At the end of each unit we will conduct a lab experiment and students will work in small groups.</i>	<ul style="list-style-type: none"> • Reading the lessons • Answering comprehension questions • Participating in class discussions • Science Labs
Relevance	Vocabulary	
<i>Children will understand that matter has properties that can be observed, described, and measured and that matter can change.</i>	<ul style="list-style-type: none"> - Matter - Physical property - Mass - Volume - Temperature - Solid - Liquid - Gas 	<ul style="list-style-type: none"> - Evaporation - Condensation - Physical change - Mixture - Solution - Dissolve - Chemical change
		<ul style="list-style-type: none"> • Workbook comprehension questions • Class discussions • Observations
Essential Questions:		
<ul style="list-style-type: none"> • What are some physical properties? • What are the states of matter? • What physical properties can we observe? • What are some changes to matter? • What changes can we observe? 		

Unit 10: Simple and Compound Machines		Time: May
Standards Taught		
<ul style="list-style-type: none"> • 3-PS2-1 Plan and carry out an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. • 3-PS2-2 Make observations and/or measurements of an object’s motion to provide evidence for how a pattern can be used to predict future motion. 		
Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
<i>Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.</i>	<i>Our classroom is set up with each student having their own desk with whole group discussion. At the end of each unit we will conduct a lab experiment and students will work in small groups.</i>	<ul style="list-style-type: none"> • Reading the lessons • Answering comprehension questions • Participating in class discussions • Science Labs
Relevance	Vocabulary	
<i>Children will understand that simple machines make work easier to do by changing the direction or size of a force.</i>	<ul style="list-style-type: none"> - Work - Simple machine - Lever - Fulcrum - Wheel-and-axle - Pulley 	<ul style="list-style-type: none"> - Inclined plane - Wedge - Screw - Compound machine
Assessments		
<ul style="list-style-type: none"> • Workbook comprehension questions • Class discussions • Observations 		
Essential Questions:		
<ul style="list-style-type: none"> • What are simple machines? • What are some other simple machines? • How do simple machines affect work? 		