

Unit 1: Work Like a Scientist		Time: <i>August-September</i>
Standards Taught		
2-PS1-1 Plan and carry out an investigation to describe and classify different kinds of materials by their observable properties.		
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>	<i>Reading the lessons</i> <i>Answering comprehension questions</i> <i>Participating in class discussions</i> <i>Science Labs</i>
Relevance	Vocabulary	Assessments
<i>Children will understand that scientists use inquiry skills and tools to help them find out information.</i>	<i>Thermometer</i> <i>Science tools</i> <i>Inquiry skills</i> <i>Investigation</i> <i>Draw Conclusions</i> <i>Hypothesis</i> <i>Communicate</i>	<i>Workbook comprehension questions</i> <i>Class discussions</i> <i>Observations</i>
Essential Questions: <i>How do you find out about things that are happening in the world around you?</i> <i>How do we use science tools?</i> <i>What tools can we use?</i> <i>How do we solve problems?</i> <i>How do scientists think?</i> <i>How do we use inquiry skills?</i> <i>Why do scientists plan an investigation?</i> <i>What are two things you can do to make sure that the results of a test are correct?</i> <i>Why is it important to record what you observe in an investigation?</i> <i>What are the steps for scientific investigation?</i>		

Unit 2: Technology and Our World		Time: <i>September</i>
Standards Taught		
2-PS1-2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.		
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>	<i>Reading the lessons</i> <i>Answering comprehension questions</i> <i>Participating in class discussions</i> <i>Science Labs</i>
Relevance	Vocabulary	Assessments
<i>Children will understand that engineers use a process to design new technology to meet human needs. Also that technology affects our everyday life.</i>	<i>Engineer</i> <i>Design process</i> <i>Technology</i> <i>Environment</i>	<i>Workbook comprehension questions</i> <i>Class discussions</i> <i>Observations</i>
Essential Questions: <i>What are the steps of the design process?</i> <i>How can we use the design process?</i> <i>What is technology?</i> <i>How can we improve technology?</i> <i>How can we make a helmet to protect an egg?</i>		

Unit 3: All About Animals		Time: <i>October</i>
Standards Taught		
2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants. 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.		
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>	<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 there are many kinds of animals and that animals need certain things to live and grow.</i>	- <i>Survive</i> - <i>Lungs</i> - <i>Gills</i> - <i>Shelter</i> - <i>Mammal</i> - <i>Amphibian</i> - <i>Metamorphosis</i> - <i>Pupa</i>	- <i>Bird</i> - <i>Reptile</i> - <i>Fish</i> - <i>Insect</i> - <i>Reproduce</i> - <i>Tadpole</i> - <i>Life Cycle</i> - <i>Larva</i>
Assessments <i>Workbook comprehension questions</i> <i>Class discussions</i> <i>Observations</i>		
Essential Questions: <i>What's my life cycle?</i> <i>What are animal needs?</i> <i>How do animals grow and change?</i> <i>What are some kinds of animals?</i> <i>How do we compare animals?</i> <i>How do body coverings help animals?</i> <i>What are some animal life cycles?</i> <i>What are fossils?</i> <i>How can we model fossils?</i>		

Unit 4: All About Plants		Time: November	
Standards Taught			
2-LS2-1 Plan and carry out an investigation to determine if plants need sunlight and water to grow 2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants. 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats			
Differentiation/Assessment:	Classroom Management and Environment:		What will the students be doing?
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.	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.		- Reading the lessons - Answering comprehension questions - Participating in class discussions - Science Labs
Relevance	Vocabulary		Assessments
Children will understand that all plants need certain things to live and grow. Also that all plants have parts that help them grow and change?	- Basic needs - Nutrients - Flower - Seed	- Seedling - Germinate - Cone - Pollen	- Workbook comprehension questions - Class discussions - Observations
Essential Questions: - What are plant needs? - What do plants need to grow? - What are some parts of a plant? - What are some plant life cycles? - How does a bean plant grow? - How can we bring water to plants? - Do all plants start as seeds?			

Unit 5: Environments for Living Things		Time: December	
Standards Taught			
2-ESS1-1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly. 2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants. 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats			
Differentiation/Assessment:	Classroom Management and Environment:		What will the students be doing?
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.	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.		- Reading the lessons - Answering comprehension questions - Participating in class discussions - Science Labs
Relevance	Vocabulary		Assessments
Children will understand that living things meet their needs in their environment and that environments change over time.	- Environment - Pollen - Food Chain - Adaptations	Resource	- Workbook comprehension questions - Class discussions - Observations
Essential Questions: - How do plants and animals need one another? - How are living things adapted to their environment? - Can plants survive in different environments? - How do environments change over time? - Can we model a food chain? - What adaptations help a bird survive? - How does a flood change the environment?			

Unit 6: Earth and Its Resources		Time: January	
Standards Taught			
2-ESS1-1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly. 2-ESS2-1 Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land. 2-ESS2-2 Develop a model to represent the shapes and kinds of land and bodies of water in an area. – 2-ESS2-3 Obtain information to identify where water is found on Earth and that it can be solid or liquid.			
Differentiation/Assessment:	Classroom Management and Environment:		What will the students be doing?
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.	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.		- Reading the lessons - Answering comprehension questions - Participating in class discussions - Science Labs
Relevance	Vocabulary		Assessments
Children will understand that changes occur to Earth’s surface. Also that people need Earth resources.	- Earthquake - Weathering - Volcano - Flood	- Erosion - Drought - Natural Resources - Product	- Workbook comprehension questions - Class discussions - Observations
Essential Questions: - How does erosion affect the Earth? - How does an earthquake change Earth’s land? - What changes Earth? - What is a geologist? - What natural resources were used to make your lunch? - What are natural resources? - How can we classify plant products?			

Unit 7: All About Weather		Time: February	
Standards Taught			
2-ESS2-2 Develop a model to represent the shapes and kinds of land and bodies of water in an area. – 2-ESS2-3 Obtain information to identify where water is found on Earth and that it can be solid or liquid.			
Differentiation/Assessment:	Classroom Management and Environment:		What will the students be doing?
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.	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.		- Reading the lessons - Answering comprehension questions - Participating in class discussions - Science Labs
Relevance	Vocabulary		Assessments
Children will understand that weather changes from day to day and season to season.	- Earthquake - Weathering - Volcano - Flood	- Erosion - Drought - Natural Resources - Product	- Workbook comprehension questions - Class discussions - Observations
Essential Questions: - How does weather change? - How does the sun heat Earth? - What are some weather patterns? - How can we measure precipitation? - How do seasons affect living things? - How can we prepare for severe weather?			

Unit 8: The Solar System		Time: March	
Standards Taught			
2-ESS2-2 Develop a model to represent the shapes and kinds of land and bodies of water in an area. – 2-ESS2-3 Obtain information to identify where water is found on Earth and that it can be solid or liquid. 2-ESS1-1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly			
Differentiation/Assessment:	Classroom Management and Environment:		What will the students be doing?
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.	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.		- Reading the lessons - Answering comprehension questions - Participating in class discussions - Science Labs
Relevance	Vocabulary		Assessments
Children will understand that Earth is a planet in our solar system and changes happen on Earth.	- Planet - Solar System - Constellation	- Orbit - Rotate - Star	- Workbook comprehension questions - Class discussions - Observations
Essential Questions: - What are the planet and stars? - What causes day and night? - How can we model day and night? - Why is the sun the only star you see during the day? - What do Astronomers study? - Why do shadows appear to move?			

Unit 9: Changes in Matter		Time: April	
Standards Taught			
2-PS1-1 Plan and carry out an investigation to describe and classify different kinds of materials by their observable properties 2-PS1-2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose. 2-PS1-3 Construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object. 2-PS1-4 Construct an argument using reasoning and evidence that some changes caused by heating or cooling can be reversed and some cannot.			
Differentiation/Assessment:	Classroom Management and Environment:		What will the students be doing?
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.	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.		- Reading the lessons - Answering comprehension questions - Participating in class discussions - Science Labs
Relevance	Vocabulary		Assessments
Children will understand that matter can have different properties. It can be a solid, liquid, or a gas. Also the properties of matter can change.	- Matter - Liquid - Mass - Volume - Property - Gas	- Solid - Water Vapor - Evaporation - Condensation	- Workbook comprehension questions - Class discussions - Observations
Essential Questions: - What is matter? - How can we compare volumes? - How does matter change? - How can water change states? - How can we measure the mass of a solid? - How does the shape of the container affect evaporation?			

Unit 10: Energy and Magnets		Time: May	
Standards Taught			
2-PS1-1 Plan and carry out an investigation to describe and classify different kinds of materials by their observable properties 2-PS1-2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose. 2-PS1-3 Construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object. 2-PS1-4 Construct an argument using reasoning and evidence that some changes caused by heating or cooling can be reversed and some cannot.			
Differentiation/Assessment:	Classroom Management and Environment:		What will the students be doing?
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.	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.		- Reading the lessons - Answering comprehension questions - Participating in class discussions - Science Labs
Relevance	Vocabulary		Assessments
Children will understand that heat, light, and sound are forms of energy. Also that magnets attract some objects and repel others.	- Energy - Vibrate - Sound - Pitch - Light - Loudness	- Heat - Magnet - Repel - Pole - Attract	- Workbook comprehension questions - Class discussions - Observations
Essential Questions: - What is energy? - What are magnets? - How strong is a magnet? - How does the amount of light affect how you see color? - How does heat affect butter? - What objects does a magnet attract? - How are magnets used in your classroom?			