

Grade 3 Science (Master)

Teacher: Mary Baker

September 2022

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>CEQ:</p> <ul style="list-style-type: none"> What changes do monarchs experience during their life cycle? <p>UEQ:</p> <ul style="list-style-type: none"> What are the properties of a monarch egg? What changes occur within the larva stage? What are the properties of the chrysalis? What characteristics do monarchs have that benefit their survival? Why and how do monarchs migrate? <p>Monarchs</p> <ol style="list-style-type: none"> Egg stage Larva stage <ul style="list-style-type: none"> anatomy 	<p>Monarchs</p> <ol style="list-style-type: none"> Identify characteristics of the monarch egg. Label the larva body parts. Identify milkweed characteristics from other plants Record observations and measurements as a way to prove which instar stage a larva is in Identify characteristics and the changes that occur in the pupa stage. Label adult monarch body parts. Explain how and why monarchs migrate. Create a Venn diagram that shows the similarities and differences between a larva and an adult monarch-record in science notebook Compare and contrast adult monarchs and moths Nature Walk to identify 	<ol style="list-style-type: none"> I can summarize the life cycle of a monarch. I can compare and contrast monarchs with other insects. I can give examples of how a monarch survives. I can identify body parts of the monarch throughout its life cycle. I can recognize milkweed from other plants. 	<p>Monarchs</p> <p>FA= Larva SA= LARVA QUIZ FA= Adult Monarch SA= ADULT QUIZ SA= MONARCH REPORT (Enter as Writing grade as well)</p>	<p>Monarchs</p> <p>Note: September, October and early November MAP Tech Integration: Post a sighting, view migration maps and resources on http://www.journeynorth.org <u>Gotta Go!, Gotta Go!</u> textbook <u>Monarchs in the Classroom</u> Curriculum binder <u>Saving the Monarchs</u> video <u>Butterfly King</u> video Life Cycle photo cards <u>Monarch Butterfly Life Cycle</u> mini-book Science Notebook Outdoor Lesson: Nature Walk to identify possible milkweed and monarchs Milkweed pictures from spring, summer and fall to identify differences and similarities Mimicry and Camouflage PowerPoint Optional Extensions: Camouflage butterfly design Monarch acrostic poems Larva/Adult optical illusion</p>

<ul style="list-style-type: none">● instars <p>3. Pupa stage</p> <p>4. Adult stage</p> <ul style="list-style-type: none">● migration● heredity● anatomy  	<p>possible milkweed and monarchs.</p>			<p>project</p> <p><u>Key Vocabulary</u></p> <p>egg larva adult monarch pupa pupate emerge chrysalis thorax prolegs true legs abdomen molting exoskeleton head capsule migration roosting nectar camouflage heredity frass hindwing forewing cremaster proboscis antenna tentacles spiracles mandibles instar segments milkweed</p>
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October 2014

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>CEQ:</p> <ul style="list-style-type: none"> What changes do monarchs experience during their life cycle? <p>UEQ:</p> <ul style="list-style-type: none"> What are the properties of a monarch egg? What changes occur within the larva stage? What are the properties of the chrysalis? What characteristics do monarchs have that benefit their survival? Why and how do monarchs migrate? <p>Monarchs</p> <ol style="list-style-type: none"> Egg stage Larva stage <ul style="list-style-type: none"> anatomy instars 	<p>Monarchs</p> <ol style="list-style-type: none"> Identify characteristics of the monarch egg. Label the larva body parts. Identify milkweed characteristics from other plants Record observations and measurements as a way to prove which instar stage a larva is in Identify characteristics and the changes that occur in the pupa stage. Label adult monarch body parts. Explain how and why monarchs migrate. Create a Venn diagram that shows the similarities and differences between a larva and an adult monarch-record in science notebook Compare and contrast adult monarchs and moths Nature Walk to identify possible milkweed and monarchs. 	<ol style="list-style-type: none"> I can summarize the life cycle of a monarch. I can compare and contrast monarchs with other insects. I can give examples of how a monarch survives. I can identify body parts of the monarch throughout its life cycle. I can recognize milkweed from other plants. 	<p>Monarchs</p> <p>FA= Larva SA= LARVA QUIZ FA= Adult Monarch SA= ADULT QUIZ SA= MONARCH REPORT (Enter as Writing grade as well)</p>	<p>Monarchs</p> <p>Note: September, October and early November MAP Tech Integration: Post a sighting, view migration maps and resources on http://www.journenorth.org <u>Gotta Go!, Gotta Go!</u> textbook <u>Monarchs in the Classroom</u> Curriculum binder <u>Saving the Monarchs</u> video <u>Butterfly King</u> video Life Cycle photo cards <u>Monarch Butterfly Life Cycle</u> mini-book Science Notebook Outdoor Lesson: Nature Walk to identify possible milkweed and monarchs Milkweed pictures from spring, summer and fall to identify differences and similarities Mimicry and Camouflage PowerPoint Optional Extensions: Camouflage butterfly design Monarch acrostic poems Larva/Adult optical illusion project</p>

<p>3. Pupa stage 4. Adult stage</p> <ul style="list-style-type: none">● migration● heredity● anatomy				<p><u>Key Vocabulary</u></p> <p>egg larva adult monarch pupa pupate emerge chrysalis thorax prolegs true legs abdomen molting exoskeleton head capsule migration roosting nectar camouflage heredity frass hindwing forewing cremaster proboscis antenna tentacles spiracles mandibles instar segments milkweed</p>
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November

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>CEQ:</p> <ul style="list-style-type: none"> ● What changes do monarchs experience during their life cycle? <p>UEQ:</p> <ul style="list-style-type: none"> ● <i>What are the properties of a monarch egg?</i> ● <i>What changes occur within the larva stage?</i> ● <i>What are the properties of the chrysalis?</i> ● <i>What characteristics do monarchs have that benefit their survival?</i> ● <i>Why and how do monarchs migrate?</i> <p>Monarchs</p> <ol style="list-style-type: none"> 1. Egg stage 2. Larva stage <ul style="list-style-type: none"> ● anatomy ● instars 	<p>Monarchs</p> <ol style="list-style-type: none"> 1. Identify characteristics of the monarch egg. 2. Label the larva body parts. 2. Identify milkweed characteristics from other plants 2. Record observations and measurements as a way to prove which instar stage a larva is in 3. Identify characteristics and the changes that occur in the pupa stage. 4. Label adult monarch body parts. 4. Explain how and why monarchs migrate. 4. Create a Venn diagram that shows the similarities and differences between a larva and an adult monarch-record in science notebook 4. Compare and contrast adult monarchs and moths 4. Nature Walk to identify possible milkweed and monarchs. 	<ol style="list-style-type: none"> 1. I can summarize the life cycle of a monarch. 2. I can compare and contrast monarchs with other insects. 3. I can give examples of how a monarch survives. 4. I can identify body parts of the monarch throughout its life cycle. 5. I can recognize milkweed from other plants. 	<p>Monarchs</p> <p>FA= Larva SA= LARVA QUIZ FA= Adult Monarch SA= ADULT QUIZ SA= MONARCH REPORT (Enter as Writing grade as well)</p>	<p>Monarchs</p> <p>Note: September, October and early November MAP Tech Integration: Post a sighting, view migration maps and resources on http://www.journeynorth.org <u>Gotta Go!, Gotta Go!</u> textbook <u>Monarchs in the Classroom</u> Curriculum binder <u>Saving the Monarchs</u> video <u>Butterfly King</u> video Life Cycle photo cards <u>Monarch Butterfly Life Cycle</u> mini-book Science Notebook Outdoor Lesson: Nature Walk to identify possible milkweed and monarchs Milkweed pictures from spring, summer and fall to identify differences and similarities Mimicry and Camouflage PowerPoint Optional Extensions: Camouflage butterfly design Monarch acrostic poems Larva/Adult optical illusion project</p> <p><u>Key Vocabulary</u></p>

<p>3. Pupa stage 4. Adult stage</p> <ul style="list-style-type: none">● migration● heredity● anatomy				<p>egg larva adult monarch pupa pupate emerge chrysalis thorax prolegs true legs abdomen molting exoskeleton head capsule migration roosting nectar camouflage heredity frass hindwing forewing cremaster proboscis antenna tentacles spiracles mandibles instar segments milkweed</p>
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December

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>CEQ:</p> <ul style="list-style-type: none"> • What are the properties of sound and light? <p><i>UEQ:</i></p> <ul style="list-style-type: none"> • <i>How do we describe sounds?</i> • <i>How are sounds made?</i> • <i>How are high and low sounds made?</i> • <i>How does length affect the pitch?</i> • <i>How does tension affect the pitch?</i> • <i>Can sounds travel through solids, liquids and air?</i> • <i>How is sound change when it travels through a solid, liquid and gas?</i> • <i>How does light travel?</i> • <i>What happens when light is absorbed, redirected and reflected?</i> 	<p>Sound</p> <ol style="list-style-type: none"> 1. Compare sound properties to develop sound discrimination. 1. Create a code using sound properties. 1. Identify a variety of sound sources and receivers. 2. Observe vibrations made by various objects that produce sound. 2. Observe that sound comes from vibrating sources. 3. Compare high, low and medium pitch sounds. 3. Recognize that frequency affects the pitch. 4. Recognize that strong vibrations result in increased volume. 5. Observe how sound travels through three states of matter: solid, liquid and gas. 5. Compare and record how sound travels through different forms of matter. <p>Light</p>	<ol style="list-style-type: none"> 1. I can describe properties of sounds. 2. I can explain how sound is made. 3. I can compare how high and low pitches are made. 4. I can describe how light travels. 5. I can create an instrument with two or more pitches. 	<p>Sound</p> <p>FA = Investigation 1 SA= Investigation 1 Quiz FA = Investigation 2 SA= Investigation 2 Quiz SA= Investigation 3 Quiz SA= Unit Assessment</p> <p>SA= Light Quiz</p>	<p>Sound</p> <p>Bill Nye: Sound video Bill Nye: Light Optics video United Streaming videos http://www.fossweb.com</p> <p><u>Key Vocabulary</u> Sound Discrimination Property Code Vibration Sound Source Sound Receiver Volume Pitch Frequency Kalimba Xylophone Tension Stethoscope Amplify Megaphone Outer Ear Inner Ear Sound Waves Engineer Design</p> <p>Light Absorption Reflection</p>

<ul style="list-style-type: none"> • <i>How do you design and create an instrument that will play two or more pitches?</i> <p>Sound</p> <ol style="list-style-type: none"> 1. Sound discrimination 2. Vibration 3. Pitch 4. Volume 5. Sound Travel  <p>Light</p> <ol style="list-style-type: none"> 1. Absorption 2. Reflection 3. Redirection  	<ol style="list-style-type: none"> 1. Explain how light can absorbed, reflected or redirected. 			<p>Redirection Light Source Ray Shadow White Light</p> <p>Engineering Lesson: Building a instrument that plays two or more pitches Refer to <u>Science Stories</u> p. 15-16 Refer to Engineering Plan Template </p>
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January

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>CEQ:</p> <ul style="list-style-type: none"> • What are the properties of sound and light? <p><i>UEQ:</i></p>	<p>Sound</p> <ol style="list-style-type: none"> 1. Compare sound properties to develop sound discrimination. 1. Create a code using sound properties. 1. Identify a variety of 	<ol style="list-style-type: none"> 1. I can describe properties of sounds. 2. I can explain how sound is made. 3. I can compare how high and low pitches are 	<p>Sound</p> <p>FA = Investigation 1 SA= Investigation 1 Quiz FA = Investigation 2 SA= Investigation 2 Quiz SA= Investigation 3 Quiz SA= Unit Assessment</p>	<p>Sound</p> <p>Bill Nye: Sound video Bill Nye: Light Optics video United Streaming videos http://www.fossweb.com</p>

<ul style="list-style-type: none"> ● <i>How do we describe sounds?</i> ● <i>How are sounds made?</i> ● <i>How are high and low sounds made?</i> ● <i>How does length affect the pitch?</i> ● <i>How does tension affect the pitch?</i> ● <i>Can sounds travel through solids, liquids and air?</i> ● <i>How is sound change when it travels through a solid, liquid and gas?</i> ● <i>How does light travel?</i> ● <i>What happens when light is absorbed, redirected and reflected?</i> ● <i>How do you design and create an instrument that will play two or more pitches?</i> 	<p>sound sources and receivers.</p> <p>2. Observe vibrations made by various objects that produce sound.</p> <p>2. Observe that sound comes from vibrating sources.</p> <p>3. Compare high, low and medium pitch sounds.</p> <p>3. Recognize that frequency affects the pitch.</p> <p>4. Recognize that strong vibrations result in increased volume.</p> <p>5. Observe how sound travels through three states of matter: solid, liquid and gas.</p> <p>5. Compare and record how sound travels through different forms of matter.</p> <p>Light</p> <p>1. Explain how light can absorbed, reflected or redirected.</p>	<p>made.</p> <p>4. I can describe how light travels.</p> <p>5. I can create an instrument with two or more pitches.</p>	<p>SA= Light Quiz</p>	<p><u>Key Vocabulary</u></p> <p>Sound Discrimination</p> <p>Property</p> <p>Code</p> <p>Vibration</p> <p>Sound Source</p> <p>Sound Receiver</p> <p>Volume</p> <p>Pitch</p> <p>Frequency</p> <p>Kalimba</p> <p>Xylophone</p> <p>Tension</p> <p>Stethoscope</p> <p>Amplify</p> <p>Megaphone</p> <p>Outer Ear</p> <p>Inner Ear</p> <p>Sound Waves</p> <p>Engineer</p> <p>Design</p> <p>Absorption</p> <p>Reflection</p> <p>Redirection</p> <p>Light Source</p> <p>Ray</p> <p>Shadow</p> <p>White Light</p>
<p>Sound</p> <p>1. Sound discrimination</p> <p>2. Vibration</p> <p>3. Pitch</p>				<p>Engineering Lesson: Building a instrument that plays two or more pitches</p> <p>Refer to <u>Science Stories</u> p. 15-16</p>

4. Volume 5. Sound Travel				Refer to Engineering Plan Template 
Light				
1. Absorption 2. Reflection 3. Redirection				

February

Content	Skills	Learning Targets	Assessment	Resources & Technology
CEQ: <ul style="list-style-type: none"> • What are the properties of sound and light? UEQ: <ul style="list-style-type: none"> • <i>How do we describe sounds?</i> • <i>How are sounds made?</i> • <i>How are high and low sounds made?</i> • <i>How does length affect the pitch?</i> • <i>How does tension affect the pitch?</i> • <i>Can sounds travel through solids, liquids and air?</i> • <i>How is sound change when it travels through a</i> 	Sound <ol style="list-style-type: none"> 1. Compare sound properties to develop sound discrimination. 1. Create a code using sound properties. 1. Identify a variety of sound sources and receivers. 2. Observe vibrations made by various objects that produce sound. 2. Observe that sound comes from vibrating sources. 3. Compare high, low and medium pitch sounds. 3. Recognize that frequency affects the pitch. 4. Recognize that strong vibrations result in increased volume. 5. Observe how sound 	<ol style="list-style-type: none"> 1. I can describe properties of sounds. 2. I can explain how sound is made. 3. I can compare how high and low pitches are made. 4. I can describe how light travels. 5. I can create an instrument with two or more pitches. 	Sound FA = Investigation 1 SA= Investigation 1 Quiz FA = Investigation 2 SA= Investigation 2 Quiz SA= Investigation 3 Quiz SA= Unit Assessment SA= Light Quiz	Sound Bill Nye: Sound video Bill Nye: Light Optics video United Streaming videos http://www.fossweb.com <u>Key Vocabulary</u> Sound Discrimination Property Code Vibration Sound Source Sound Receiver Volume Pitch Frequency Kalimba Xylophone Tension Stethoscope Amplify Megaphone

<p><i>solid, liquid and gas?</i></p> <ul style="list-style-type: none"> • <i>How does light travel?</i> • <i>What happens when light is absorbed, redirected and reflected?</i> • <i>How do you design and create an instrument that will play two or more pitches?</i> <p>Sound</p> <ol style="list-style-type: none"> 1. Sound discrimination 2. Vibration 3. Pitch 4. Volume 5. Sound Travel <p>Light</p> <ol style="list-style-type: none"> 1. Absorption 2. Reflection 3. Redirection 	<p>travels through three states of matter: solid, liquid and gas.</p> <p>5. Compare and record how sound travels through different forms of matter.</p> <p>Light</p> <ol style="list-style-type: none"> 1. Explain how light can be absorbed, reflected or redirected. 			<p>Outer Ear Inner Ear Sound Waves Engineer Design</p> <p>Light</p> <p>Absorption Reflection Redirection Light Source Ray Shadow White Light</p> <p>Engineering Lesson: Building a instrument that plays two or more pitches Refer to <u>Science Stories</u> p. 15-16 Refer to Engineering Plan</p> <p>Template </p>
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March

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>CEQ:</p> <ul style="list-style-type: none"> • WHAT PATTERNS AND MOVEMENTS 	<p>Sun</p> <ol style="list-style-type: none"> 1. Observe and record the path of the sun. 1. Explain how shadows 	<ol style="list-style-type: none"> 1. I can identify the moon phases. 2. I can explain how shadows form. 	<p>Sun</p> <p>FA = Sun SA= SUN QUIZ</p>	<p>http://www.fossweb.com</p> <p><u>Sun, Moon and Stars: Science Stories</u> textbook Sun</p>

<p>CAN YOU OBSERVE WHEN YOU STUDY THE SUN, MOON AND STARS?</p> <p><i>UEQ:</i></p> <ul style="list-style-type: none"> • <i>What natural objects can you see in the night sky? Are they the same or different from those you see in the day sky?</i> • <i>Do the stars and moon change position or stay in the same place every night?</i> • <i>How does the shape of the moon change over four weeks?</i> • <i>How do telescopes help us to study the moon and stars?</i> • <i>What are the seasonal changes of the sun?</i> <p>Sun</p> <ol style="list-style-type: none"> 1. Shadows and seasonal changes 2. Sunrise and Sunset 3. Compass  <p>Moon</p> <ol style="list-style-type: none"> 1. Night sky observations 	<p>form.</p> <ol style="list-style-type: none"> 1. Use shadow data to predict the position of the sun. 1. Recognize that the sun changes position each season. 2. Determine that the sun rises in the east and sets in the west. 2. Summarize how earth's rotation causes our day and night. 3. Use scientific tools to observe the sun's location in the sky. <p>Moon</p> <ol style="list-style-type: none"> 1. Record observations of the night sky. 1. Understand that other planets orbit the sun and that the moon orbits the Earth. 2. Observe changes in the moon's appearance 2. Analyze data to discover the sequence of changes that occur during the moon phase cycle. <p>Stars</p> <ol style="list-style-type: none"> 1. Identify several 	<ol style="list-style-type: none"> 3. I can describe how the sun changes position each day/season. 4. I can explain that the moon orbits the earth and that the earth orbits the sun. 5. I can tell how astronomers use telescopes to study the sky. 	<p>Moon</p> <p>FA - Moon SA= MOON QUIZ</p> <p>Stars</p> <p>FA = Stars SA= STAR QUIZ</p>	<p><u>Key Vocabulary</u></p> <p>cardinal directions east west north south day night sun shadows sunrise sunset compass rotation axis orbit</p> <p>Moon</p> <p><u>Key Vocabulary</u></p> <p>orbit cycle moon phases lunar moon new moon waxing crescent first quarter waxing gibbous full moon waning gibbous third quarter waning crescent eclipse</p>
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<p>2. Phases of the moon</p> <p>Stars</p> <p>1. Constellations</p> <p>2. Telescopes</p>	<p>constellations as patterns of stars</p> <p>1. Learn that the visible stars change with the seasons.</p> <p>1. Understand that stars appear to travel because of Earth rotates in its axis.</p> <p>2. Explain how telescopes are instruments that magnify distant objects</p>			<p>planets satellite reflected solar system</p> <p>FOSS: Moon DVD in kit</p> <p>Stars constellation telescope galaxy Milky Way rotate axis astronomer magnify</p> <p><u>Key Vocabulary</u></p> <p>FOSS: Stars DVD in kit</p> <p>Outdoor Lesson</p> <p>1. Take students outside to observe and trace shadows and their movement throughout the day</p> <p>2. Observe the phases of the moon with an observation log included in the teaching masters</p>
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April

Content	Skills	Learning Targets	Assessment	Resources & Technology
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<p>CEQ:</p> <ul style="list-style-type: none"> WHAT PATTERNS AND MOVEMENTS CAN YOU OBSERVE WHEN YOU STUDY THE SUN, MOON AND STARS? <p>UEQ:</p> <ul style="list-style-type: none"> <i>What natural objects can you see in the night sky? Are they the same or different from those you see in the day sky?</i> <i>Do the stars and moon change position or stay in the same place every night?</i> <i>How does the shape of the moon change over four weeks?</i> <i>How do telescopes help us to study the moon and stars?</i> <i>What are the seasonal changes of the sun?</i> <p>Sun 1. Shadows and seasonal changes</p>	<p>Sun</p> <p>1. Observe and record the path of the sun. 1. Explain how shadows form. 1. Use shadow data to predict the position of the sun. 1. Recognize that the sun changes position each season. 2. Determine that the sun rises in the east and sets in the west. 2. Summarize how earth's rotation causes our day and night. 3. Use scientific tools to observe the sun's location in the sky.</p> <p>Moon</p> <p>1. Record observations of the night sky. 1. Understand that other planets orbit the sun and that the moon orbits the Earth. 2. Observe changes in the moon's appearance 2. Analyze data to discover the sequence of changes that occur during</p>	<p>1. I can identify the moon phases. 2. I can explain how shadows form. 3. I can describe how the sun changes position each day/season. 4. I can explain that the moon orbits the earth and that the earth orbits the sun. 5. I can tell how astronomers use telescopes to study the sky.</p>	<p>Sun</p> <p>FA = Sun SA= SUN QUIZ</p> <p>Moon</p> <p>FA - Moon SA= MOON QUIZ</p> <p>Stars</p> <p>FA = Stars SA= STAR QUIZ</p>	<p>http://www.fossweb.com</p> <p><u>Sun, Moon and Stars: Science Stories</u> textbook Sun</p> <p><u>Key Vocabulary</u> cardinal directions east west north south day night sun shadows sunrise sunset compass rotation axis orbit</p> <p>Moon</p> <p><u>Key Vocabulary</u> orbit cycle moon phases lunar moon new moon waxing crescent first quarter waxing gibbous</p>
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<p>2. Sunrise and Sunset 3. Compass </p> <p>Moon 1. Night sky observations 2. Phases of the moon</p> <p>Stars 1. Constellations 2. Telescopes</p>	<p>the moon phase cycle.</p> <p>Stars</p> <p>1. Identify several constellations as patterns of stars 1. Learn that the visible stars change with the seasons. 1. Understand that stars appear to travel because of Earth rotates in its axis. 2. Explain how telescopes are instruments that magnify distant objects</p>			<p>full moon waning gibbous third quarter waning crescent eclipse planets satellite reflected solar system</p> <p>FOSS: Moon DVD in kit</p> <p>Stars constellation telescope galaxy Milky Way rotate axis astronomer magnify</p> <p><u>Key Vocabulary</u></p> <p>FOSS: Stars DVD in kit</p> <p>Outdoor Lesson 1. Take students outside to observe and trace shadows and their movement throughout the day 2. Observe the phases of the moon with an observation log</p>
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included in the teaching masters

May

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>CEQ:</p> <ul style="list-style-type: none"> WHAT PATTERNS AND MOVEMENTS CAN YOU OBSERVE WHEN YOU STUDY THE SUN, MOON AND STARS? <p>UEQ:</p> <ul style="list-style-type: none"> <i>What natural objects can you see in the night sky? Are they the same or different from those you see in the day sky?</i> <i>Do the stars and moon change position or stay in the same place every night?</i> <i>How does the shape of the moon change over four weeks?</i> <i>How do telescopes help us to study the moon and stars?</i> 	<p>Sun</p> <ol style="list-style-type: none"> Observe and record the path of the sun. Explain how shadows form. Use shadow data to predict the position of the sun. Recognize that the sun changes position each season. Determine that the sun rises in the east and sets in the west. Summarize how earth's rotation causes our day and night. Use scientific tools to observe the sun's location in the sky. <p>Moon</p> <ol style="list-style-type: none"> Record observations of the night sky. Understand that other planets orbit the sun and that the moon orbits the Earth. 	<ol style="list-style-type: none"> I can identify the moon phases. I can explain how shadows form. I can describe how the sun changes position each day/season. I can explain that the moon orbits the earth and that the earth orbits the sun. I can tell how astronomers use telescopes to study the sky. 	<p>Sun</p> <p>FA = Sun SA= SUN QUIZ</p> <p>Moon</p> <p>FA - Moon SA= MOON QUIZ</p> <p>Stars</p> <p>FA = Stars SA= STAR QUIZ</p>	<p>http://www.fossweb.com</p> <p><u>Sun, Moon and Stars: Science Stories</u> textbook</p> <p>Sun</p> <p><u>Key Vocabulary</u> cardinal directions east west north south day night sun shadows sunrise sunset compass rotation axis orbit</p> <p>Moon</p> <p><u>Key Vocabulary</u> orbit cycle moon phases lunar</p>

<ul style="list-style-type: none"> • <i>What are the seasonal changes of the sun?</i> <p>Sun</p> <ol style="list-style-type: none"> 1. Shadows and seasonal changes 2. Sunrise and Sunset 3. Compass  <p>Moon</p> <ol style="list-style-type: none"> 1. Night sky observations 2. Phases of the moon <p>Stars</p> <ol style="list-style-type: none"> 1. Constellations 2. Telescopes 	<ol style="list-style-type: none"> 2. Observe changes in the moon's appearance 2. Analyze data to discover the sequence of changes that occur during the moon phase cycle. <p>Stars</p> <ol style="list-style-type: none"> 1. Identify several constellations as patterns of stars 1. Learn that the visible stars change with the seasons. 1. Understand that stars appear to travel because of Earth rotates in its axis. 2. Explain how telescopes are instruments that magnify distant objects 			<p>moon new moon waxing crescent first quarter waxing gibbous full moon waning gibbous third quarter waning crescent eclipse planets satellite reflected solar system</p> <p>FOSS: Moon DVD in kit</p> <p>Stars constellation telescope galaxy Milky Way rotate axis astronomer magnify</p> <p><u>Key Vocabulary</u></p> <p>FOSS: Stars DVD in kit</p> <p>Outdoor Lesson</p> <ol style="list-style-type: none"> 1. Take students outside to observe and trace shadows and
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				their movement throughout the day 2. Observe the phases of the moon with an observation log included in the teaching masters
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