

Astronomy

Teacher: Keith Kuhn

September 2020

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>CEQ How do the important historical observations, evidence and models of space inform us about our current understanding of space?</p> <p>How do the movements of the Earth and the Moon lead to observable phenomena?</p> <p>How do the characteristics and features of members of the Solar System explain their movement, functionality and origin?</p> <p>How is the formation and features of the Sun</p>	<p>Earth's Place</p> <ol style="list-style-type: none"> 1. Explain how ancient astronomy shaped modern astronomy. 2. Relate the Earth's movements to our observation of space phenomena. 3. Relate the Moon's movements to our observations of the Moon. 4. Understand the important aspects of the Apollo Program. 	<ul style="list-style-type: none"> • I can explain how ancient astronomy shaped modern astronomy. • I can describe Earth's movements of rotation, revolution and precession. • I can relate the Moon's movements to our observations (phases, eclipses, horizon lines) of the Moon. • I can explain the important aspects of the Apollo Program. 	<p>Earth's Place</p> <ol style="list-style-type: none"> 1. Quiz Space Junk 2. Quiz Vocabulary 3. Quiz Earth and Moon Movements 4. Moon Flip Book 5. Quiz Astronomical History & Apollo 6. Test - Earth's Place 	<p>Earth's Place</p> <p>Earth Science, Tarbuck & Lutgen copyright 2000 Tech Integration: None</p> <p>Outdoor Lesson; Night Observation.</p> <p>Informative: What if the Moon Didn't Exist?</p> <p>Informative: Ice on the Moon</p> <p>Key Vocabulary: Geocentric Universe Heliocentric Universe Retrograde Motion Stellar Parallax Orbital Motion Law of Universal Gravitation</p>

explained and how do the properties of light explain our ability to study light?

Earth's Place

UEQ

- How did ancient astronomical models and observations shape modern astronomy?
- How do the movements of the Earth and Moon lead to observable phenomena?
- What steps did the U.S. take to accomplish a trip to the moon?

ASTRONOMICAL HISTORY

EARTH'S MOVEMENTS

MOON'S MOVEMENTS

APOLLO PROGRAM

Perturbation
 Rotation
 Revolution
 Solar Day
 Sidereal Day
 Precession
 Solar Eclipse
 Lunar Eclipse
 New Moon
 Full Moon
 Crescent Moon
 Gibbous Moon
 Waning Moon Phase
 Waxing Moon Phase
 Synodic Month
 Sidereal Month
 Summer Solstice
 Winter Solstice
 Autumnal Equinox
 Vernal Equinox
 Apollo Program
 Gemini Missions
 Mercury Missions
 Command Module
 Service Module
 Lunar Module

October

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>Solar System</p> <p>UEQ</p> <ul style="list-style-type: none"> How are the observable characteristics of the Solar System determine the theory for the Solar System's formation? How do the characteristics of the minor members of the Solar System distinguished them from each other? <p>SOLAR SYSTEM CHARACTERISTICS</p> <p>SOLAR SYSTEM FORMATION</p> <p>MINOR MEMBERS OF THE SOLAR SYSTEM</p>	<p>Solar System</p> <ol style="list-style-type: none"> Establish the characteristics of the Solar System. Understand the Nebular Theory for the formation of the Solar System. Characterize and classify the minor members of the Solar System. 	<ul style="list-style-type: none"> I can explain the characteristics of the Solar System. I can describe the Nebular Theory for the formation of the Solar System. I can characterize and classify the minor members of the Solar System. 	<p>Solar System</p> <ol style="list-style-type: none"> Quiz Moon Conspiracy Video Quiz Vocabulary Quiz Solar System (Review) Quiz Birth of the Earth (video) Quiz Killer Space Rocks (article) Apophis Asteroid question set Test - Solar System 	<p>Solar System</p> <p>Earth Science, Tarbuck & Lutgen copyright 2000</p> <p>Tech Integration: Internet Research for Solar System Presentation.</p> <p>Outdoor Lesson; Night Observation Informative: Origin of the Earth. Fly Him to the Moon</p> <p>Key Vocabulary:</p> <ul style="list-style-type: none"> Inner planets Outer planets Primary Planet Dwarf Planet Nebular Hypothesis Nebula Solar System Kuiper Belt Oort Cloud Vulcanoids Asteroids Asteroid Belt

Meteoroids
Comets

November

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>Sun & Light</p> <p>UEQ</p> <ul style="list-style-type: none"> How does nuclear fusion on stars occur? How are the Sun's features created? How does the study and understanding of electromagnetic energy relate to collecting information about astronomical observations? <p>NUCLEAR FUSION</p> <p>SUN'S FEATURES</p> <p>ELECTROMAGNETIC ENERGY</p>	<p>Sun & Light</p> <ol style="list-style-type: none"> Explain the process of Nuclear Fusion on the Sun and other mass stars. Explain the formation of the Sun's features. Determine the properties of electromagnetic energy. Relate the properties of electromagnetic energy to astronomical observations. 	<ul style="list-style-type: none"> I can explain the process and products of Nuclear Fusion on the Sun and other mass stars. I can distinguish between the various features of the Sun. I can determine the properties of electromagnetic energy. I can relate the properties of electromagnetic energy to astronomical observations. 	<p>Sun & Light</p> <ol style="list-style-type: none"> Quiz Sun and Light (Review) Sun Illustration Sun & Light Powerpoint (or other presentation tool) Quiz - 2 Videos & 2 Articles Quiz EMS video Quiz Vocabulary - Sun & Light Test Sun and Light 	<p>Sun & Light</p> <p>Earth Science, Tarbuck & Lutgen copyright 2000</p> <p>Tech Integration: Internet Research for Sun Illustration.</p> <p>Internet research and use of Powerpoint to illustrate the differences among the types of telescopes.</p> <p>Outdoor Lesson; Night Observation Narrative: Big Bang Writing</p> <p>Key Vocabulary: Nuclear Fusion $E=mc^2$ Sun Spots Solar Flare Granules Spicules Prominence</p>

				Corona Solar Winds Sun's Core Convection Zone Radiation Zone Photosphere Chromosphere Electromagnetic Energy Electromagnetic Spectrum Doppler Effect Red Shift Refracting Telescope Reflecting Telescope Radio Telescope Spectroscope
--	--	--	--	--