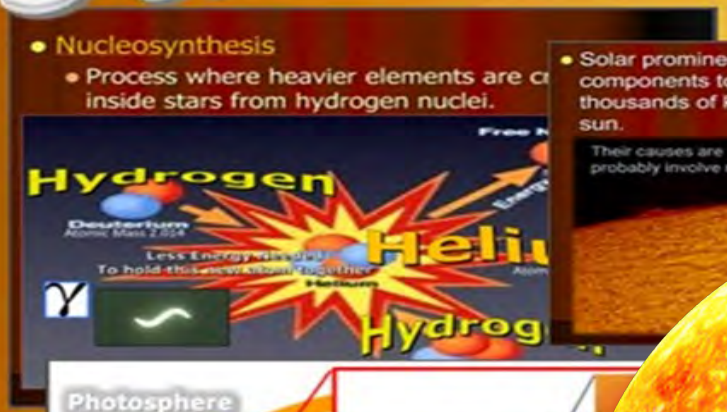
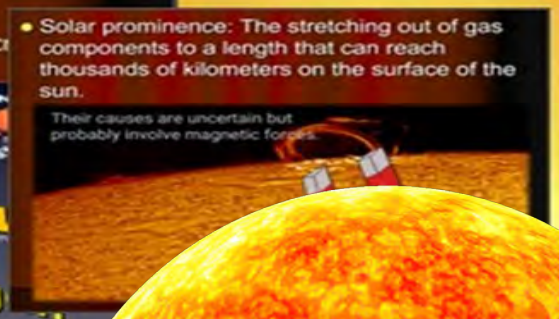
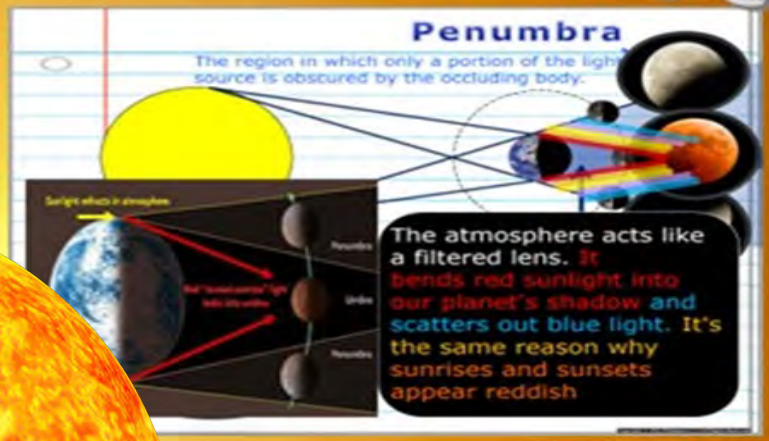
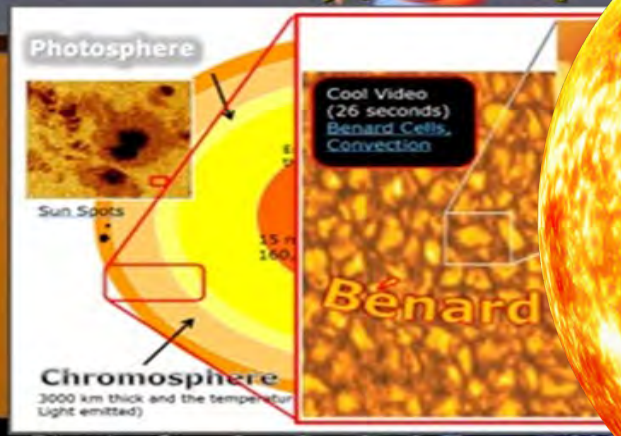
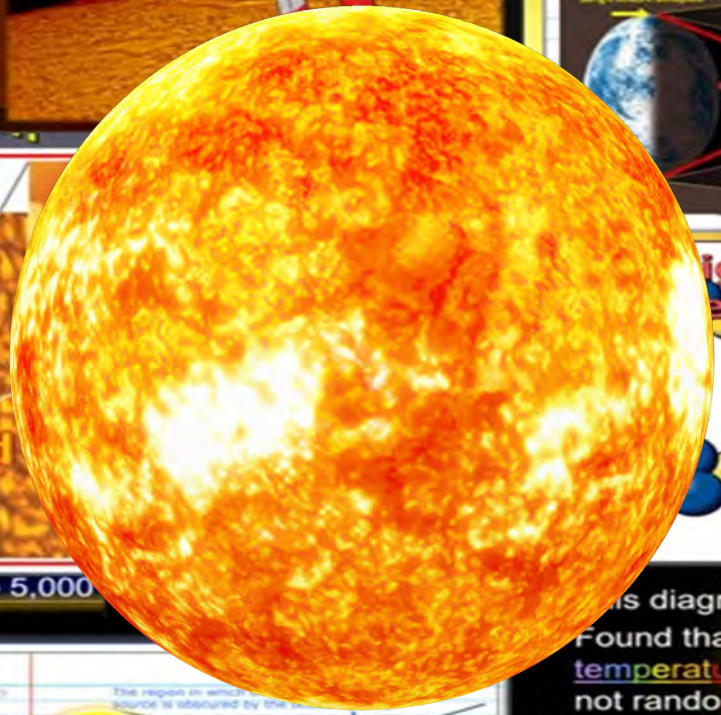
Sun and Stars Unit

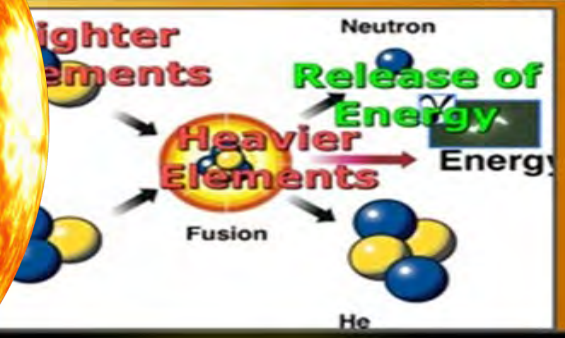


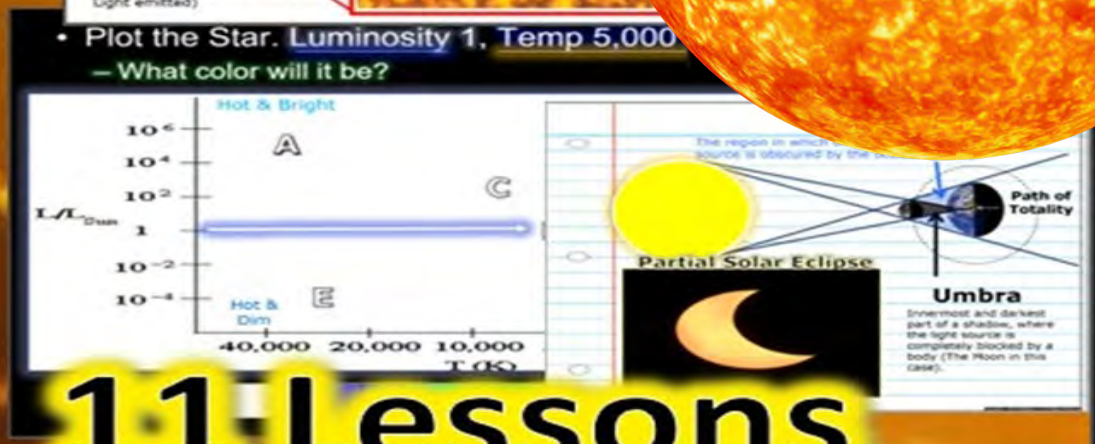


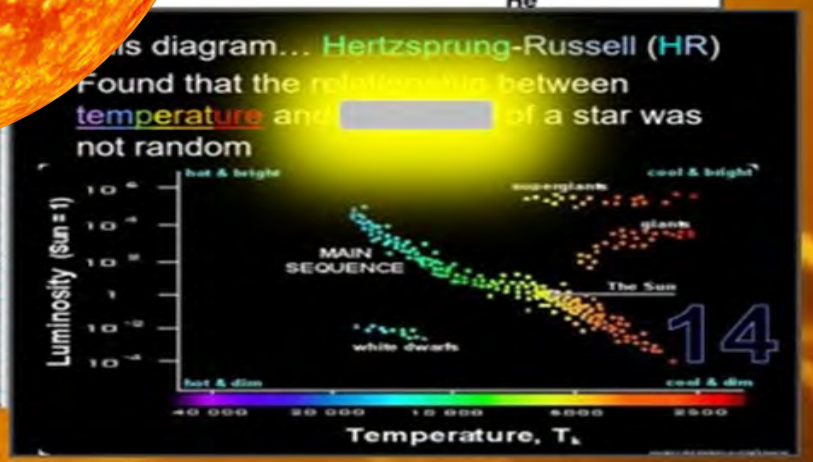






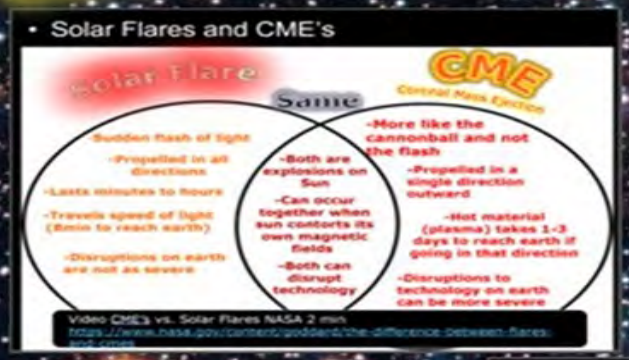


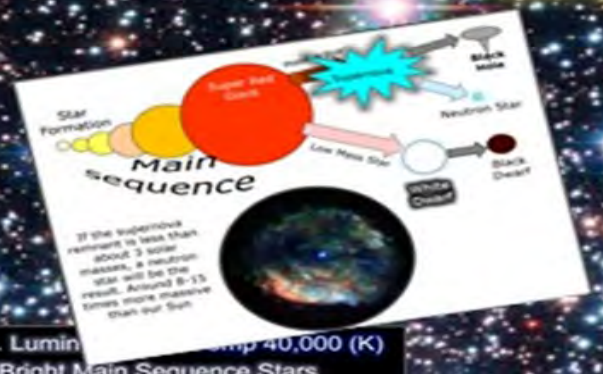


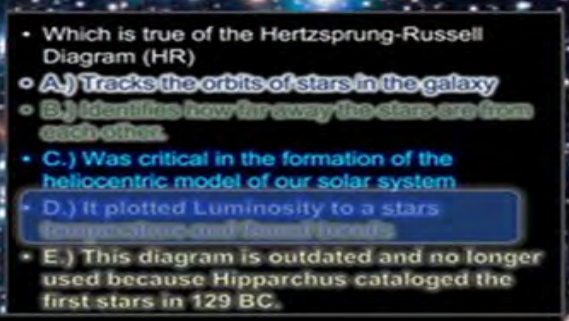


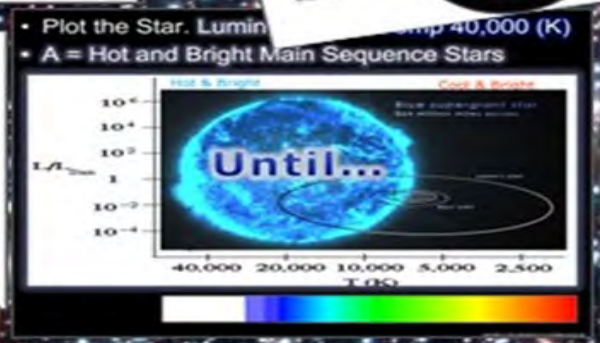
11 Lessons

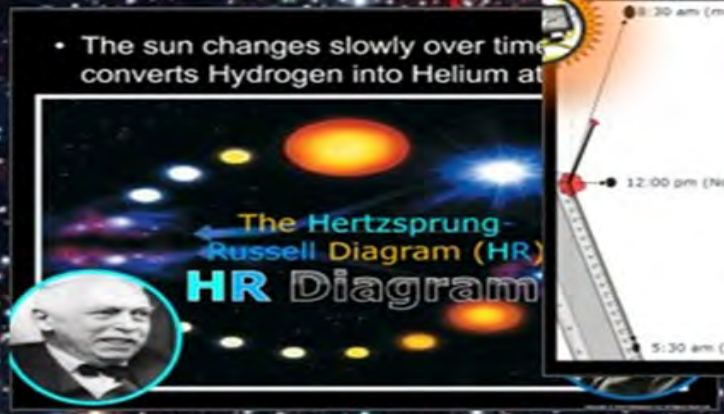
Interactive Slideshows

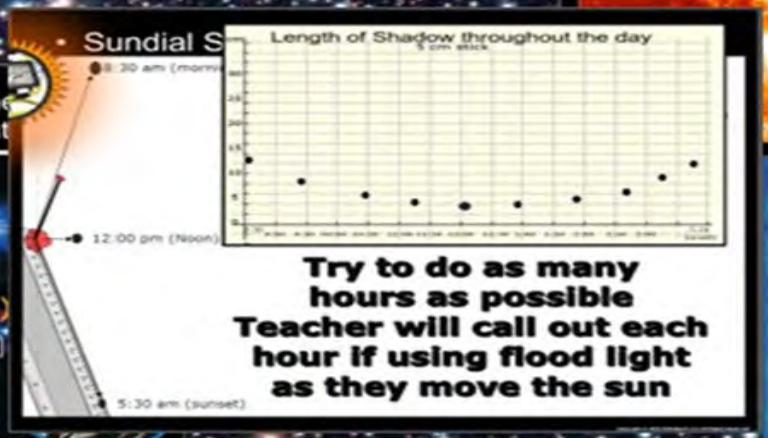




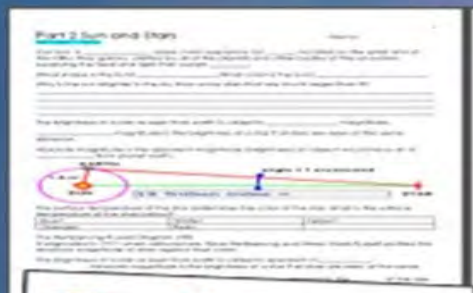


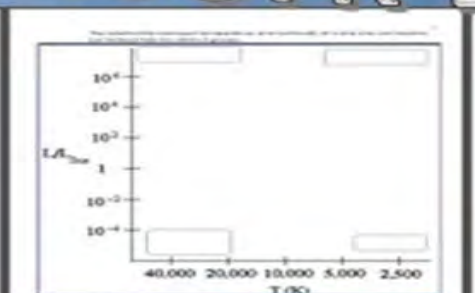


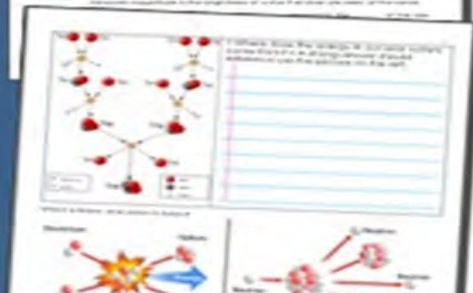


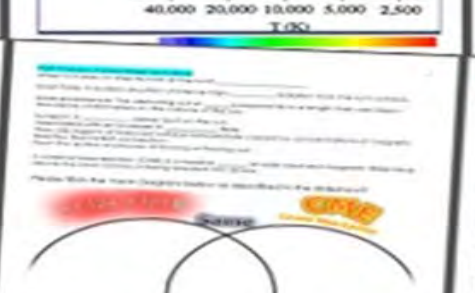


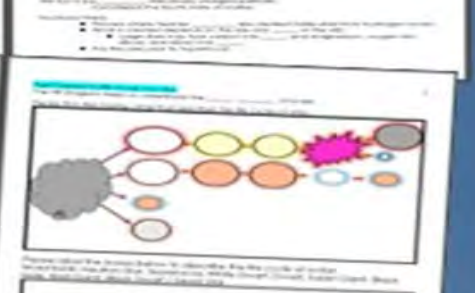
Follow Along Work Bundle

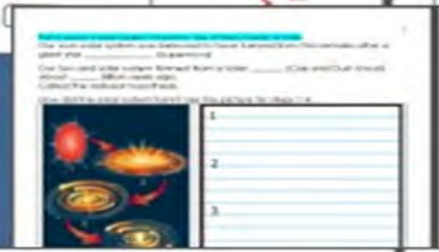


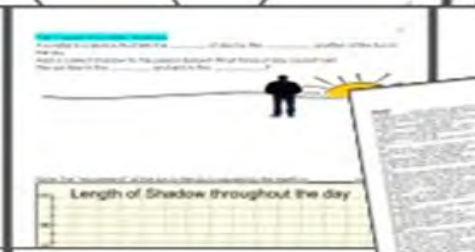


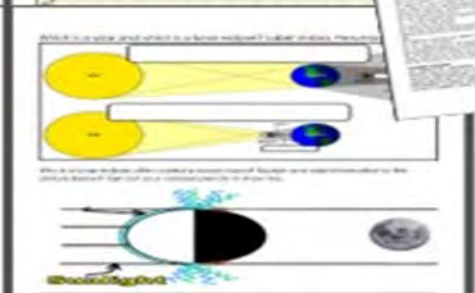






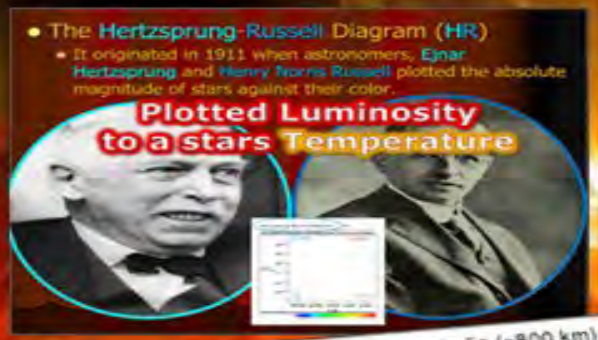


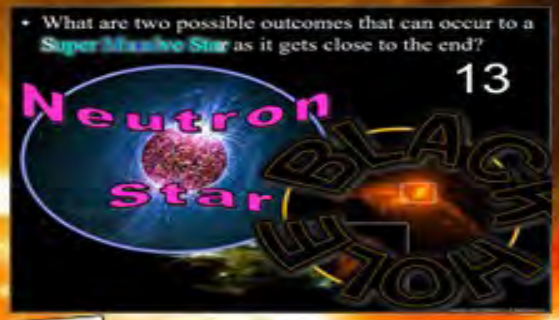


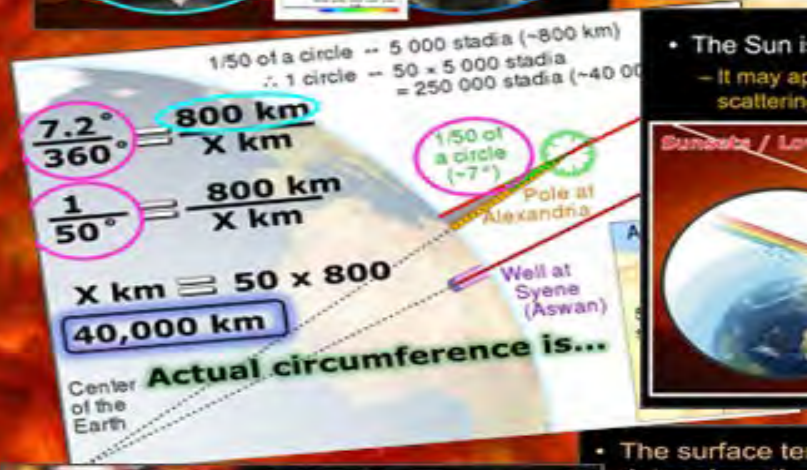


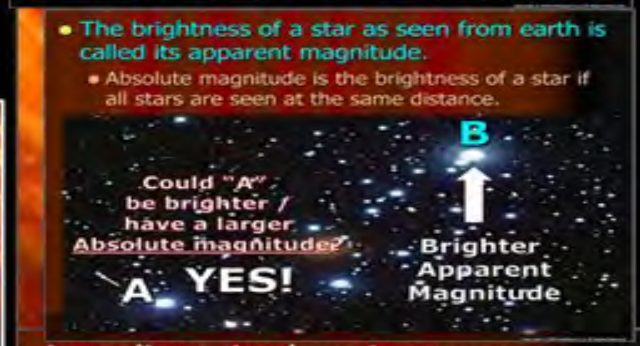
18 Pages

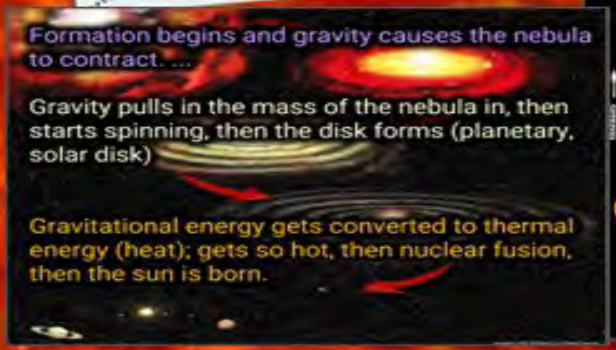
Activities, Notes, Keys, Assessments, and more all built-in

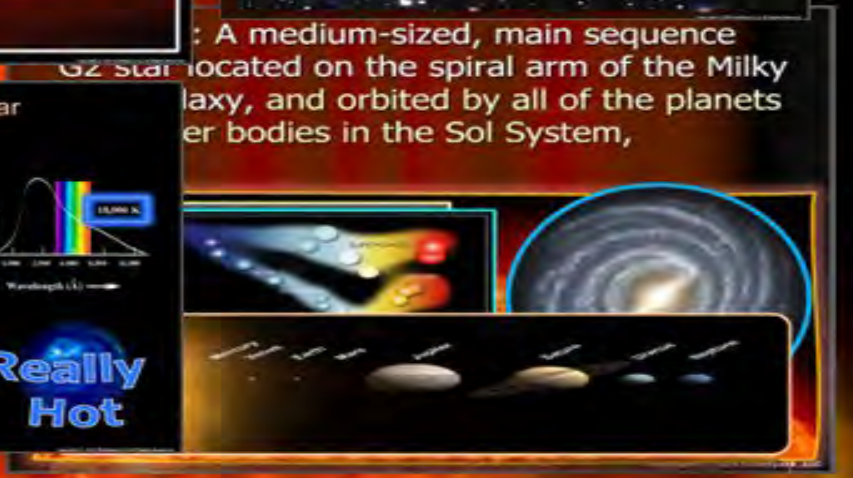












Part 2: The Sun, Absolute Magnitude, Apparent Magnitude, Parsec, Stellar Classification / Spectra, Hertzsprung Russell Diagram, Composition of the Sun, Nuclear Synthesis, Layers of the Sun, Solar Flares, Coronal Mass Ejections, Carrington Event, Life Cycle of a Star, Blackhole, Neutron Star, Solar System Formation, Shadows, Sun Dials, Eratosthenes, Graphing Shadow length, Solar Eclipse, Lunar Eclipse, Path of Totality, Box Game Review, Crossword Puzzle, End Unit Assessment with Answer Version so Students can Self-Assess

Part 2: Astronomy Unit

Part 2 Lesson 1 The Sun

Part 2 Lesson 2 HR Diagram

Part 2 Lesson 3 Inside the Sun

Part 2 Lesson 4 Solar Flares

Part 2 Lesson 5 Life Cycle of Stars

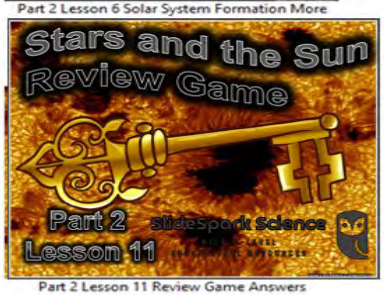
Part 2 Lesson 6 Solar System Formation More

Part 2 Lesson 7 Optional Sun Song

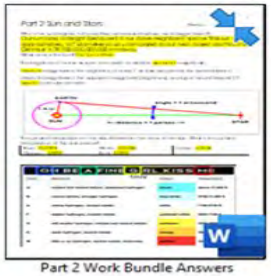
Part 2 Lesson 8 Shadows Sun Dials

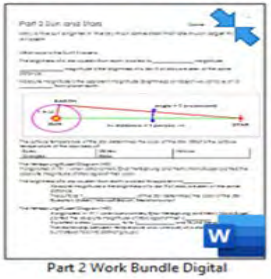
Part 2 Lesson 9 Solar Lunar Eclipse

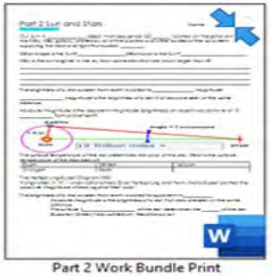
Part 2 Lesson 10 Review Game



Part 2 Lesson 11 Review Game Answers


Part 2 Work Bundle Answers


Part 2 Work Bundle Digital


Part 2 Work Bundle Print

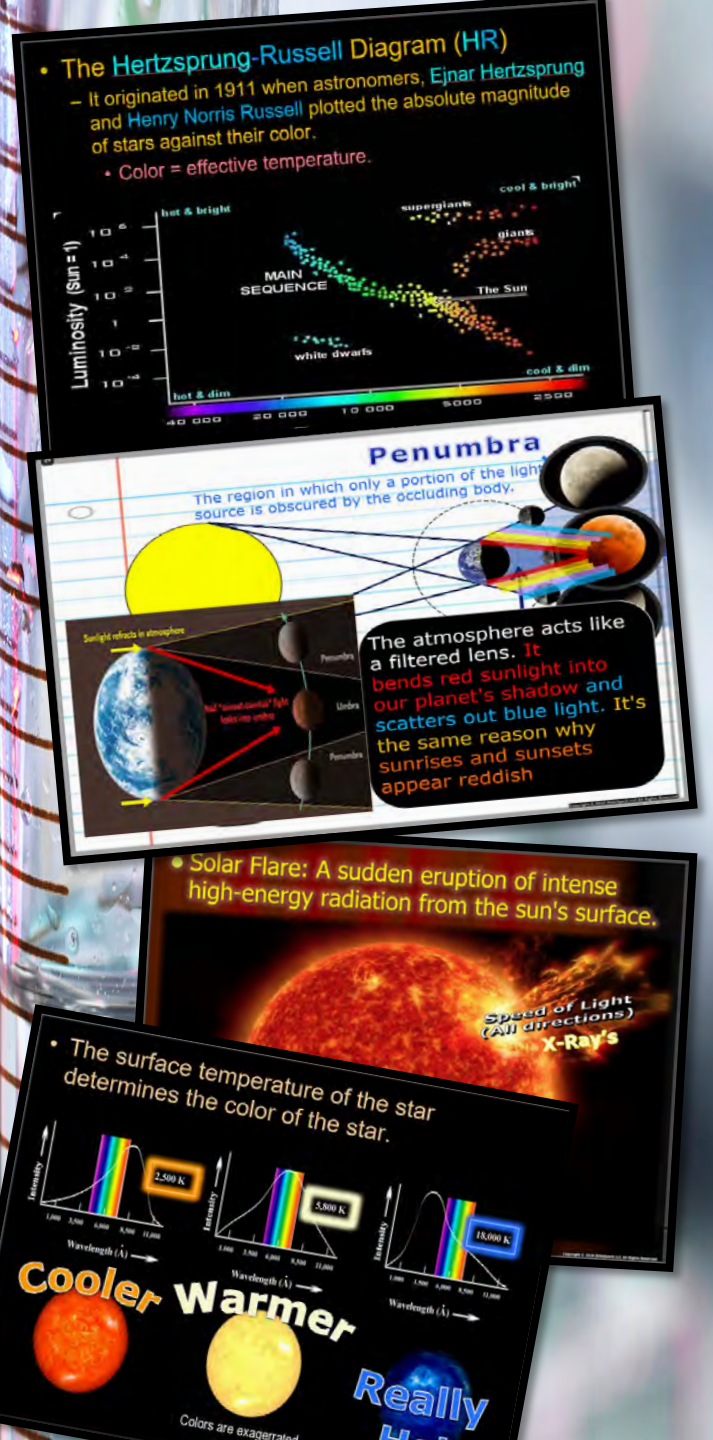

Part 2 Work Bundle Writable pdf

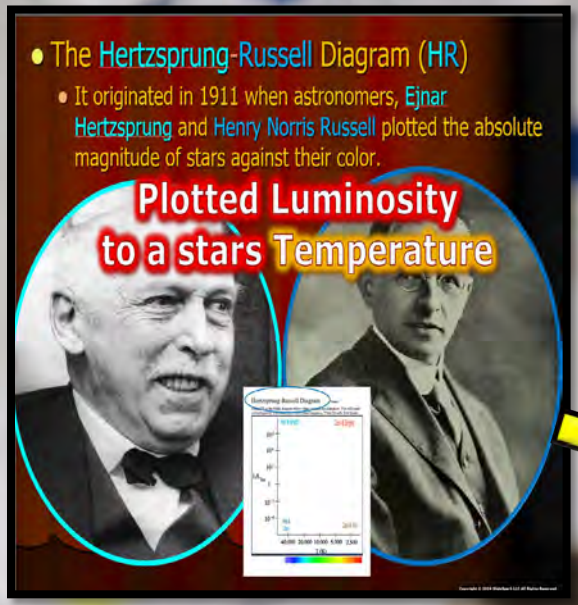
SlideSpark Science

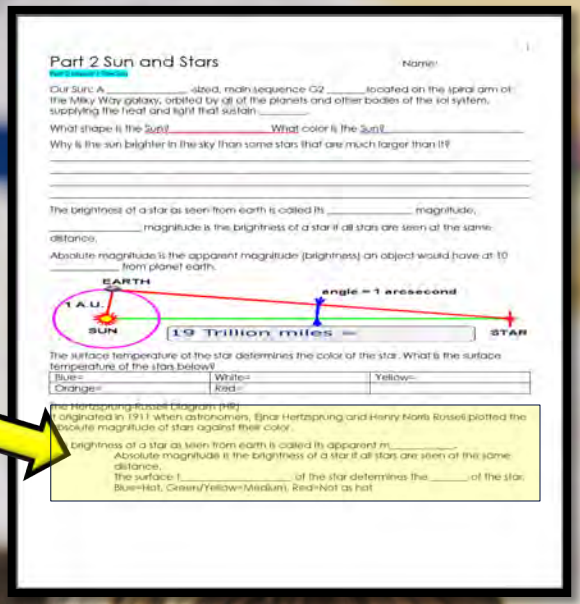
MIDDLE-LEVEL EDUCATIONAL RESOURCES

Interactive slideshows provide the roadmap for an amazing learning experience for students in grades 5-9. A Detailed set of work bundles chronologically follow the digital learning, providing a clear and intuitive roadmap to understanding. As the teacher or student advances through a slideshow, exciting hands-on activities, fantastic visuals, fill-in notes, review opportunities, video links, assessments, and much more are strategically placed throughout. Interactive learning unfolds step by step and supported by the work bundle to reach all types of learners. Everything you need to run to an amazing learning experience is provided in this one-of-a-kind science curriculum.

Each unit in the curriculum is designed to help teachers deliver the best possible learning experience for their students. Our interactive science slideshows are filled with questions and answers, important fill-in notes, hands-on activities, projects, games, built-in quizzes, and end of the unit assessment pieces. Students follow along with a work bundle that documents the entire learning experience for a fantastic review and assessment piece.

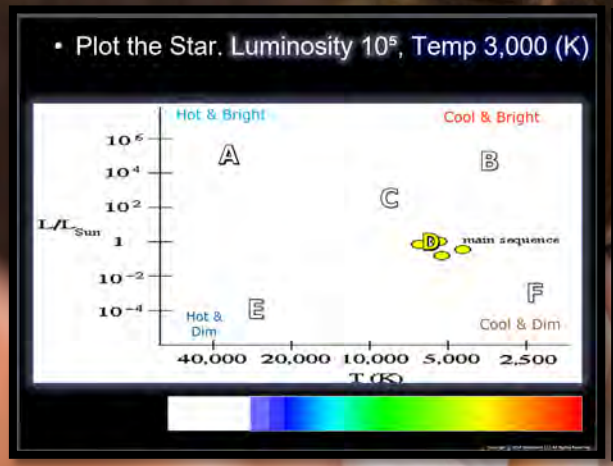


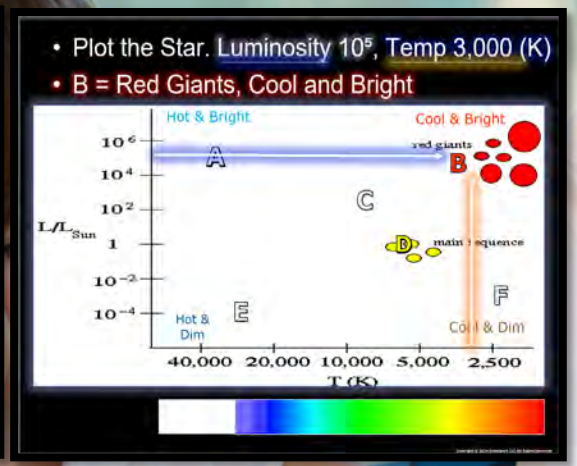


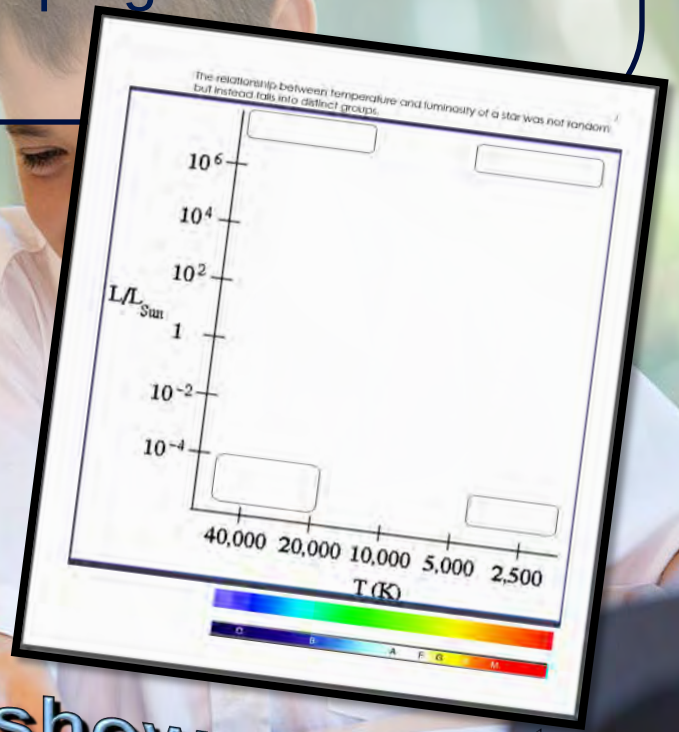


Red Slide Notes: Help students record important information in a fun and easy-to-understand way. Designed red-colored slides contain a few pieces of crucial information that students must record into their work bundle to complete the notes. Students will use these important notes throughout the work bundle.

The set-up of the slideshows are designed to make learning fun and interactive for students. With a mix of questions and answers, teachers can use these slides to get their students thinking and actively participating in their education. Plus, the answers are always revealed on the next slide, providing students with immediate feedback and helping teachers assess their understanding.





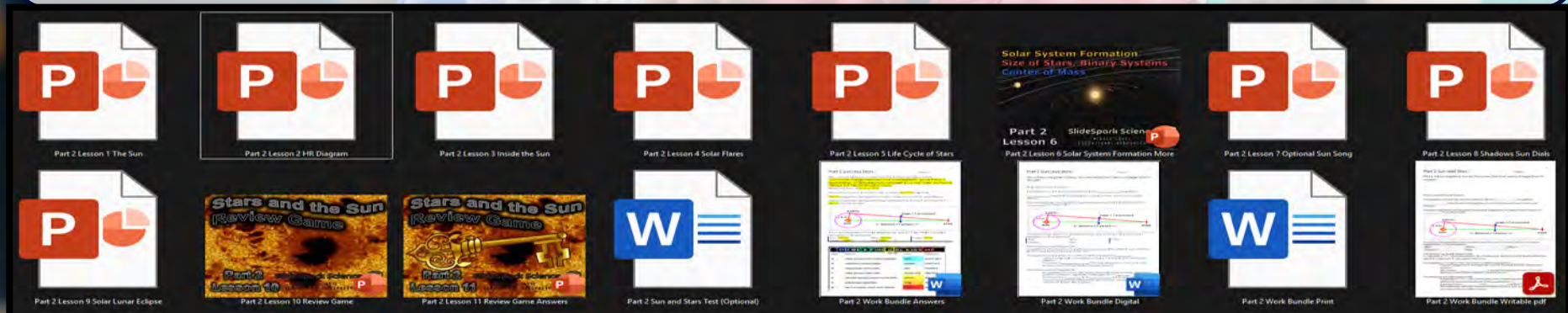


Next Slide

Slideshow supports Work Bundle

Lesson Planning

Daily lessons space exciting hands-on activities, red slide notes, video and academic links, projects, simulations, readings, built-in quizzes, and review opportunities throughout the slideshows. A typical day may have many different learning styles being targeted. Daily lesson planning becomes advancing through the slideshow roadmap the night before. Each lesson is roughly 50 minutes, but sometimes things can speed up or slow down. The best strategy is just to go at your classes own pace. The work bundle chronologically follows the interactive slideshow and you can always spend extra time assessing the quality of the writing within. If you don't quite finish a lesson, you can always pick it up the next day where you left off. The only real trick in timing is not starting a larger activity if you don't have the available time to complete. The slideshows have been designed to be a low stress, go at your classes own pace experience. Most activities are designed to be cost effective, using general materials that can be gathered from your local stores.

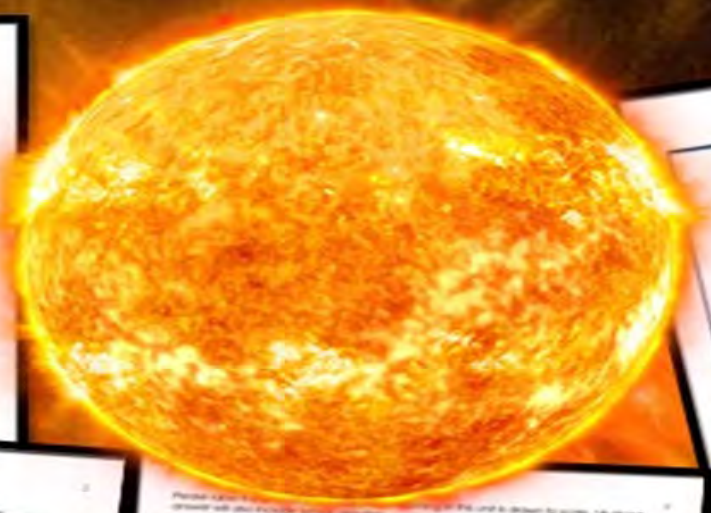


One clear, organized bundle guides students through notes, review, and assessments with ease.

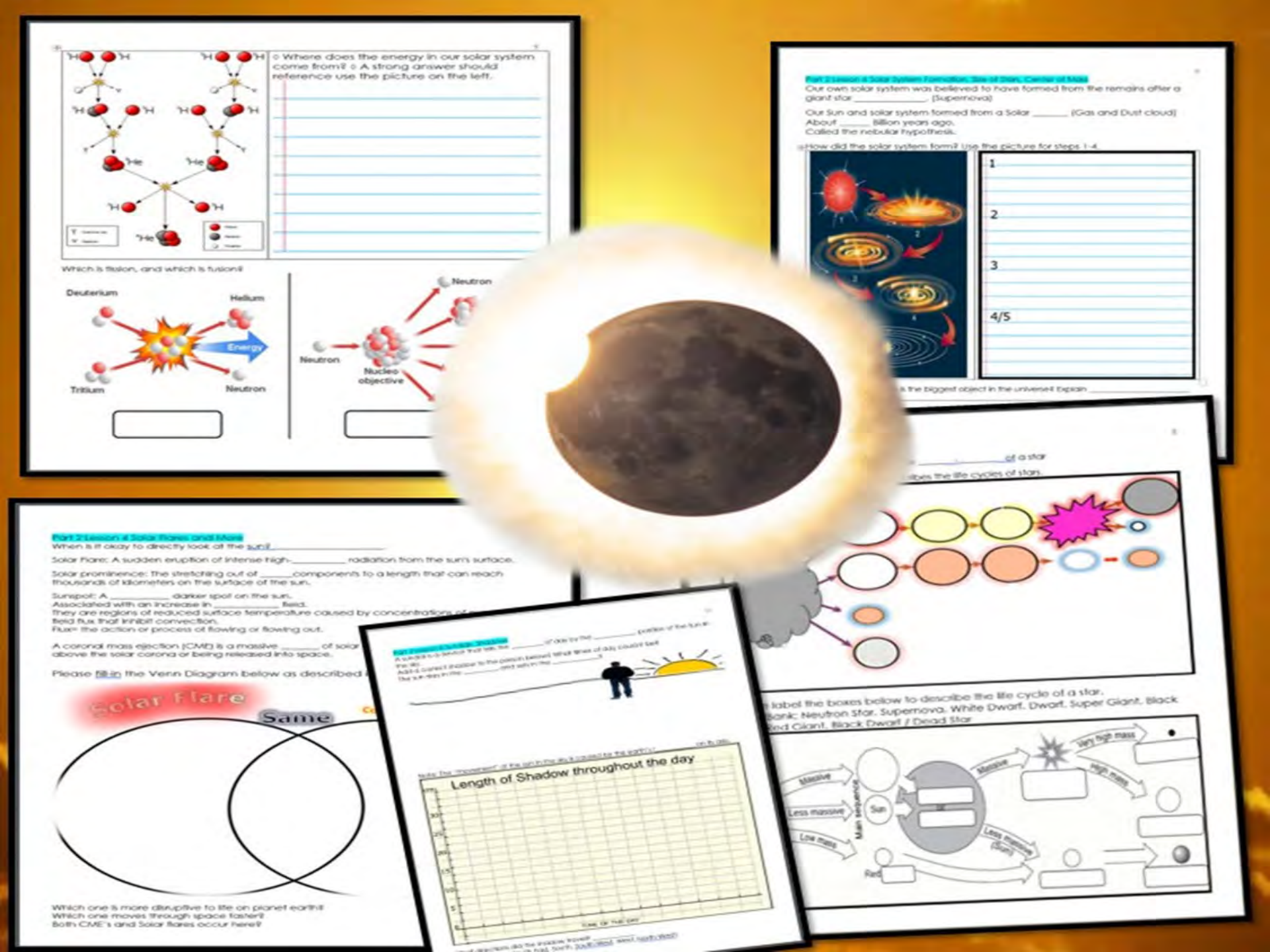
Follow Along Work Bundle

Each science unit comes with several work bundles. The bundles should be printed before the unit begins and distributed to the students on the first day of the unit. The work bundles will be due shortly after the completion of the unit. The work bundle will become a resource for the review games, crossword puzzles, and will be collected for assessment. The work bundle follows the entire learning experience and will be used every day. They are chronological to the lessons and provide places to record fill-in notes, answer questions, collect data, graph and much more. An answer version is provided that can that be distributed to your support professionals. A digital version of the work bundle and some writable .pdf versions are provided if you want to go paperless. These work bundles are perfect for students looking for an easy and organized way to track their progress and stay on top of their studies.

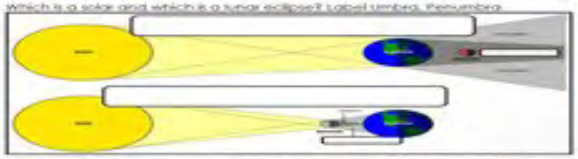
Sun and Stars



18 Pages


Where does the energy in our solar system come from? A strong answer should reference use the picture on the left.
Which is fission, and which is fusion?
Deuterium
Helium
Energy
Tritium
Neutron
Neutron
Nucleo objective
Neutron
Part 2 Lesson 4 Solar System Formation, Size of Stars, Center of Mass
Our own solar system was believed to have formed from the remains after a giant star _____. [Supernova]
Our Sun and solar system formed from a Solar _____ [Gas and Dust cloud]
About _____ Billion years ago.
Called the nebular hypothesis.
How did the solar system form? Use the picture for steps 1-4.
1
2
3
4/5
Part 2 Lesson 4 Solar Flares and More
When is it okay to directly look at the sun?
Solar Flare: A sudden eruption of intense high-_____ radiation from the sun's surface.
Solar prominence: The stretching out of _____components to a length that can reach thousands of kilometers on the surface of the sun.
Sunspot: A _____ darker spot on the sun.
Associated with an increase in _____ field.
They are regions of reduced surface temperature caused by concentrations of
field flux that inhibit convection.
Flux= the action or process of flowing or flowing out.
A coronal mass ejection (CME) is a massive _____ of solar
above the solar corona or being released into space.
Please fill in the Venn Diagram below as described
Solar Flare
Same
Which one is more disruptive to life on planet earth?
Which one moves through space faster?
Both CME's and Solar flares occur here?
Length of Shadow throughout the day
of a star
label the boxes below to describe the life cycle of a star.
Supernova, White Dwarf, Dwarf, Super Giant, Black
Red Giant, Black Dwarf / Dead Star
Massive
Less massive
Low mass
Main sequence
Sun
Red
Very high mass
High mass
Less massive (Star)

Which is a solar and which is a lunar eclipse? Label umbra. Penumbra



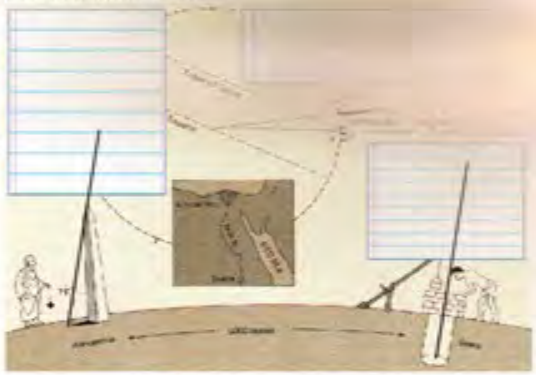
Why is a lunar eclipse often called a blood moon? Explain and add information to the picture below. Get out your colored pencils to show me.

When is the next lunar eclipse and solar eclipse in or near your state? Record the dates and times below. Let's make an effort to check one out sometime.

Is it the sun that moves across the sky or is the earth rotating?

Which way does the sun travel vs. the shadow?

What is so special about Eratosthenes?



Part 2 Rev

1-20 = 5 pts

*20-*25 * = Bonus + 1

(Secretly write owl in

Final Question = 5 pt

STAR LIGHT				
1)	6)			
2)	7)			
3)	8)	13)	18)	*20)
4)	9)	14)	19)	*24)
5)	10)	15)	20)	*25)

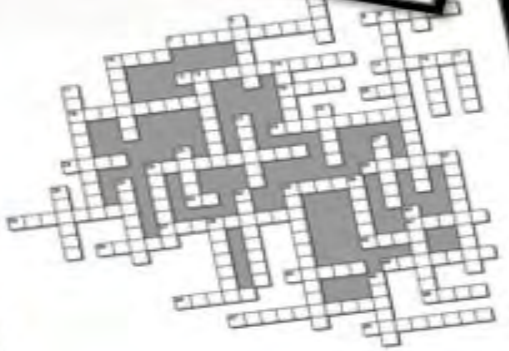
Final Question Wager ___ /5 Answer: _____

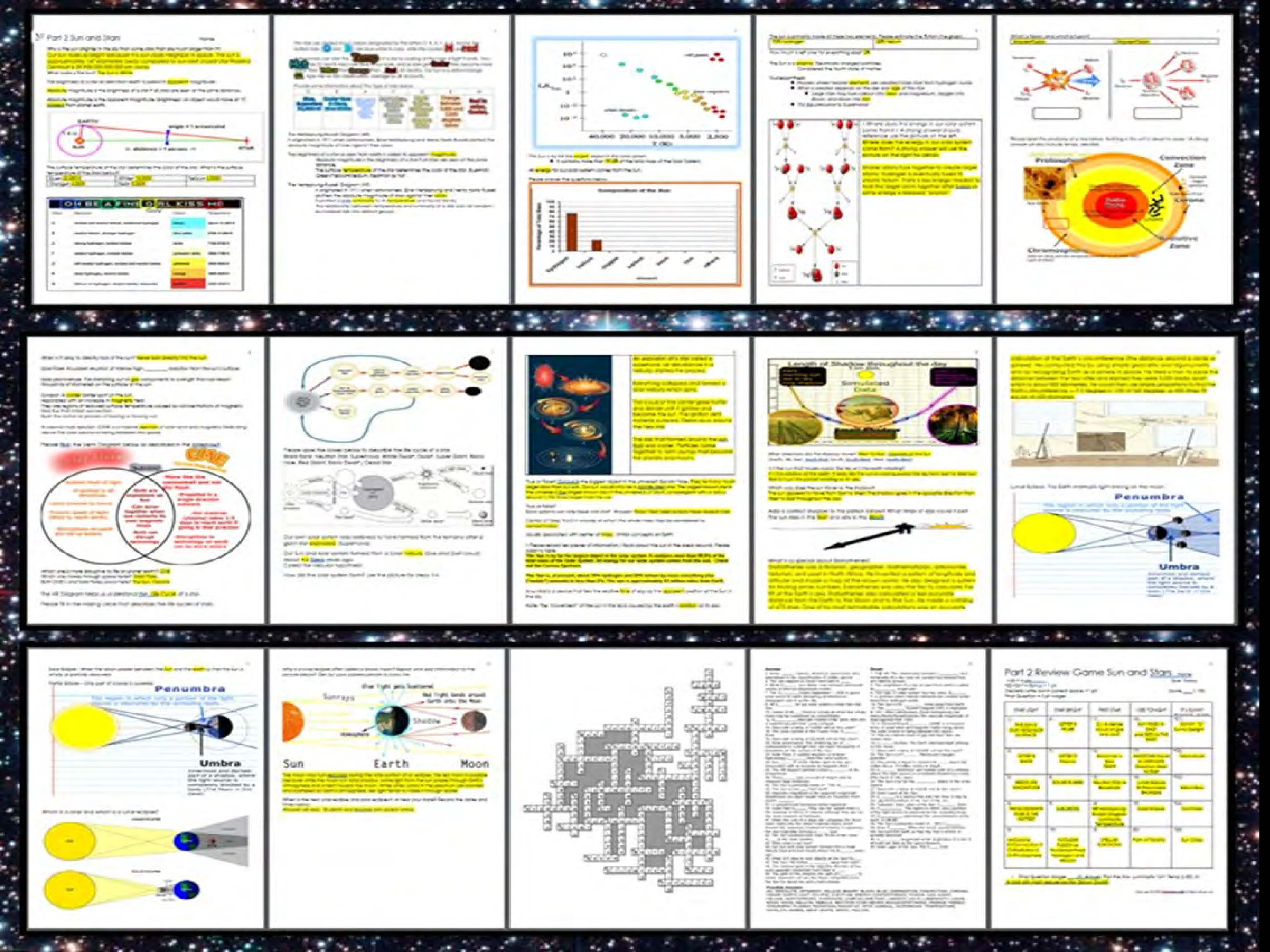
The region in which only a portion of the light source is obscured by the occulting body.

Innermost and darkest part of a shadow; where the light source is completely blocked by a body (The Moon in this case).

The region in which only a portion of the light source is obscured by the occulting body.

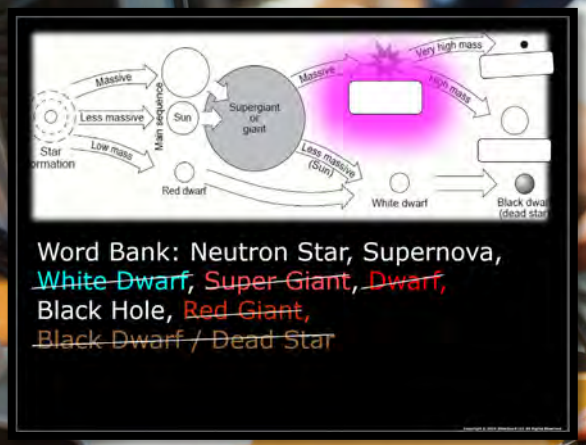
Innermost and darkest part of a shadow; where the light source is completely blocked by a body (The Earth in this case).

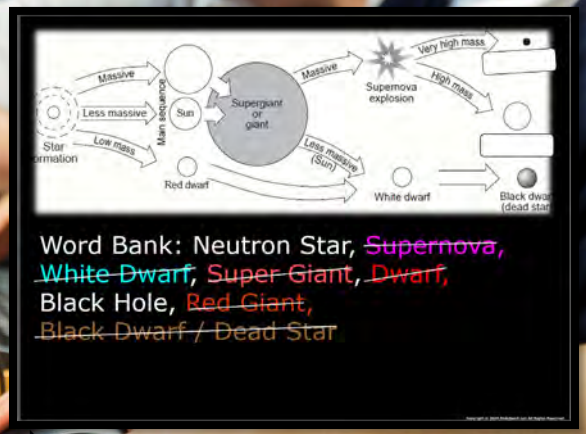



Part 2 Sun and Stars
Composition of the Sun
Length of Shadow throughout the day
Penumbra
Umbra
Sun
Earth
Moon
Part 2 Review Game Sun and Stars

Built-in Questions and Assessments

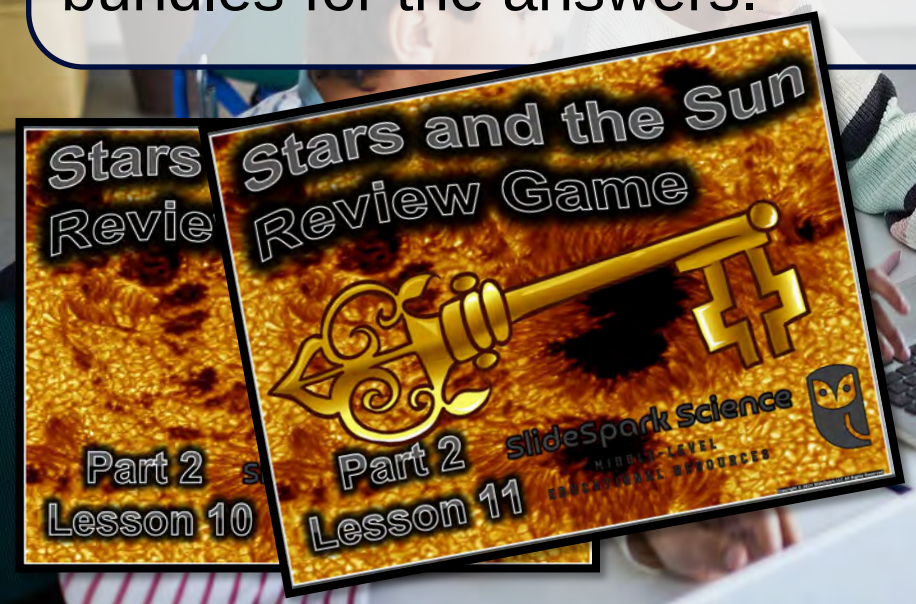
Many slides will have relevant terms covered with a box. When advancing through the slideshow an outline around the box will glow with a bright color. The next slide will make the box disappear. These slides allow the teacher to call upon students or table groups / check for understanding before advancing. The team at SlideSpark has found that using this technique helps to keep the students focused. Constantly recalling and reviewing information learned is necessary when moving through a large unit. The slideshows don't just give everything away for free. Students should be able to demonstrate knowledge before moving on. Some slides have full questions instead of just covered terms. In these slides, the teacher should encourage small group work. The teacher can then call upon one or two groups to share before advancing the slide. The next slide will always reveal the correct answer.

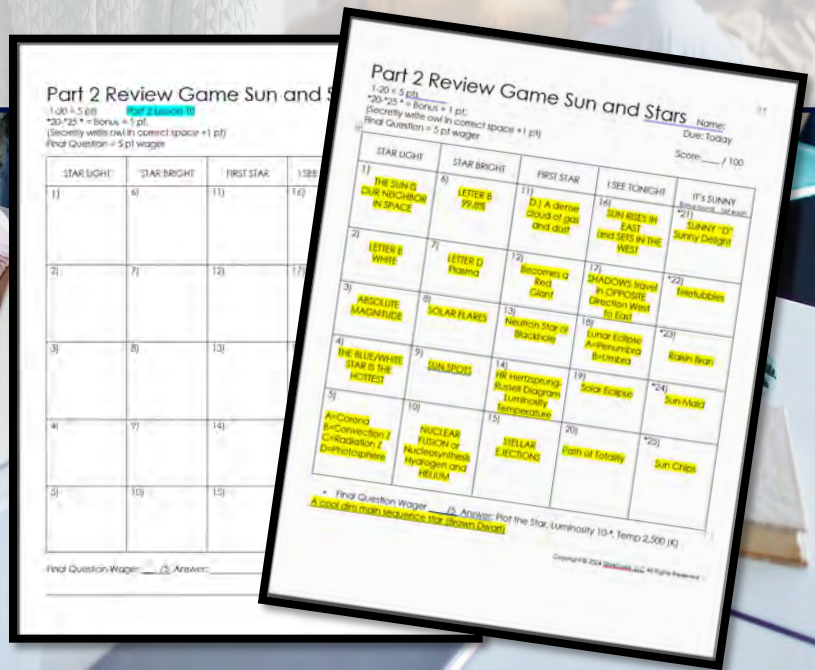




Review Game / Assessments

Each of the Units concludes with a review quiz. Answers are provided in slideshow form so students can self assess. A blank template sheet is provided in the work bundle. Students can benefit from working together in small table groups with quiet communication. You can decide if you want to allow the use of work bundles or not. These are a nice review opportunity and get the students looking through their work bundles for the answers.





SUN & STARS

Quiz Game

- The brightness of a star as seen from ear
called its apparent magnitude.
  - Absolute magnitude is the brightness
all stars are seen at the same dista

This star is extremely bright but also FAR AWAY

This sta
It's clos

A

is the Sun?

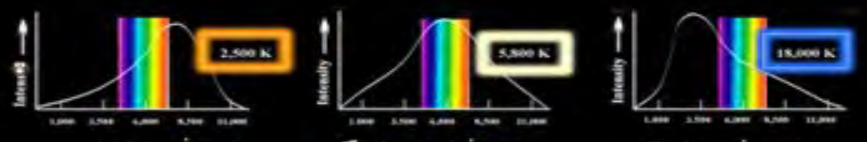
2

B

D

ne answer is...

- The surface temperature of the sta
determines the color of the star.
  - Which star has the hottest surface temperature?



Cooler

Warmer

Really Hot

Colors are exagerrated

- Why is the sun brighter in the sky than some stars that are much larger than it?

1

Our close neighbor

93 million miles

147 million km

Away

Big Difference

Closest star

Proxima Centauri

39,900,000,000,000 km away.

4.24 light-years away

- What is one way a new nebula can form?

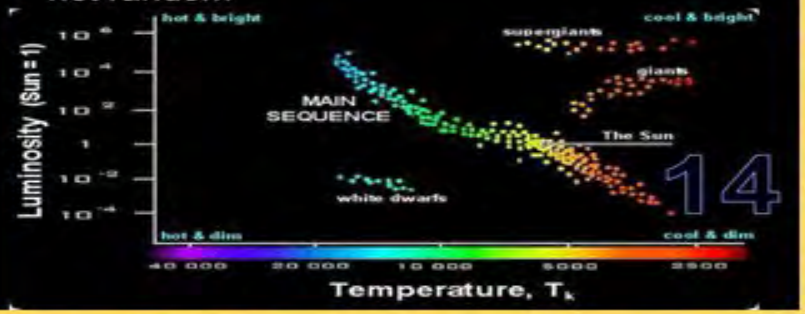
Stellar Ejections

15

Also Supernova

Can aid in Nebula formation (some debate)

- This diagram… Hertzsprung-Russell (HR)
- Found that the relationship between temperature and luminosity of a star was not random



14

- A formation process of a star often begins with a Nebula. A Nebula is a…
  - A.) Largest Object in the Universe
  - B.) A Superheated Blackhole
  - C.) A Supernova
  - D.) A dense cloud of gas and dust
  - E.) Cannot be determined

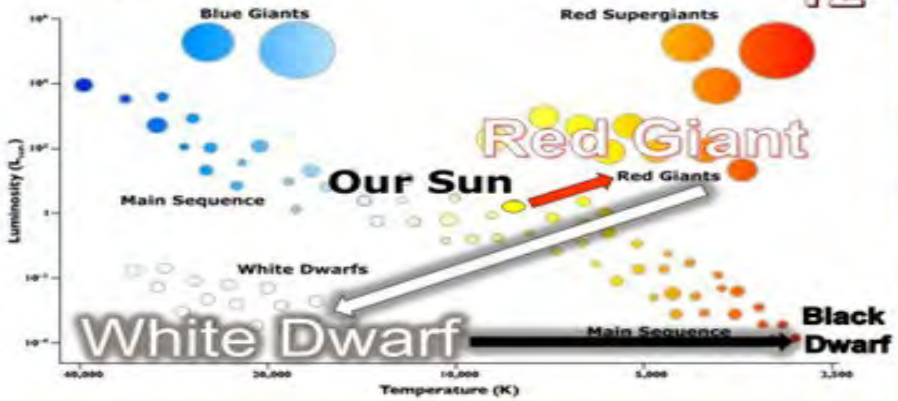
11

- What are two possible outcomes that can occur to a Super Massive Star as it gets close to the end?

13

What is going to happen to our sun? What two types of stars will it turn into?

12



- Name this process? The Sun is primarily composed of these two chemical elements?

HYDROGEN

Deuterium

Free Neutron

HELIUM

10

NUCLEAR FUSION

HYDROGEN

Tritium

- What are the names for these features on the surface of the Sun? Associated with an increase in magnetic field.

Sun Spot

9

- The state of matter that best represents the Sun is a…
  - A.) Gas
  - B.) Solid
  - C.) Liquid
  - D.) Plasma
  - E.) Cannot be determined.

7 answer is…

- The Sun makes up this percent of our solar system by mass?
  - A.) 50%
  - B.) 99.8%
  - C.) 25%
  - D.) 1%
  - E.) Cannot be determined

6

- What are the names of these features circled below?

8

Solar Flares

Also coronal mass ejections

Corona

Chromosphere

Convection Zone

B

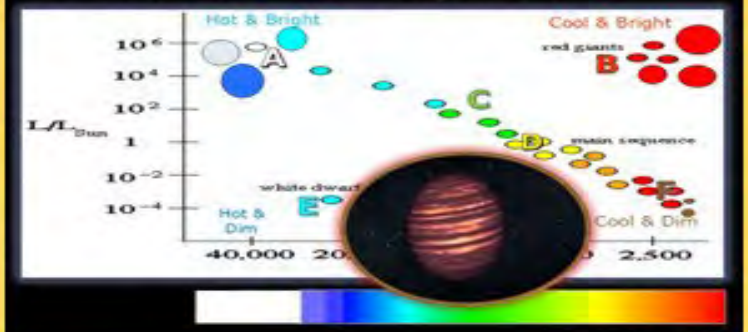
C

Inner Core

D

5

- Plot the Star. Luminosity 10^{-4}, Temp 2,500 (K)
- F = Cool and Dim Main Sequence Stars



- Name this event as seen from planet earth?

19

Solar Eclipse

- The sun rises in the East, and sets in the West. The shadows travel in the opposite direction.
  - When are the shadows the longest and shortest?

17

East
Sunrise
West to East
Noon
(Short Shadows)
West
Sunset

- What is this called? Name A and B?

18

Lunar Eclipse

- What is the name for the shaded region that travels across the surface of the Earth during a solar eclipse?

20

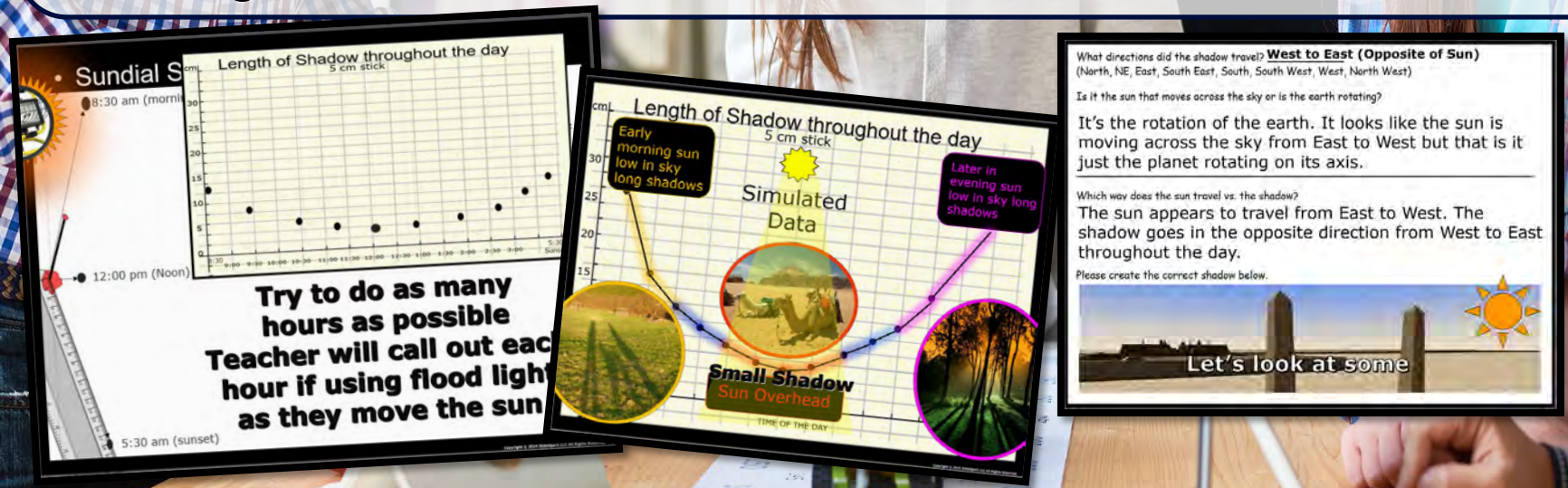
Path of Totality

What causes the apparent movement of the Sun across the sky?

16

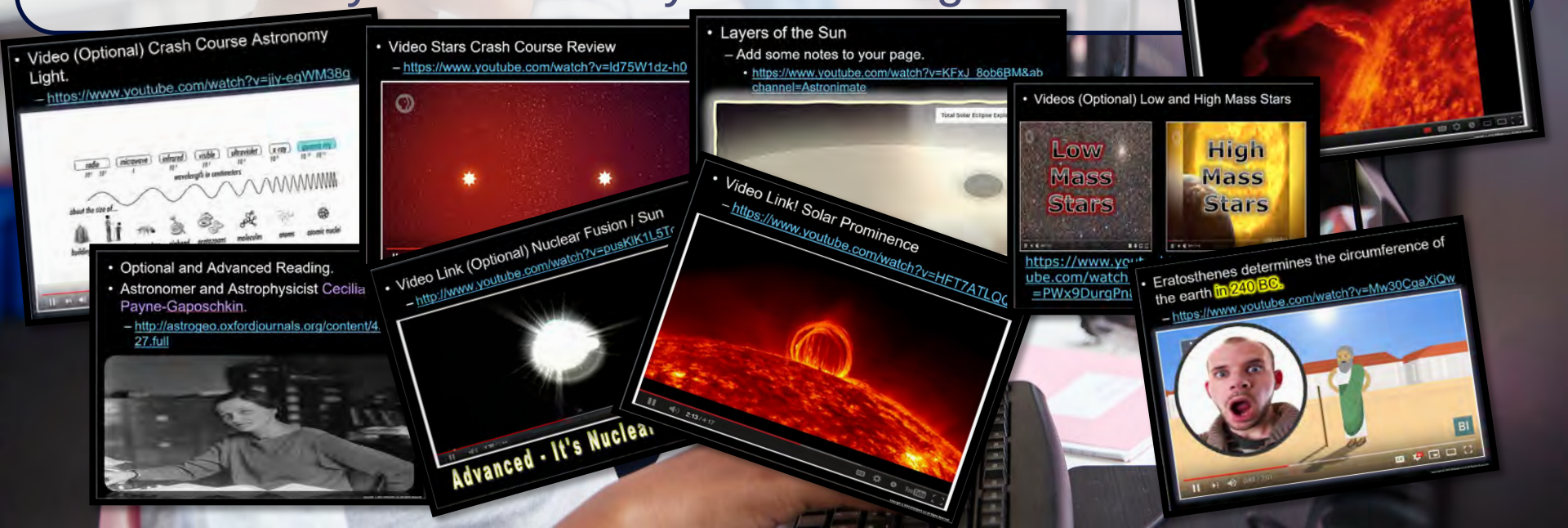
Activities / Labs

Our science activities are designed to help students explore and understand complex scientific concepts in an engaging and interactive way. Each science unit includes several hands-on activities that encourage students to collect data and think critically about the world around them. Our easy-to-follow slideshow provides detailed visuals, simple materials, and clear directions, making it easy for both students and teachers to navigate the activities.



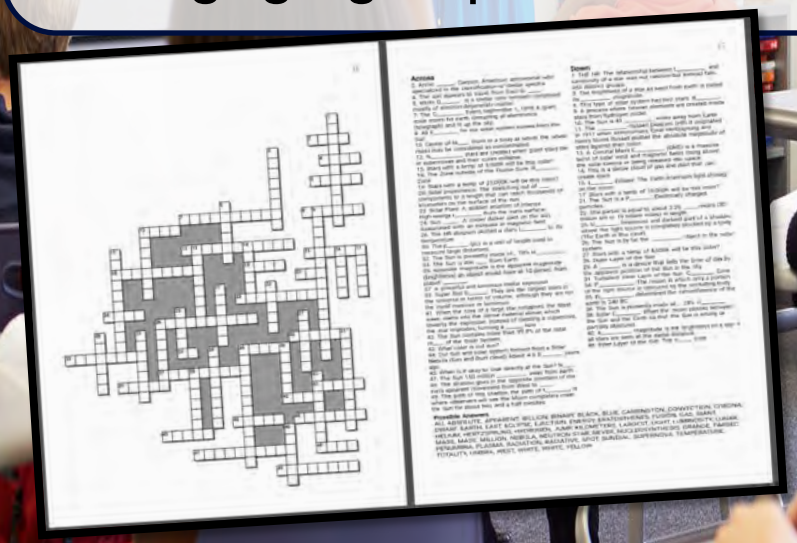
Built-in Video Links

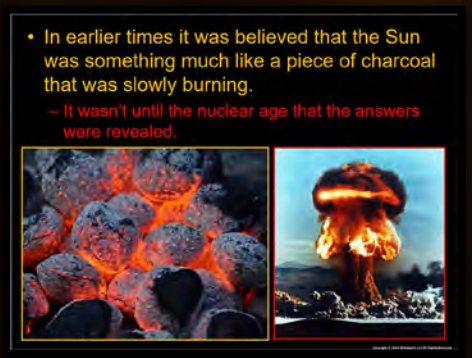
Our science education program is designed with the modern, multimedia learner in mind, and our video links are a perfect complement to our educational materials. These short clips are embedded into the slideshow at just the right places for a fantastic review. Whether you're studying biology, chemistry or physics, our video links are an excellent way to reinforce your learning.



Games and Review

Games are a fantastic way for students to learn scientific concepts while having fun. We incorporate a variety of games into our curriculum, including interactive quizzes and puzzles that challenge students to think critically about the material. Our Hidden Box Games are a particularly popular feature, which conclude each unit by revealing a picture related to the topic. Students try to guess what the picture might be, making learning an engaging experience.





The Owl - Each Part of the slideshow has a small clipart Owl hiding somewhere in a slide. The owl is incredibly small and blended into just the right slide. If a student spots the “Owl” they can raise their hand high into the air. When you call upon the student they can say “Owl" and be the student who spotted the Owl. Each PowerPoint Review game also has an owl hiding in it worth one point. Remind the students that they secretly write the word "owl" rather than yell it out during the review games. The Owl search is not included in every lesson. A slide at the beginning of the lesson will alert the students that today is an “Owl’ day. Everything arrives editable so delete if you wish. You will find that some students will become the expert owl hunters in the group.

Google Classroom Compatible

Our digital learning programs are designed for students to learn science in a flexible and engaging environment. Our Google Classroom-compatible units provide a seamless learning experience whether your students are in the classroom or learning from home. Our step-by-step slideshows and student work bundles ensure that students can complete their work independently. The PowerPoint Slideshows and step-by-step work bundles can easily be loaded to your Google Drive and posted in your Google Classroom. These are great for daily lessons, students who need additional time, and for a student who was absent and looking to catch up in their work bundle.

Part 2 Lesson 5 Life Cycle o...

Google Slides

Part 2 Lesson 2 HR Diagram

Google Slides

Part 2 Lesson 1 The Sun

Google Slides

Part 2 Lesson 9 Solar Lunar ...

Google Slides

Part 2 Lesson 10 Review Ga...

Google Slides

Part 2 Lesson 7 Optional Su...

Google Slides

Part 2 Lesson 3 Inside the S...

Google Slides

Part 2 Lesson 4 Solar Flares

Google Slides

Part 2 Lesson 6 Solar Syste...

Google Slides

Part 2 Lesson 8 Shadows Su...

Google Slides

Astronomy Unit

Astronomy Unit

60 Lessons (6^{th} -8^{th} Medium Difficulty) Part 1 is 6 Lessons and 18 Page Work Bundle, Part 2 is 10 Lessons and 19 Page Work Bundle, Part 3 is 14 Lessons and 19 Page Work Bundle, Part 4 is 9 Lessons and 20 Page Work Bundle, Part 5 is 6 Lessons and 13 Page Work Bundle, Part 6 is 8 Lessons and 17 Page Work Bundle, Part 7 is 9 Lessons and 19 Page Work Bundle

Part 1: Astronomy Unit : Introduction to Astronomy, Copernicus, Heliocentrism, Galileo, Kepler's Laws of Planetary Motion, Ellipse, Perihelion, Aphelion, Orbits, Orbital Velocities, Eccentricity, Calculating Eccentricity, Astronomical Units, Distances in the Solar System, Graphing Planetary Data, Order of the Planets, Box Game Review, Crossword Puzzle, End Unit Assessment with Answer Version so Students can Self-Assess.

Part 2: Astronomy Unit: The Sun, Absolute Magnitude, Apparent Magnitude, Parsec, Stellar Classification / Spectra, Hertzsprung Russell Diagram, Composition of the Sun, Nuclear Synthesis, Layers of the Sun, Solar Flares, Coronal Mass Ejections, Carrington Event, Life Cycle of a Star, Blackhole, Neutron Star, Solar System Formation, Shadows, Sun Dials, Eratosthenes, Graphing Shadow length, Solar Eclipse, Lunar Eclipse, Path of Totality, Box Game Review, Crossword Puzzle, End Unit Assessment with Answer Version so Students can Self-Assess

Part 3: Astronomy Unit: The Habitable Zone, Important data about Mercury, Venus, Earth, Venn Diagram of Earth and Venus, Moon Formation Theories, Earth's Axial Tilt, Seasons on Earth, Equinox, Solstice, Earth's EM Field, Aurora borealis, Synchronous Orbit of the moon, Features of the moon, Phases of the Moon (with OREOS), Tides, Neap Tide, Spring Tide, Tidal Cycle, Reading a Tide Chart, Mars, Features on Mars, Moons of Mars, Rover Exploration, Missions Past and Future, End Unit Assessment with Answer Version so Students can Self-Assess

Part 4: Astronomy Unit: Rocketry, Apollo Missions, Parts of the Saturn V Rocket, Apollo Modules, Parts of a Rocket, Water Bottle Rockets, Newton's Laws, Lift, Drag, Thrust, Weight, Law of Gravitation, Einstein and Gravity, Spacetime, Space Shuttle Program, International Space Station, Future in Space, Box Game Review, Crossword Puzzle, End Unit Assessment with Answer Version so Students can Self-Assess

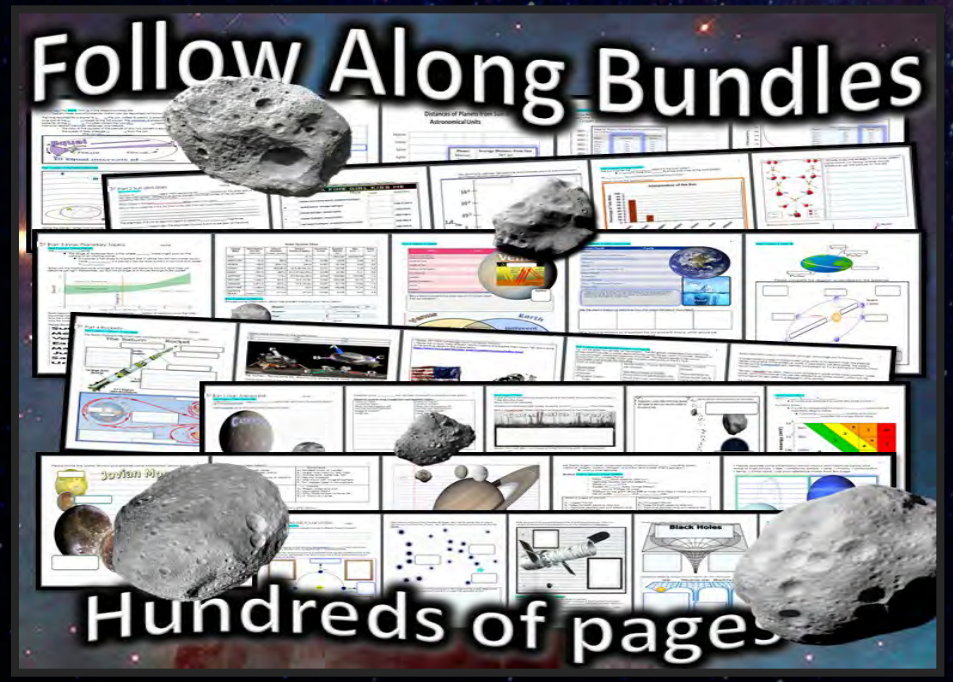
Part 5: Astronomy Unit : Main Asteroid Belt, protoplanet Ceres, Vesta, Meteors, Meteorites, Asteroids, Bolides, Chicxulub Crater, Tunguska Event, Chelyabinsk meteor, Craters, Parts of a Crater, Crater Impact Activity, NEO's, Torino Scale, Box Game Review, Crossword Puzzle, End Unit Assessment with Answer Version so Students can Self-Assess

Part 6 Astronomy Unit: The Outer Planets, Gas Giants, Ice Giants, Density of Outer Planets, Jupiter, Red Spot, Composition of Outer Planets, Jovian Moons, Saturn and its Moons, Uranus and its Moons, Neptune and its Moons, The Kuiper Belt, Demotion of Pluto, Oort Cloud, Comets, Box Game Review, Crossword Puzzle, End Unit Assessment with Answer Version so Students can Self-Assess

Part 7: Astronomy Unit: Constellations, Hubble Space Telescope, Spitzer Space Telescope, Speed of Light, Nebulas, Types of Nebulas, Galaxy, Type of Galaxies, Gravity, The Special Theory of Relativity , Blackholes, Neutron Stars, Spacetime, Pulsars, Quasars, Exoplanets, Hubble Deep Field, Beyond the Solar System, Black holes, Exoplanets, The Big Bang, Evidence for the Big Bang, Box Game Review, Crossword Puzzle, End Unit Assessment with Answer Version so Students can Self-Assess


Astronomy
Mega Bundle
Neutron Star
The Habitable Zone
Penumbra
Cooler
Warmer
Really Hot
7 Units


INTERACTIVE
SLIDESHOWS
Barred
Irregular
Elliptical
Neutron Star
NEBULA
Venus
Earth
Olympus Mons
Name A,B,C,D?
Equinox March 20th
Equinox September 20th
Secure with Duct Tape

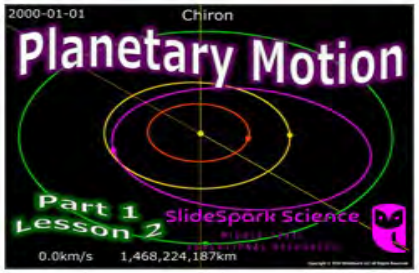

Follow Along Bundles
Hundreds of pages


Activities, Projects,
Assessments, All Built-in
Our Sun
The size and color tell us where the star is in its life cycle.
Johannes Kepler
Galileo Galilei
Nicholaus Copernicus
Eccentricity
Cooler
Warmer
Really Hot

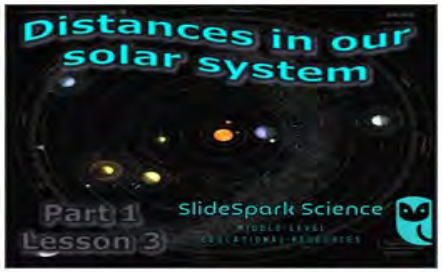
Introduction to Astronomy, Copernicus, Heliocentrism, Galileo, Kepler's Laws of Planetary Motion, Ellipse, Perihelion, Aphelion, Orbits, Orbital Velocities, Eccentricity, Calculating Eccentricity, Astronomical Units, Distances in the Solar System, Graphing Planetary Data, Order of the Planets, Box Game Review, Crossword Puzzle, End Unit Assessment with Answer Version so Students can Self-Assess

Part 1: Astronomy Unit

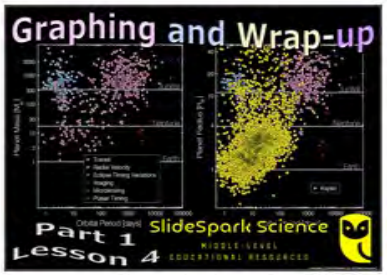
Part 1 Lesson 1 Introduction Kepler



Part 1 Lesson 2 Planetary Motion



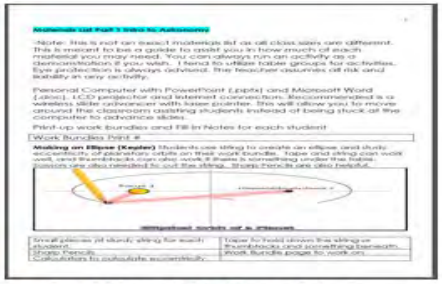
Part 1 Lesson 3 Distances Solar System

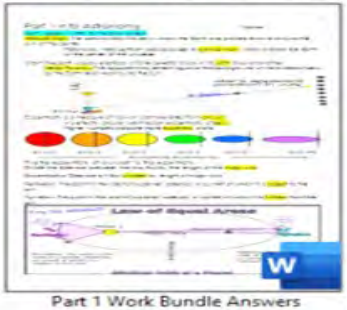


Part 1 Lesson 4 Graphing Wrap Up

Part 1 Lesson 5 Review Game

Part 1 Lesson 6 Review Game Answers


Part 1 Materials List Intro to Solar System


Part 1 Work Bundle Answers


Part 1 Work Bundle Digital


Part 1 Work Bundle Print


Part 1 Work Bundle Writable pdf

Part 2: The Sun, Absolute Magnitude, Apparent Magnitude, Parsec, Stellar Classification / Spectra, Hertzsprung Russell Diagram, Composition of the Sun, Nuclear Synthesis, Layers of the Sun, Solar Flares, Coronal Mass Ejections, Carrington Event, Life Cycle of a Star, Blackhole, Neutron Star, Solar System Formation, Shadows, Sun Dials, Eratosthenes, Graphing Shadow length, Solar Eclipse, Lunar Eclipse, Path of Totality, Box Game Review, Crossword Puzzle, End Unit Assessment with Answer Version so Students can Self-Assess

Part 2: Astronomy Unit

Part 2 Lesson 1 The Sun

Part 2 Lesson 2 HR Diagram

Part 2 Lesson 3 Inside the Sun

Part 2 Lesson 4 Solar Flares

Part 2 Lesson 5 Life Cycle of Stars

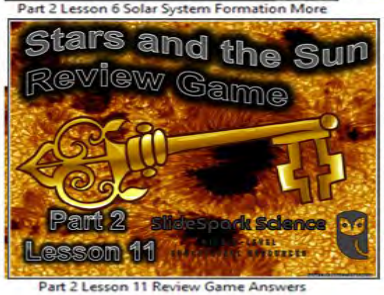
Part 2 Lesson 6 Solar System Formation More

Part 2 Lesson 7 Optional Sun Song

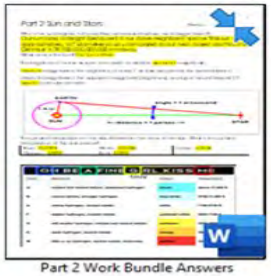
Part 2 Lesson 8 Shadows Sun Dials

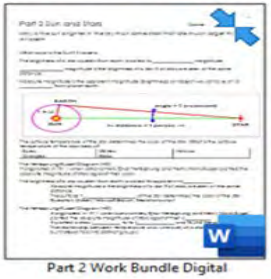
Part 2 Lesson 9 Solar Lunar Eclipse

Part 2 Lesson 10 Review Game



Part 2 Lesson 11 Review Game Answers


Part 2 Work Bundle Answers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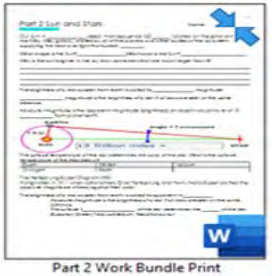

Part 2 Work Bundle Print


Part 2 Work Bundle Writable pdf

Part 3: The Habitable Zone, Important data about Mercury, Venus, Earth, Venn Diagram of Earth and Venus, Moon Formation Theories, Earth's Axial Tilt, Seasons on Earth, Equinox, Solstice, Earth's EM Field, Aurora borealis, Synchronous Orbit of the moon, Features of the moon, Phases of the Moon (with OREOS), Tides, Neap Tide, Spring Tide, Tidal Cycle, Reading a Tide Chart, Mars, Features on Mars, Moons of Mars, Rover Exploration, Missions Past and Future

Part 3: Astronomy Unit

Part 3 Lesson 1 Inner Planets

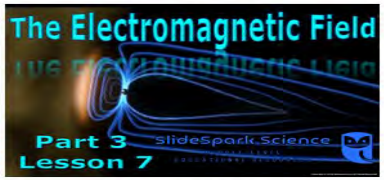
Part 3 Lesson 2 Mercury

Part 3 Lesson 3 Venus

Part 3 Lesson 4 Earth and Moon

Part 3 Lesson 5 Axial Tilt

Part 3 Lesson 6 Solstice Equinox



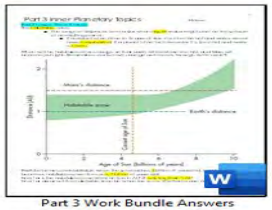
Part 3 Lesson 7 EM Field

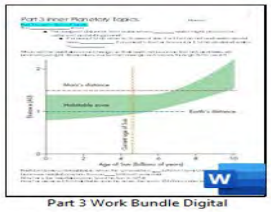
Part 3 Lesson 8 Phases of Moon 1

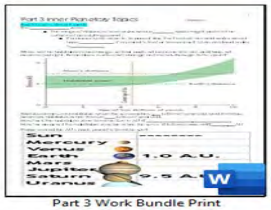
Part 3 Lesson 9 Phases of Moon 2

Part 3 Lesson 10 Phases Quiz

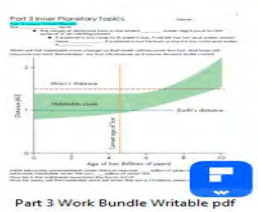

Part 3 Materials List


Part 3 Work Bundle Answers


Part 3 Work Bundle Digital



Part 3 Work Bundle Print


Part 3 Work Bundle Writable pdf

Astronomy Unit Part 4: Rocketry, Apollo Missions, Parts of the Saturn V Rocket, Apollo Modules, Parts of a Rocket, Water Bottle Rockets, Newton's Laws, Lift, Drag, Thrust, Weight, Law of Gravitation, Einstein and Gravity, Spacetime, Space Shuttle Program, International Space Station, Future in Space

Part 4: Astronomy Unit

Part 4 Lesson 1 Mission to the Moon

Part 4 Lesson 2 Water Rockets Gravity

Part 4 Lesson 3 Gravity Rocket Built Cont

Part 4 Lesson 4 Space Shuttle ISS

Part 4 Lesson 5 Newtons 1st Law

Part 4 Lesson 6 2nd Law of Motion

Part 4 Lesson 7 3rd Law of Motion

Part 4 Lesson 8 Rocketry Wrap Up

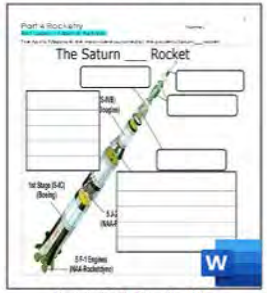
Part 4 Lesson 9 Review Game

Part 4 Lesson 10 Review Game Answers

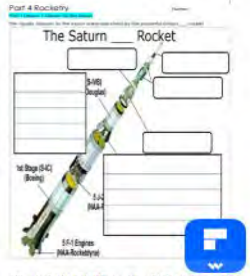

Part 4 Materials List


Part 4 Work Bundle Answers

Part 4 Work Bundle Digital



Part 4 Work Bundle Print



Part 4 Work Bundle Writable pdf

Part 5: Main Asteroid Belt, protoplanet Ceres, Vesta, Meteors, Meteorites, Asteroids, Bolides, Chicxulub Crater, Tunguska Event, Chelyabinsk meteor, Craters, Parts of a Crater, Crater Impact Activity, NEO's, Torino Scale,

Part 5: Astronomy Unit

Part 5 Lesson 1 Main Asteroid Belt

Part 5 Lesson 2 Tunguska Event

Part 5 Lesson 3 NEOs

Part 5 Lesson 4 Impact Lab

Part 5 Lesson 5 Research and Wrap Up

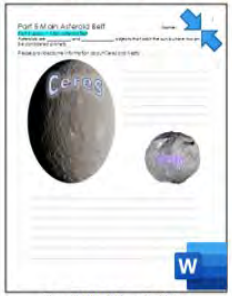
Part 5 Lesson 6 Review Game

Part 5 Lesson 7 Review Game Answers


Part 5 Materials List

Part 5 Work Bundle Answers

Part 5 Work Bundle Digital



Part 5 Work Bundle Print

Part 5 Work Bundle Writable pdf

Part 6 of Astronomy Unit: The Outer Planets, Gas Giants, Ice Giants, Density of Outer Planets, Jupiter, Red Spot, Composition of Outer Planets, Jovian Moons, Saturn and its Moons, Uranus and its Moons, Neptune and its Moons, The Kuiper Belt, Demotion of Pluto, Oort Cloud, Comets

[Part 6 Astronomy Unit]

Part 6 Lesson 1 Gas Giants

Part 6 Lesson 2 Jupiter

Part 6 Lesson 3 Jovian Moons

Part 6 Lesson 4 Saturn

Part 6 Lesson 5 Ice Giants

Part 6 Lesson 6 Outer Solar System

Part 6 Lesson 7 Review Game

Part 6 Lesson 8 Review Game Answers

Part 6 Lesson 9 Space Expo Project


Part 6 Work Bundle Answers


Part 6 Work Bundle Digital


Part 6 Work Bundle Print

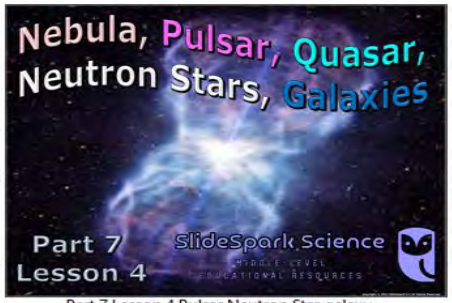
Astronomy Unit Part 7: Constellations, Hubble Space Telescope, Spitzer Space Telescope, Speed of Light, Nebulas, Types of Nebulas, Galaxies , Type of Galaxies, Gravity, The Special Theory of Relativity , Blackholes, Neutron Stars, Spacetime, Pulsars, Quasars, Exoplanets, Hubble Deep Field, Beyond the Solar System, Black holes, Exoplanets, The Big Bang, Evidence for the Big Bang

Part 7: Astronomy Unit

Part 7 Lesson 1 Constellations Hubble

Part 7 Lesson 2 Speed of Light More

Part 7 Lesson 3 Spacetime



Part 7 Lesson 4 Pulsar Neutron Star galaxy

Part 7 Lesson 5 Galaxies

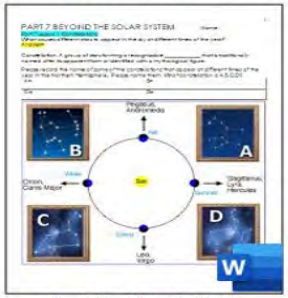
Part 7 Lesson 6 Exoplanets

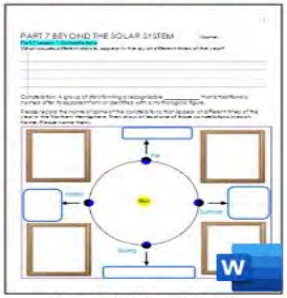
Part 7 Lesson 7 Big Bang

Part 7 Lesson 8 Review Game

Part 7 Lesson 9 Review Game Answers


Part 7 Work Bundle Answers


Part 7 Work Bundle Digital


Part 7 Work Bundle Print

Curriculum Guide

Number of Lessons in each unit (50 min, daily lessons) and difficult rating scale / intended grade level.

=Easier,


= More difficult,


=Most difficult

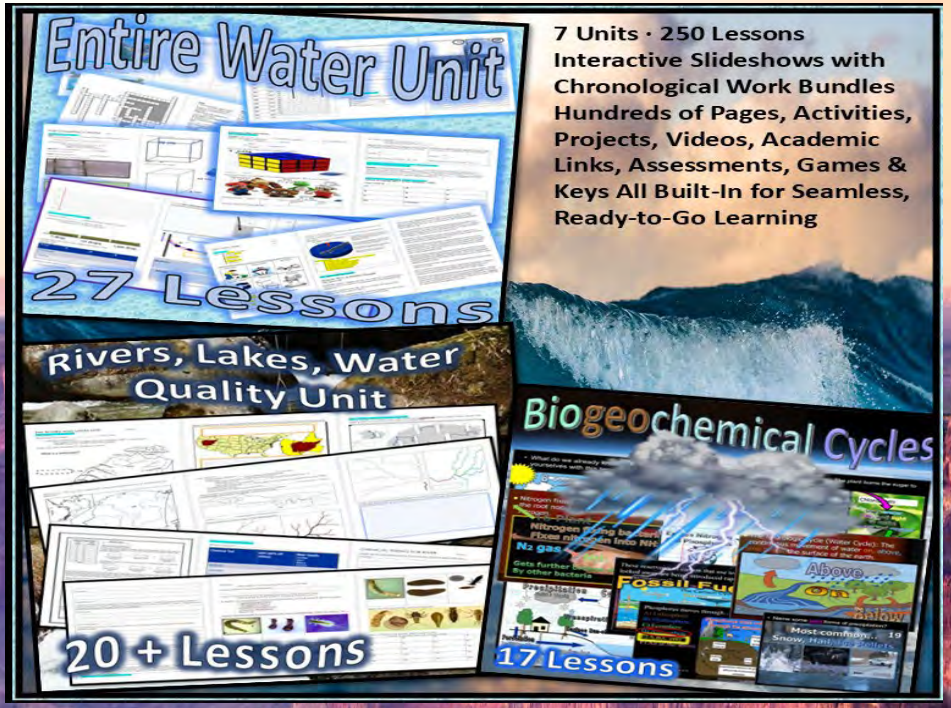
Earth Science Units	Daily Lessons	Intended Grade	
Geology Topics Unit	60 Lessons	6-8 medium difficulty	MORE DIFFICULT
Weather and Climate Unit	40 Lessons	6-8 medium difficulty	MORE DIFFICULT
Astronomy Unit	60 Lessons	6-8 medium difficulty	MORE DIFFICULT
Weathering, Soil Sciences	28 Lessons	5-7 easier	EASIEST
Rivers and Water Quality	25 Lessons	5-7 easier	EASIEST
Water Molecule Unit	20 Lessons	5-7 easier	EASIEST
Biogeochemical Cycles Unit	16 Lessons	5-7 easier	EASIEST

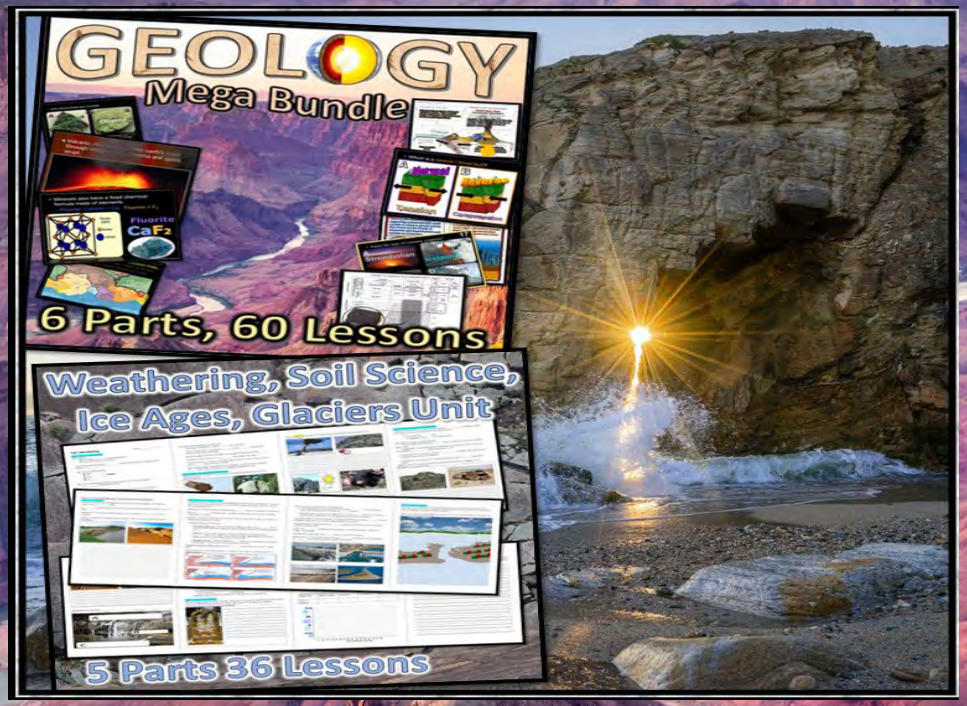
Earth Science Curriculum

Earth Science Curriculum

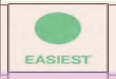
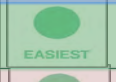
SlideSpark Science

MIDDLE-LEVEL EDUCATIONAL RESOURCES



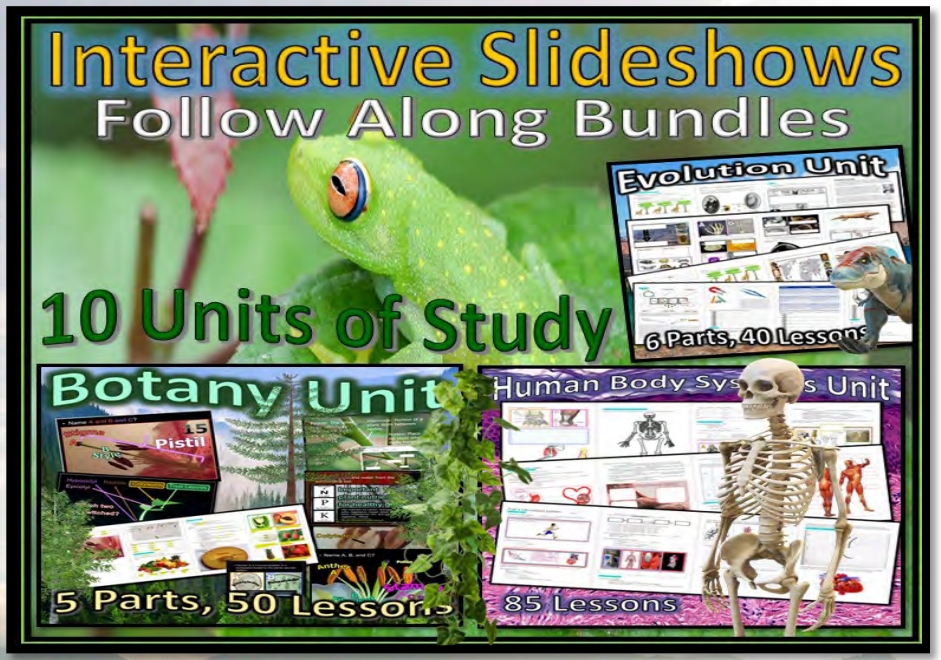


Life Science Units

	Daily Lessons	Intended Grade	
Ecology Feeding Levels Unit	13 Lessons	5-6 easier	
Ecology Interactions Unit	30 Lessons	5-6 easier	
Ecology Abiotic Factors Unit	13 Lessons	5-6 easier	
Botany Unit	50 Lessons	5-7 easier	
Evolution and Natural Selection	40 Lessons	5-7 easier	
Taxonomy and Classification	50 Lessons	6-8 medium difficulty	
Infectious Diseases Unit	30 Lessons	7-9 more difficult	
DNA and Genetics Unit	42 Lessons	8-10 most difficult	
Human Body Systems Unit	85 Lessons	6-8 medium difficulty	
Cell Biology Unit	30 Lessons	8-10 most difficult	

Life Science Curriculum


Life
Science
Curriculum
SlideSpark Science
MIDDLE-LEVEL
EDUCATIONAL RESOURCES


Interactive Slideshows
Follow Along Bundles
10 Units of Study
Evolution Unit
6 Parts, 40 Lessons
Botany Unit
5 Parts, 50 Lessons
Human Body Sys s Unit
85 Lessons


Cellular Biology Unit
Form Follows Function
30 Lessons of 50 minutes
DNA and Genetics Unit
40 Lessons
Infectious Diseases
30 Lessons


Taxonomy and Classification Unit
6 Parts
50 Lessons
Ecology Interactions Unit
30 Lessons
Ecology Feeding Le
Full Unit
Ecology Abiotic Factors Unit
27 Lessons

Physical Science	Daily Lessons	Intended Grade	
Laws of Motion and Machines Unit	33 Lessons	8-10 most difficult	
Matter Energy and the Environment	58 Lessons	7-10 medium difficulty	
Atoms and Periodic Table Unit	44 Lessons	8-10 most difficult	
Science Skills Unit	30 Lessons	5-7 medium difficulty	

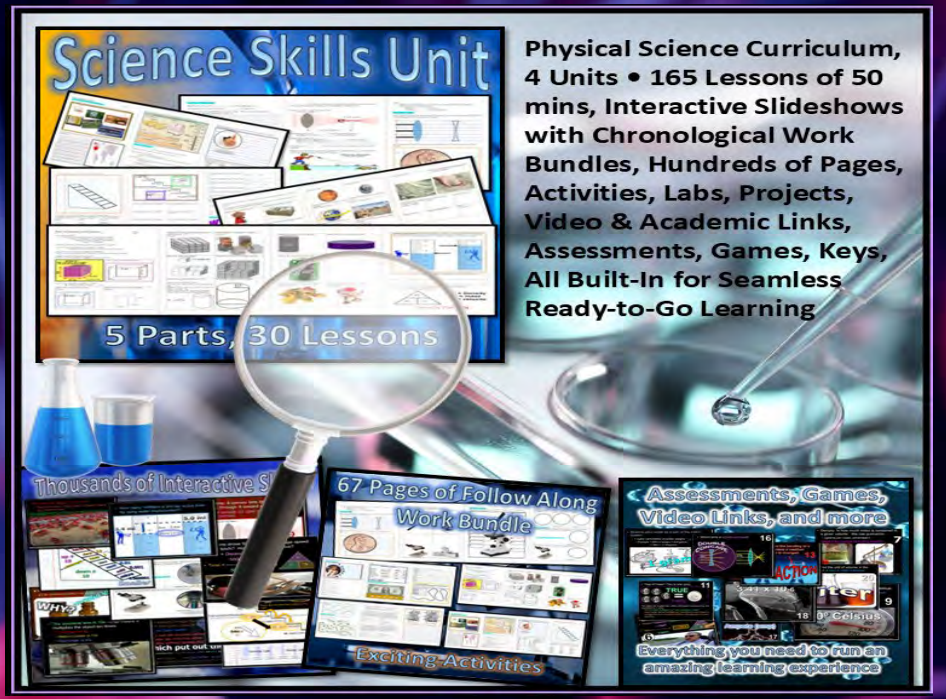
Physical Science Curriculum

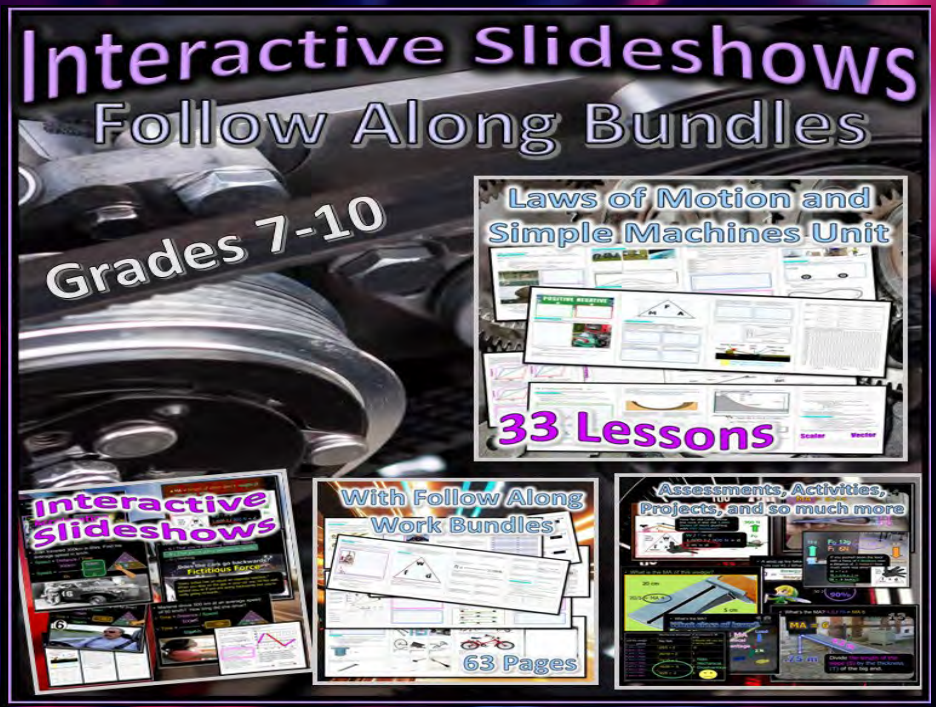
Entire SlideSpark Science Curriculum

Physical Science Curriculum

SlideSpark Science

MIDDLE-LEVEL EDUCATIONAL RESOURCES





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Sincerely,

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SlideSpark Science

MIDDLE-LEVEL

EDUCATIONAL RESOURCES

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