Class: Solar Energy HonorsP4 & P5 Teacher Name: THORNTON

| Day | Objectives & Essential Questions | Assignments (all work still posted on Dr. Thornton JERFSA): https://sites.google.com/palmbeachschools.org/drthorntonjerfsa/home?authuser=2 | Due Date 10.21-10.25 |
|-----------|---|--|--|
| | | CHECK CLASSROOM or SIS FOR DEADLINES | |
| Monday | 4.1 Global water distribution describe the distribution of the Earth's water oceans fresh water: ice sheets and glaciers, ground water, atmosphere, lakes and rivers 4.2 The water cycle describe and interpret the water cycle precipitation, surface run-off, interception, infiltration, through-flow, ground water flow, transpiration, evaporation and condensation 4.3 Water supply describe the sources of fresh water used by people aquifers, wells, rivers, reservoirs, desalination plants | CLASSWORK: BEGIN ATMOSPHERE LAB Unit 3, Activity #2 PHOTO AND PLACE 3 x 5 cards REVIEW Air quality Lab Unit #3 Activity #2 Introduction Lit Reivew Methods Unit 3, Lesson # 7, VIDEO of Slides 51-83 Unit 3, ACTIVITY #7 VIDEO WATCH AND REPORT Climate kids ATMOSPHERE HOMEWORK: Read Watch Report 1-5 | ALL HOMEWO RK DUE BEFORE CLASS ON ASSIGNED DATE WORK ON PROJECT |
| Tuesday | | CLASSWORK: • PHOTO 3 x 5 cards • Unit 3, Lesson # 7, VIDEO of Slides 83-92 HOMEWORK: Work on LAB | |
| Wednesday | | CLASSWORK: PHOTO 3 x 5 cards Unit 3, ACTIVITY #7 VIDEO WATCH AND REPORT Climate kids ATMOSPHERE HOMEWORK: Read Watch Report 8-11 Work on LAB | |
| Thursday | | SUBSTITUTE 10 Grade Field Study CLASSWORK: • GET PHOTOS EARLY!!! | |

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| | Watching From the Ashes Unit #3 Activity #6 Coal industry effect on air quality in USFROM THE ASHES Video: https://www.fromtheashesfilm.com/ PAID FOR ON AMAZON Documentary Worksheet: https://docs.google.com/document/d/1CwJrz2SgJ7WTyulJQ 6VEN6h3RcxlM5rX_6TPkhkiw08/edit?usp=sharing Additional info for worksheet: https://assets.bbhub.io/dotorg/sites/31/2017/09/From_the-Ashes_GUIDE_V9.pdf HOMEWORK: |
| Friday | SUBSTITUTE 12 Grade Field Study • GET PHOTOS EARLY!!! Bring to CLASS CLASSWORK: Watching From the Ashes Unit #3 Activity #6 Coal industry effect on air quality in USFROM THE ASHES ■ Video: https://www.fromtheashesfilm.com/ PAID FOR ON AMAZON ■ Documentary Worksheet: https://docs.google.com/document/d/1CwJrz2SgJ7WTyulJQ 6VEN6h3RcxlM5rX_6TPkhkiw08/edit?usp=sharing ■ Additional info for worksheet: https://assets.bbhub.io/dotorg/sites/31/2017/09/From_the-Ashes_GUIDE_V9.pdf HOMEWORK: COMPLETE |

SC.912.E.5.4:

Explain the physical properties of the Sun and its dynamic nature and connect them to conditions and events on Earth.

SC.912.E.6.6:

Analyze past, present, and potential future consequences to the environment resulting from various energy production technologies.

Class: Solar Energy HonorsP4 & P5 Teacher Name: THORNTON SC.912.L.17.11: Evaluate the costs and benefits of renewable and nonrenewable resources, such as water, energy, fossil fuels, wildlife, and forests. SC.912.L.17.12: Discuss the political, social, and environmental consequences of sustainable use of land. SC.912.L.17.13: Discuss the need for adequate monitoring of environmental parameters when making policy decisions. SC.912.L.17.15: Discuss the effects of technology on environmental quality. SC.912.L.17.20: Predict the impact of individuals on environmental systems and examine how human lifestyles affect sustainability. Define a problem based on a specific body of knowledge, for example: biology, chemistry, physics, and earth/space science, and do the following: 1. Pose questions about the natural world, (Articulate the purpose of the investigation and identify the relevant scientific concepts). 2. Conduct systematic observations, (Write procedures that are clear and replicable. Identify observables and examine relationships between test (independent) variable and outcome (dependent) variable. Employ appropriate methods

for accurate and consistent observations; conduct and record measurements at appropriate levels of precision. Follow safety guidelines).

3. Examine books and other sources of information to see what is already known,

4. Review what is known in light of empirical evidence,

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SC.912.N.1.1:

Plan investigations, (Design and evaluate a scientific investigation). 6. Use tools to gather, analyze, and interpret data (this includes the use of measurement in metric and other systems, and also the generation and interpretation of graphical representations of data, including data tables and graphs), (Collect data or evidence in an organized way. Properly use instruments, equipment, and materials (e.g., scales, probeware, meter sticks, microscopes, computers) including set-up, calibration, technique, maintenance, and storage).

- 7. Pose answers, explanations, or descriptions of events, 8. Generate explanations that explicate or describe natural phenomena (inferences),
- 9. Use appropriate evidence and reasoning to justify these explanations to others,
- 10. Communicate results of scientific investigations, and
- 11. Evaluate the merits of the explanations produced by others.

SC.912.N.1.2:

Describe and explain what characterizes science and its methods.

SC.912.N.1.3:

Recognize that the strength or usefulness of a scientific claim is evaluated through scientific argumentation, which depends on critical and logical thinking, and the active consideration of alternative scientific explanations to explain the data presented.

SC.912.N.1.4:

Identify sources of information and assess their reliability according to the strict standards of scientific investigation.

SC.912.N.1.5:

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Describe and provide examples of how similar investigations conducted in many parts of the world result in the same outcome.

SC.912.P.10.3:

Compare and contrast work and power qualitatively and quantitatively.

SC.912.P.10.9:

Mathematicians who participate in effortful learning both individually and with others:

Analyze the problem in a way that makes sense given the task. Ask questions that will help with solving the task

Build perseverance by modifying methods as needed while solving a challenging task.

Stay engaged and maintain a positive mindset when working to solve tasks.

Help and support each other when attempting a new method or approach.

MA.K12.MTR.2.1:

Mathematicians who demonstrate understanding by representing problems in multiple ways:

Build understanding through modeling and using manipulatives.

Represent solutions to problems in multiple ways using objects, drawings, tables, graphs and equations.

Progress from modeling problems with objects and drawings to using algorithms and equations.

Express connections between concepts and representations.

Choose a representation based on the given context or purpose.

Teacher Name: THORNTON Class: Solar Energy HonorsP4 & P5 MA.K12.MTR.4.1: Teachers who encourage students to engage in discussions that reflect on the mathematical thinking of self and others: Establish a culture in which students ask questions of the teacher and their peers, and error is an opportunity for learning. Create opportunities for students to discuss their thinking with peers. Select, sequence and present student work to advance and deepen understanding of correct and increasingly efficient methods. Develop students' ability to justify methods and compare their responses to the responses of their peers. MA.K12.MTR.6,1; Apply mathematics to real-world contexts. Mathematicians who apply mathematics to real-world contexts. Connect mathematical concepts to everyday experiences. Use models and methods to understand, represent and solve problems. Perform investigations to gather data or determine if a method is appropriate. Redesign models and methods to improve accuracy or efficiency