CPalms Energy Lesson Links

Sun and Me (grades 1-2)

https://www.cpalms.org/Public/PreviewResourceUrl/Preview/9949 or direct link
http://www.fsec.ucf.edu/en/education/k-12/curricula/sm1/index.htm

Energy of the Future SSPS2064 Inc. Energy of the Future
This Model Eliciting Activity (MEA) is written at a 5th grade level and provides students with an engineering problem in which they must work as a team to design a procedure to select the best company that will send and build solar energy equipment in space.

Here comes the sun 2-3)
https://www.cpalms.org/Public/PreviewResourceUrl/Preview/23742

Town of Newberry: Alternative Energies MEA Grades 4/5
https://www.cpalms.org/Public/PreviewResourceLesson/Preview/47378
This Model Eliciting Activity (MEA) is written at a 5th grade level. In this open-ended problem, students are presented with a variety of energy resources, a description of the source, and the advantages/disadvantages of each. Students must consider which resource energy is the best to implement, describe their procedures for reasoning, and defend their decisions by providing proper validation.

Spread the Sunshine MEA 6/8
https://www.cpalms.org/Public/PreviewResourceLesson/Preview/67222
In this MEA, the sun is asking students to provide an advertisement explaining how the sun's energy is used to provide energy every second of every day. Students are asked to provide many examples of how solar energy is transformed into electrical, thermal, and other types of energy. Students are then asked to develop a presentation for the media outlet of their choosing. This MEA can be scaled down for differentiation, or used as is for a challenge to engage students in a rigorous fun activity.

Future Car: Energy and the Environment 6/8
https://www.cpalms.org/Public/PreviewResourceLesson/Preview/48822

Students must choose which type of automotive power plant is the best choice for a car company to use in its upcoming eco-friendly model. The students must make this decision based on characteristics of each power plant, such as efficiency, production cost, and production energy. Students must decide what they feel makes the car most "ecological." They may choose a very low-polluting car that is very difficult and costly to produce, or one that has more emissions, but uses very limited resources to develop. This lesson could be used to either as an introduction or a follow-up to a lesson about ecology, energy use and conservation, or human environmental impacts.

Solar Powered MEA 6/8
https://www.cpalms.org/Public/PreviewResourceLesson/Preview/68114
Students will explore ways in which energy conservation affects the environment.

Renewable Resources are the Answer 9/10
https://www.cpalms.org/Public/PreviewResourceLesson/Preview/48808
This lesson deals with understanding how non renewable resources are being depleted. It emphasizes the urgent need to discuss and implement the use of renewable resources since it's much cheaper. A total appreciation of what the earth supply us with.

Community Energy Wars 9/12
https://www.cpalms.org/Public/PreviewResourceLesson/Preview/49185

- Students will discuss the costs and benefits of a variety of energy projects in a local area.

More Energy Lessons

- PBS Solar Lesson Plan
  https://www.pbs.org/newshour/extra/lessons-plans/lesson-plan-is-solar-power-the-future-of-energy/
- Science Journal for Kids article
  https://sciencejournalforkids.org/articles/can-electricity-reach-the-billion-people-who-live-without-it/

- High school algebra lessons
  http://www.nea.org/assets/docs/Solar_Power_and_Me_The_Inherent_Advantages.pdf
- https://www.teachengineering.org/activities/view/cub_energy2_lesson01_activity2
- https://www.teachengineering.org/lessons/view/cub_environ_lesson09
- https://www.nationalgeographic.org/interactive/national-geographic-energy/?utm_source=BibblioRCM_Row
- https://www.education.com/science-fair/article/what-is-sustainable-development/
- https://www.sciencebuddies.org/science-fair-projects/project-ideas/list
- https://florida.pbslearningmedia.org/subjects/engineering--technology/systems--technologies/energy-and-power/