Earth Space Science: Energy Resources Building an Energy Efficient Life

The following learning activities were backwards planned to facilitate the development of students' knowledge and skills for mastery of this NGSS Performance Expectation. Not all of the dimensions and CCSS are covered in the following activities and teachers are encouraged to address them where possible.

MS-ESS3 Earth and Human Activity

Students who demonstrate understanding can:

MS-ESS3 3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.* [Clarification Statement: Examples of the design process include examining human environmental impacts, assessing the kinds of solutions that are feasible, and designing and evaluating solutions that could reduce that impact. Examples of human impacts can include water usage (such as the withdrawal of water from streams and aquifers or the construction of dams and levees), land usage (such as urban development, agriculture, or the removal of wetlands), and pollution (such as of the air, water, or land).]

MS.LS2.A MS.LS2.C MS.LS4.D

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Articulation	of DCIs act	ross grade-ba	nds:

3.LS2.C 3.LS4.D 5.ESS3.C HS.LS2.C HS.LS4.C HS.LS4.D HS.ESS2.C HS.ESS2.D HS.ESS2.E HS.ESS3.C HS.ESS3.D				
Common Core State Star	ndards Connections:			
WHST.6-	Conduct short research projects to answer a question (including a self-generated question), drawing on			
8.7	several sources and generating additional related, focused questions that allow for multiple avenues of exploration.			
WHST.6-8.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.			
6.RP.A.1	Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.			
7.RP.A.2	Recognize and represent proportional relationships between quantities.			
6.EE.B.6	Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.			
7.EE.B.4	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.			

