Understanding Earth's Energy Sources

Grades: 9-12

Topics: Biomass, Wind Energy, Hydrogen and Fuel Cells, Solar, Vehicles, Geothermal

Owner: ACTS

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Standard's Guide to Learning Middle School Hands-On Science Elective Class

Student: Grade: Date:

Proficiency Levels

<u>Math</u>	в	PP	Р	Α
Collect, organize, analyze, and graph (e.g., line plots, bar graphs, coordinate graphs, stem-and-leaf plots) categorical and numerical data.				
Distinguish between categorical and numerical data.				
Use graphs and statistics to describe and compare two data sets.				

<u>Science</u>

Understand the processes of scientific investigation and design, conduct, communicate about and evaluate other such investigations.		
Create a written plan for an investigation.		
Use appropriate tools, technologies, and measurement units to gather and organize data interpreting and evaluating data I order to formulate conclusions.		
Communicate results of their investigation inappropriate ways.		
Use metric units in measuring, calculating, and reporting results.		
Explain that scientific investigations sometimes result in unexpected findings that lead to new questions and more investigations.		
Understand interrelationships among science, technology, and human activity and how they effect the can world.		
Describe uses of renewable and non-renewable resources.		
Describe advantages and disadvantages that might accompany the introduction of a new technology.		
Identify and analyze ways in which advances in science and technology have affected each other and society.		
Identify, compare, and predict variables and conditions related to change.		
Identify and illustrate natural cycles within systems.		
Recognize that patterns exist within and across systems.		

Proficiency Levels

Reading	В	PP	Р	Α
Locate and recall information in text with different structures (for example, cause and effect, compare and contrast, and problem/solution).				
Identify the meaning of unfamiliar words in context using word recognition skills and context clues.				
Use reading, thinking, listening and viewing skills to solve problems and answer questions.				
Make predictions , draw conclusions, and analyze what they read, hear, and view.				
Differentiate between fact and opinion in a variety of texts.				
Explain the text's main point and use relevant details to support the explanation.				
Read to locate, select , and make use of relevant information from a variety of media, references, and technological sources.				

<u>Writing</u>

Apply skills in analysis, synthesis, evaluation, and explanation to their writing and speaking.		
Write and speak in the content area.		

B-Beginning PP-Partially Proficient P-Proficient A-Advanced