

Project Title: NGSS Earth and Human Activity		Name: Angelica Alvarado
Audience: Grade 4	Subject: Science	
Link to Project: http://blnds.co/1GONg12		
<p>Established Goals/Standards:</p> <p>NGSS 4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment. 4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.</p> <p>Common Core State Standards RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. (4-ESS3-2) RI.4.9 Integrate information from texts on the same topic in order to write or speak about the subject knowledgeably. (4-ESS3-2) W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic. (4-ESS3-1) W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources. (4-ESS3-1) W.4.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. (4-ESS3-1)</p>		
<p>Expected Student Understanding(s)/Learning Target(s):</p> <ul style="list-style-type: none"> • Students will obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment. • Student will draw inferences based on informational text, "Frogs at Risk" • Students will create a model using the process of Design Thinking for a solution to natural hazards. 		
<p>Integration of Seven Survival Skills (List all seven). You can discuss them individually or in narrative form, but you MUST account for all seven in your unit:</p>		

Ms. Alvarado's 7 essential survival skills for the 21st Century

1. **Perseverance**- higher order thinking skills and sound reasoning in order to solve problems, Students will need to create a solution on natural hazards and ensure the problem is solved by using Design Thinking process.

2. **Leadership**- work with others and self-direction, Students will collaborate with partner and share information about the cause and effect of natural hazards.

3. **Empathy**- cross-cultural understanding and self-reliance- Students will need to create a solution to save animals and their habitat.

4. **Creativity and Innovation**- producing high quality work, Students will create a model using the process of Design Thinking.

5. **Adaptability and Flexibility**- reflection, motivation and open-mindedness, Students will need to reflect on the text and videos and explain the causes of natural hazards.

6. **Digital-Age Literacy**- technology, multicultural and global awareness, Students will read a PDF about frogs in South America and utilize BrainPop for further information.

7. **Effective Communication**- understanding and communicating ideas, Students will be asked to post their responses on Schoology and respond to another peer in class.

SAMR Alignment - discuss where in the unit and what level(s) (Give at least 2 examples and the tool(s) used)

1. Substitution- Schoology Posts
2. Augmentation- Symbaloo on Natural Hazards

Assessment - Discuss the type(s) of assessment used in the unit (this could be from a mastery-based task, formative assessment, etc.):

1. **Air Pollution Quiz (Quick Comprehension Check)**-Reference Brain Pop Video
2. **Partner Talk (Formative Assessment)** What are three possible causes of this risk given by scientists? Write your responses to the causes as a post on Schoology and respond to one group member, if you agree or disagree and why.
3. **Reflection Writing (Formative Assessment)**- Why is it important for scientists to know whether an area is polluted?
4. **Design Thinking Model (Mastery-based Task)**