

You can earn up to 2 points of make-up credit for late or missing assignments in **Unit 6: Energy Resources & Consumption** by completing ONE of the Creative Tasks described in the attached directions. Once you're done, please share your completed Creative Task with me by attaching it to this assignment in Google Classroom, emailing it to me at ccarman@kentschools.net, or sending it to me through Remind.

In order to earn full credit, you must also write a short paragraph (2-3 sentences) explaining how your creative task fits into one or more of the topics for Unit 6: Energy Resources & Consumption:

- #6.1: Renewable and Nonrenewable Resources
- #6.2: Global Energy Consumption
- #6.3: Fuel Types and Uses
- #6.4: Distribution of Natural Energy Resources
- #6.5: Fossil Fuels
- #6.6: Nuclear Power
- #6.7: Energy from Biomass
- #6.8: Solar Energy
- #6.9: Hydroelectric Power
- #6.10: Geothermal Energy
- #6.11: Hydrogen Fuel Cell
- #6.12: Wind Energy
- #6.13: Energy Conservation

Please let me know if you have any questions!

Option #1: Access to energy

In this Creative Task, you will use the "[Access to Energy](#)" report on the Our World in Data website to **investigate one topic related to unequal energy access around the world**. Choose from one of the following topics:

- Access to electricity:
 - [What share of people have access to electricity?](#)
 - [How many people don't have access to electricity?](#)
- Access to clean fuels for cooking:
 - [What share of people have access to clean fuels for cooking?](#)
 - [How many people do not have access to clean fuels for cooking?](#)
 - [What share of people use solid fuels for cooking?](#)
- [How does per capita electricity consumption vary across the world?](#)
- [How does per capita energy consumption vary across the world?](#)
- What determines levels of energy access:
 - [Low-income households lack access to electricity and clean fuels](#)
 - [Rural households lag behind on energy access](#)

Which topic you choose to investigate and compare is entirely up to you! Here are some points to address in your Creative Task:

- Why did you select this topic? Why is it meaningful to you?
- What trends or patterns do you notice? If your chart or map has a play button, how do these trends or patterns change over time?
- With respect to this topic, how does the United States compare to the rest of the world? How do you know?
- Based on these trends, what do you think is going to happen in the future? Why do you think so?

Here are some ideas for your Creative Task:

- make a slideshow or record a video explaining your topic and its importance – be sure to add pictures to give your presentation more meaning
 - create a poster or flyer on paper, in [JamBoard](#), Google Docs, Google Slides, or another drawing app describing your topic and its importance
 - write a short story, poem or song – maybe you can write about what has happened in the past or predict what might happen in the future
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Option #2: Health hazards from fossil fuels

In this Creative Task, you will select one of the three fossil fuels – **coal**, **oil** (petroleum), or **natural gas** – and investigate a human health hazard caused by its use. Here are some ideas to help you get started:

Coal

- hazards to miners – e.g., black lung, mine collapse, explosions, fires
- air pollution – e.g., particulate matter, soot, carbon emissions
- toxic coal ash

Oil (petroleum)

- hazards to oil workers – e.g., explosions, regular exposure to toxic chemicals
- air pollution – e.g., refineries, carbon emissions, carbon monoxide, explosions
- water and land pollution – e.g., well sites, offshore drilling, pipelines, oil spills, fracking
- "peak oil"

Natural gas

- hazards to gas drillers – e.g., explosions, regular exposure to toxic chemicals
- air pollution – e.g., "fugitive" emissions, carbon emissions, evaporation sprayers
- water and land pollution – e.g., groundwater contamination, wastewater injection, induced earthquakes

These are the guiding questions your Creative Task should answer:

- What fossil fuel did you choose? Why did you pick it?
- What human health hazard did you choose? Why did you pick it?
- How is this hazard produced by using this fossil fuel? Does it happen during extraction, refining, energy production through combustion, or disposal?
- What human health impact or impacts are caused by this hazard? Does it cause cancer, lung or heart damage, developmental disabilities in children, or something else?
- What's one solution to decrease or eliminate this health hazard? Is it currently being used, how much does it cost, and why isn't it more widely used?

Here are some ideas for your Creative Task:

- create a [Google Site](#) explaining your topic with text and embedded pictures, graphs or videos
- make a slideshow or record a video explaining your topic – be sure to add pictures to give your presentation more meaning
- create a poster or flyer on paper, in [JamBoard](#), Google Docs, Google Slides, or another drawing app describing your topic
- write a short story, poem or song – maybe you can write about what has happened in the past or predict what might happen in the future

Option #3: Alternative energy ad campaign

In this Creative Task, you will select one of the three "alternative" sources – **nuclear power**, **hydroelectric power**, or **geothermal energy** – and create an advertising campaign either **in favor of** or **opposed to** building a power plant of this type in Kent, Ohio. This *hypothetical* power plant would be located just north of Roosevelt High School on State Route 43, where Franklin Elementary and the Oak Knolls Golf Course used to be:



When you're researching your Creative Task, think about the **pros** (benefits) and **cons** (costs and risks) of your energy source. If you're **in favor of** building this power plant, focus on showing its **benefits**. If you're **opposed to** building it, focus on exposing its potential **problems**.

These are the guiding questions your Creative Task should answer:

- What energy source did you choose? Why did you pick it?
- Are you **in favor of** building this power plant or **opposed to** it? Why?
- If you're **in favor of** building this power plant, what are three **benefits** that it could bring to Kent?
- If you're **opposed to** building this power plant, what are three **problems** that it could cause in Kent?
- What is an example of this energy source being used somewhere else in the world? If you're in favor of building this power plant, try to find a **positive** example; if you're **opposed**, try to find a negative example.

Regardless of the format of your creative task, please **include at least one picture** of an existing power plant that uses this energy source.

Here are some ideas for your Creative Task:

- record a short commercial or promotional video for YouTube or TikTok
- create a promotional poster or flyer on paper, in [JamBoard](#), Google Docs, Google Slides, or another drawing app
- create a [Google Site](#) with text and embedded pictures, graphs or videos
- make a slideshow or record a video – be sure to add pictures to give your presentation more meaning
- write a short story, poem or song in favor of or against your selected energy source