



Energy Resources

(Four weeks) *Nov. 30- Dec. 18.*
/ Apr. 30 – May 26

SEV3. Obtain, evaluate, and communicate information to evaluate types, availability, allocation, and sustainability of energy resources.

a. Analyze and interpret data to

communicate information on the origin and consumption of renewable forms of energy (wind, solar, geothermal, biofuel, and tidal) and non-renewable energy sources (fossil fuels and nuclear energy).

Learning Goals:

1. I can identify the sources of renewable and nonrenewable forms of energy.
2. I can differentiate between the origins of renewable and nonrenewable forms of energy.
3. I can use data to relate the rate of consumption to the origins of renewable forms of energy.
4. I can use data to relate the rate of consumption to the origins of nonrenewable forms of energy.
5. I can analyze and interpret data to explain the origin and consumption of renewable and nonrenewable forms of energy sources.

Activities:

Week 1: [Hydropower lesson](#)

Power to the Planet: Formative Assessment: **Dec. 3 / May 5**

https://docs.google.com/document/d/1wY38v_Co76cQHgnZGKA2buJfA1wnpZFXUeBWInqzFIE/edit

<https://classroom.google.com/c/MzcOMTA3MDgwNDBa>

Notes:

https://drive.google.com/drive/folders/17YB12I59_yzBLS2Sp74tJWtJkhO4mivd

Videos: “Brown before Green” Dirty Jobs Series

<https://drive.google.com/file/d/0B8oCU7HYaZJyY2JGRTV2QVluajA/view>

Video Report:

<https://docs.google.com/document/d/1ICPsoR56rtWhSJIF7Opw-AVsk7qxF2Uhlgs4f2LPKH0/edit>



Learning Goals:

b. Construct an argument based on data about the risks and benefits of renewable and nonrenewable energy sources.

1. I can explain the risks of the use of renewable and nonrenewable energy sources.
2. I can explain the benefits of the use of renewable and nonrenewable energy sources.
3. I can develop a claim about the risks and benefits of renewable and nonrenewable energy sources.
4. I can gather data to support a claim about the risks and benefits of renewable and nonrenewable energy sources.
5. I can construct an argument based on data about the risks and benefits of renewable and nonrenewable energy sources.

Activities:

Week 2: [Nat Geo Non Renewable Resources](#)

Assignments:

Kahoot Review:

<https://create.kahoot.it/share/environmental-unit-3-review/304bbe1f-f879-4cbb-914d-4a995838e39f>

Mini-project: **Formative Assessment Dec. 10 / May 13**

<https://docs.google.com/document/d/1x3HJGXAbvPADgQUQ2BNOwosZ3FyoySIINCELzZjGAQ4/edit>



Learning Goals:

c. Obtain, evaluate, and communicate data to predict the sustainability potential of renewable and non-renewable energy resources.

1. I can identify data models that represent the risks and benefits of renewable and nonrenewable energy sources.

2. I can identify data models represent the effect of renewable and nonrenewable energy sources on the environment.
3. I can explain the sustainability potential of renewable and nonrenewable energy resources.
4. I can gather data and identify trends associated with the use of renewable and nonrenewable energy sources.
5. I can obtain and evaluate data trends related to renewable and nonrenewable energy sources in order to make predictions about the sustainability potential of these energy sources.

Activities:

Notes:

<https://docs.google.com/presentation/d/1VnD7rhVLpkudXjctvu3YhuoRSC2eY4GqrOKxAUjwCss/edit#slide=id.p1>

[Renewable and Nonrenewable Resource Project](#)

Lazy Environmentalist: **Formative Assessment** Dec.16 / May 19

<https://docs.google.com/document/d/1JXM7uXYV4Bq6JABWUYfZq7UqTe5VpdcuOiv4R8mvjxo/edit>

Videos: <https://drive.google.com/drive/folders/1lwisN7pH3jOeLyXnJrZdkvJfbfCAI6WX>



Learning Goals:

d. Design and defend a sustainable energy plan based on scientific principles for your location.

1. I can identify the energy demands for my location.
2. I can identify scientific principles related to energy.
3. I can review energy plans and relate them to scientific principles.
4. I can evaluate energy plans to determine the strengths and weaknesses as it relates to sustainability.
5. I can design and defend a sustainable energy plan based on scientific principles for my location

Activities: Summative Assessment: Dec.16 / May 19 - 20

https://www.energystar.gov/ia/products/globalwarming/downloads/GoGreen_Activities%20508_compliance_small.pdf

https://parc.wustl.edu/files/parc/imce/student_engagement_in_energy.pdf

<https://sustainability.asu.edu/sustainableschools/learn-more/energy/>