

Mastery Opportunity – Energy Resources

Mastery assignments are optional, but are due ONLY on the day of the test.
Choose any two of the following four assignments.

Option 1:

1. What is the difference between renewable and nonrenewable resources?
2. Name the four stages of coal production.
3. How did petroleum & natural gas form?
4. What is the difference between nuclear fission and nuclear fusion?
5. What is the only naturally occurring element that can be used in nuclear fission?
6. Why would nuclear fusion be a good energy source if we could harness the energy?
7. Explain how energy is created from a coal-fired power plant? (many steps)
8. Now tell HOW is electricity created using EACH of these alternate sources?

- solar energy
- geothermal
- hydroelectric
- wind energy

Option 2:

1. List AND describe each of the four stages in the production of coal.
2. Create a table that analyzes that pros and cons of each type of coal mining that we discussed in class.
3. We discussed the use of petroleum as a fuel for cars. IF you choose to drive an electric car, how could that be considered just trading one fossil fuel source for another? What would have to happen to avoid this?



Option 3:

You are participating in a nuclear energy rally. Create a poster (8.5 X 11 size) that you would take to the rally to support your position.

- Determine which side of the argument you will take: Pro Nukes or No Nukes.
- Provide INFORMATION on your position
- Make sure that your “poster” is visually appealing – so that YOU will be the one pictured on the evening news.

Option 4:

Create a graphic organizer that covers renewable and nonrenewable energy sources. Be sure find a way to include descriptions/definitions and not just words. You will also need a picture/diagram to represent each source.

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