Name: Date: Class:

Alternative Energy Pros and Cons Worksheet – Geothermal Answer Key

| Type | of a | altern | ative | energy: |
|-------------|------|--------|-------|---------|
|-------------|------|--------|-------|---------|

Geothermal

Individual work:

Define alternative energy source:

Subterranean heat is used to turn water into steam. The steam turns a turbine which produces electricity.

What are the pros and cons of the energy source you focused on?

| Pros | Cons |
|---|--|
| Environmentally friendly, the carbon footprint is minimal | Environmental issues - when geothermal energy is used, some of the greenhouse gases that are below the surface escape. Small amounts of sulfur dioxide and toxic heavy metals are also released. |
| Renewable - the energy in the geothermal reservoirs will last billions of years | Surface instability - geothermal power plants have led to the sinking of the Earth's surface. Earthquakes can be triggered by hydraulic fracturing. |
| Stable - the power output is predictable, unlike solar and wind. | Expensive |
| | Location specific |
| | |
| | |

Highlight 2 pros and 2 cons that you think are most important to share with the rest of your group. When everyone has learned about the alternative energy source they are focusing on, share what you have identified as most important with your group. Take notes in the table below so that you can share this information with your poster group.

Answers will vary based on student presentations.





| | Date: | Class: |
|----------------|-------|--------|
| Group sharing: | | |
| Type of energy | Pros | Cons |
| Solar | | |
| Wind | | |
| Geothermal | | |
| Hydropower | | |
| Nuclear | | |
| Biomass | | |
| Nuclear | | |

Based on what you heard from these presentations, which type of energy do you recommend be used in getting electricity to your building?

| Answers will vary. |
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|--------------------|

What is the evidence and reasoning behind this recommendation?

Answers will vary.

