

Date _____

Name _____

PEANUT MINING QUESTIONS

1. In your own words, define a nonrenewable resource.
2. How were the peanuts like a nonrenewable resource?
3. In your own words, explain what an ore is.
4. How could the peanuts in the activity be compared to an ore?
5. What part did the peanut shells represent in the mining process?
6. What are some things a mining company must consider when mining an ore?
7. What are some of the ways that we used energy in our mining activity?
8. In your opinion was our ore "profitable" considering the energy used to produce the product? Why?
9. What are some ways that we can work to slow down the use of our nonrenewable resources?
10. What would be a sound ecological method of disposing of the peanut shells after the activity is over?

PEANUT MINING ANSWER KEY

1. A natural resource that is available only in limited amounts and cannot be replaced.
2. There were only a limited number of peanuts to be mined.
3. A mineral containing a useful substance, such as a metal that can be mined for a profit.
4. The peanut kernel inside of the shell represents the useful substance mined from a mineral.
5. The shells represent the waste products produced from mining activity that have to be disposed of.
6. The mining company must consider whether or not the metal can be sold for a profit that will be more than the cost of mining the metal.
7. We had to hunt the peanuts, shell the peanuts, use electricity for the food processor to make the peanut butter, and use energy to dispose of the shells.
8. Answers will vary.
9. Recycling, using less water and electricity. Other answers may be given.
10. Composting.

Mining For Peanuts Activity

Name: _____

Teacher: _____

Date : _____

Title of Work: _____

| | Criteria | | | | Points |
|---|---|--|--|---|--------|
| | 1 | 2 | 3 | 4 | |
| Student will be able to define the term non-renewable resource and explain how our peanuts were a nonrenewable resource. | No Understanding or Knowledge . The response is characterized by the following: no response, completely incorrect response, or response conveys no understanding of the term as it relates to the lab activity. | Minimal Knowledge or Understanding. The response shows that the student has some inkling or understanding of the term. | Partial Knowledge and Understanding. This response is good but not necessarily complete. It is characterized by one or both of the following: partially correct answer, or response conveys some but not complete understanding of concept needed to answer the question. | Full Knowledge and Understanding. The response is characterized by at least one of the following: Completely correct answer, or response conveys full understanding of the concept needed to answer the question. | _____ |
| Students will define the term ore, and describe how it relates to the lab activity. | No Understanding or Knowledge. This response is characterized by one or more of the following: no response, a completely incorrect response, or response conveys no understanding of the concept needed to answer the question. | Minimal Knowledge and Understanding The response shows that the student has some inkling of knowledge or understanding of the concept. | Partial Knowledge and Understanding The response is pretty good but isn't necessarily complete. The response is characterized by one or both of the following: partially correct answer, or the response conveys some but not complete understanding of concept needed to answer the question. | Full Knowledge and Understanding This response is characterized by one or more of the following: completely correct answer, response conveys full understanding of the term as it relates to the topic. Response conveys full understanding of the concept needed to answer the question. | _____ |
| Students will explain what the peanut shells | No Knowledge or Understanding The response is | Minimal Knowledge The response show that the student has | Partial Knowledge and Understanding This response is | Full Knowledge and Understanding This response is | _____ |

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|--|---|--|--|---|----------|
| <p>represent in the mining process and what considerations must be made when mining an ore.</p> | <p>characterized by one or more of the following: No response Completely incorrect response The response conveys no understanding of the idea or concept needed to answer the question.</p> | <p>some inkling of the knowledge or understanding of the term.</p> | <p>pretty good but isn't necessarily complete. The response is characterized by one or both of the following: partially correct answer, or Response conveys some but not complete understanding of the concept needed to answer the question.</p> | <p>characterized by one or more of the following: Completely correct answer Response conveys full understanding of the term as it relates to the topic. Response conveys full understanding of the idea or concept needed to answer the question.</p> | |
| <p>Students can give examples of ways that energy was used during the mining process and give an opinion as to whether our ore was profitable in relation to the energy we expended to get the final product.</p> | <p>No Knowledge or Understanding The response is characterized by one or more of the following: No response A completely incorrect response Response conveys no understanding of the concept needed to answer the question.</p> | <p>Minimal Knowledge and Understanding This response shows that the student has some inkling of knowledge or understanding of the concept.</p> | <p>Partial Knowledge and Understanding This response is pretty good, but is not necessarily complete. The response is characterized by one or both of the following: partially correct answer, or response conveys some but not complete understanding of the concept needed to answer the question.</p> | <p>Full knowledge and Understanding This response is characterized by one or more of the following: Completely correct answer. Response conveys full understanding of the concept needed to answer the question.</p> | <p>—</p> |
| | | | | | <p>—</p> |
| | | | | <p>Total----></p> | <p>—</p> |

Teacher Comments: