

Minequest Task List: Lake Bottom Treasure

Big Question: How will an industry anchored in an ancient lake bed meet the challenge of new technologies?

Task #1: Take five minutes to write down what you know about trona also known as soda ash.

Task #2: You will become an expert regarding the Trona Industry by touring websites listed below, finding the answers to the questions listed under the topics below, and recording your answers on the student answer sheet. Be sure to obtain a Student Answer Sheet from your teacher before you begin your quest for answers or print one from this link now.

Task #3: Find the sheet of paper on which you recorded what you knew about trona before you began this Minequest. Take another five minutes and write down what you know now.

Task #4: Further investigate how trona is processed into soda ash. Design a flow chart or a graphic to share this information with your class.

Task #5: Find out how trona was deposited in southwest Wyoming millions of years ago. Design a graphic organizer and present this information to your class.

Task #6: Return to your notes and the websites you've visited in this Minequest to explore trona connections in the rest of the world. Where in the world are there other deposits of trona? Is there competition for this mineral resource? How has the competition changed the price of soda ash? Draw a map to graphically illustrate your understanding of competition in the trona industry.

Task #7: With two other students, develop a concise explanation of (1) how the soda ash industry plays a significant role in local, national, and global economies, (2) how it provides a link between the natural resources of southwest Wyoming and the rest of the world, and (3) how trona makes modern life more enjoyable and convenient. You will be asked to share one of these answers with the rest of the class.

Task #5: Imagine that an especially creative inventor develops a piece of technology for mining and processing trona into soda ash that does not use any human labor. By purchasing and installing this piece of technology, the trona plants in southwestern Wyoming will become entirely automated. You are the manager of one of the plants and understand that you play an essential role in the economic health of your community. How will you manage this situation for the good of both your industry and your community? You will generate solutions and then rate your solutions using the problem solving matrix.

Task #8: From the matrix above, select any two separate scores. Identify the scores you choose by the cell they are in such as Solution 3, Criterion 5. Explain what you were thinking when you gave these two ratings.

Task #9: Explain how the highest rated solution assures that the majority of individuals or groups involved are affected in a positive manner or a neutral manner. Explain how the consequences for some parties might be negative yet necessary. Can you modify the solution so that the consequences to most parties are equitable in that each party will realize some positive consequences and some consequences that are negative?

Task #10: Visit the Minequest Lobby and find the Lake Bottom Treasure conversations. Add your comment.