How to Analyze a Document: Newspaper Article

Josiah Sweers and Adam Hietbrink

**Background Information:** This is a newspaper article for our case study about sustainable farming. The students will need to know about soil quality, the carbon cycle, global warming, and land management practices.

**Document Description:** This is a fake newspaper article for the New York Times that describes the benefits of biochar. The students should understand that biochar is an effective way to improve soil quality for better crop yields, but they will analyze the price per ton of biochar and realize it is too expensive to be a realistic option.

**Inferring:** Students will need to infer that the benefits of biochar listed in this paragraph are beneficial for the soil and organic matter.

**Biochar: The Cure to World Hunger?**

*Staff Reporter: Ronnie Russ*

Biochar is a very porous medium that can be seen as a hotel for microorganisms. The compost provides the food that the microbes need to reproduce, leading to increased microbial diversity and populations. In addition, biochar has a high negative charge and as a result will hold on to positively charged nutrients, conserving nutrients. Biochar also has a high water holding capacity and thus reduces irrigation needs.

In addition, since biochar lasts for thousands of years in the soil, carbon that plants have fixed from the atmosphere is now removed from the carbon cycle and is banked in the soil. This process is called carbon sequestration. Carbon sequestration is an effective tool in reversing global warming.

Unfortunately to use biochar effectively at least 2 tons needs to be incorporated per acre of soil.

**Sonoma Biochar**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Cubic foot bag</td>
<td>$17.50</td>
</tr>
<tr>
<td>1 Cubic ton</td>
<td>$1200.00</td>
</tr>
</tbody>
</table>

**Financial Literacy:** Students will analyze information in the chart and calculate the cost of treating 100 acres of soil with biochar.

**Evaluating Evidence:** Students will evaluate the picture in the article and determine the validity of the alleged results.

**Developing Perspective:** Students will critically read the document and form an opinion or personal perspective about the benefits of biochar and the feasibility of its application.