

Case Study - Mining's Impact

Go to <https://earth.org/environmental-problems-caused-by-mining/> to answer the following questions on your own paper.

Introduction

1. A lithium ion battery pack for an electric vehicle typically weighs from 350-500 Kg. According to the article, how much lithium, cobalt, cadmium and manganese are used in an average battery?
(Keep in mind 1 Kg= 2.2 pounds)

Water Use in Mining

2. List some ways that water is used in mining processes?
3. Is all of this water recyclable or reusable?
4. Why is using saline water for mining better than other types of water?

Mining Pollution

5. The article lists three polluting chemicals that are useful in mining, and are often recycled. What are these three chemicals?
6. What are some negative issues with smaller, illegal "artisanal mines?"

How Does Mining Impact the Land?

7. Why might mines in Gabon more damaging than those in Australia?
8. What is "phytomining?"

Greenhouse Gas Emissions from Mining

9. Compare the amount of CO₂ produced in mining 1 Kg of diamond to mining 1 Kg of iron.
10. Copy the diagram that illustrates the mining production life cycle.

Looking Ahead

11. Why is it important to be informed about the environmental impacts of mining?