

Uranium Ore: Benefits and Impacts-Teacher Answer Key

1. Identify or hypothesize the societal, economic and environmental benefits and impacts of uranium uses, mining and milling in the 1940s to 1970s.

	Benefits	Impacts
Societal	People may have felt proud to support the Cold War and reduce our dependence on foreign oil and uranium supplies.	People didn't understand or were not fully told about the hazards or risks.
Economic	For tribal communities, the mines provided economic advantages including jobs at the mines and mills, development of new roads and airstrips, and money spent by non-tribal workers for food, lodging and other services.	Some miners began getting sick and dying. That likely placed economic burdens on the family. The Radiation Exposure Compensation Act (RECA) was passed to compensate families.
Environmental	Some may have believed and promoted the message that nuclear power is clean energy with little impact on the environment.	Tribal lands were disrupted by mining. Some mines were abandoned (and sometimes not restored to their original state). Water supplies were contaminated.

2. How has your community benefited from or been impacted by uranium mining or abandoned uranium mines?

Answers may vary.

3. What activities or regulations have been put in place to address the impacts of uranium mining on Native Americans and Alaska Natives?

The Uranium Mill Tailings Radiation Control Act (UMTRCA) required the cleanup of abandoned mill tailings, but not mines. RECA pays victims of the Cold War nuclear program. Controls and radiation protection standards have been put in place to protect uranium miners. The Navajo Nation has banned uranium mining and exploration on its lands. Congress authorized a comprehensive 5-year plan to coordinate the cleanup of contaminated structures, soil and water in the Navajo Nation.

4. In 2012, six underground mines and five in-situ leaching operations were in operation within the U.S. As of 2014, five in-situ leaching sites were in operations and two conventional mills were in standby (not in operation). Should the mining and milling of uranium continue in the U.S.? Explain your answer.

Answers may vary.