Uranium Mining Methods: Teacher Answer Key

Mining Method	Benefits	Impacts
Underground mining	• **Provides jobs** • **Brings money to the local economy and may lead to improved local facilities and services** • **Permits mining operations to be largely out of sight** • **Allows for production in all kinds of weather conditions**	• **Produces safety and health hazards if unauthorized persons enter mines or fall in openings** • **Presents numerous safety and health risks for workers working underground** • **Releases radon and radioactive dust into the environment** • **Produces contaminated soil, water and tailings that can impact the surrounding soil, air and water if not managed properly**
Open-pit mining	• **Provides jobs** • **Brings money to the local economy and may lead to improved local facilities and services** • **Allows for high production of uranium that brings money to the company**	• **Produces safety and health hazards if unauthorized persons enter or fall in pits** • **Releases radon into the environment** • **Produces tailings/radioactive waste that can contaminate the soil, air and water**
In-situ leaching	• **Provides jobs** • **Brings money to the local economy and may lead to improved local facilities and services** • **Reduces risk of employee accidents and exposure to radiation** • **Costs less than other mining methods** • **Eliminates the concerns of open pits, radioactive dust and uranium mill tailings**	• **Risk of spills, leaks and contamination of groundwater and potential drinking water** • **Releases radon into the environment** • **Produces waste slurries and waste water that could contaminate the environment if not managed properly** • **Leaching chemicals may impact or contaminate groundwater, soil and rocks** • **Only feasible in deposits that are saturated and have high permeability**