

Name _____

The Cool and Secure World of the Svalbard Global Seed Vault

Open-Ended Response Answer Key

1. Preserving plant diversity is essential because it provides a genetic pool that can be tapped into to develop new crop varieties that are resistant to diseases, pests, and changing environmental conditions. The Svalbard Global Seed Vault contributes to this goal by serving as a secure repository for a wide variety of plant seeds from around the world, ensuring their preservation for future generations.
2. In a scenario where a global plant disease threatens a crucial crop, scientists could turn to the vault to access seeds of alternative varieties that may be resistant to the disease. By using these seeds, they can develop and grow new crops that are less susceptible to the disease, helping to overcome the crisis and secure our food supply.
3. The Svalbard Global Seed Vault is located on a remote Norwegian island called Svalbard, which is situated in the Arctic Ocean. Its remote location ensures physical isolation from most human activity, and the cold Arctic climate naturally helps maintain the low temperatures required for seed storage, making it an ideal location for long-term preservation.
4. The Svalbard Global Seed Vault symbolizes international cooperation because it is a collaborative effort among countries worldwide. By sending seeds to the vault and collectively protecting plant genetic resources, nations demonstrate their shared responsibility in safeguarding the future of agriculture and ensuring global food security.

