

Curriculum Unit

Seeds and The Next Generation

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KEY LEARNING, ENDURING UNDERSTANDING, ETC.

Incorporating Indigenous wisdom into interactions with the local environment helps students recognize their role in the environment, and the responsibility to become better caretakers. Examining local phenomena and utilizing science and engineering practices to observe and question, deepens understanding.

ESSENTIAL QUESTION(S) for the UNIT

How do Indigenous practices support scientific study and understanding of conservation practices for local plant and seed populations?
What indigenous skills can we apply to recognizing and understanding local phenomena?

CONCEPT A

Seed Evolution and Traits

CONCEPT B

Evolution of Indigenous Practices

CONCEPT C

Seed Conservation

ESSENTIAL QUESTIONS A

What traits did plants and seeds develop to become so successful and diverse?

ESSENTIAL QUESTIONS B

What practices and beliefs were developed by Indigenous people that benefitted themselves and the environment?

ESSENTIAL QUESTIONS C

What Indigenous skills can we use to observe and conserve seeds native to our region?

VOCABULARY A

Gymnosperm	Paleobotany	Pollinator
Angiosperm	Germination	Native
Endosperm	Scarification	Seed Coat
Monocot	Dormant	Cotyledon
Dicot	Dispersal	Fossil Record

VOCABULARY B

Indigenous	Decimation
Migrate	Extinction
Paleoindian	Permian
Megafauna	Co-evolution
Colonization	Ceremonial

VOCABULARY C

Companion Planting	Ethnobotany
Seed Retrieval	Seed Bank
Seed Storage	
Cold Stratification	
Reference Charts	

ADDITIONAL INFORMATION/MATERIAL/TEXT/FILM/RESOURCES

Online Native Seed Catalogs	Video presentations from Indigenous people	Good camera or phone for videotaping and still shots of seed experiments and gardening, plus an Osmo (gimble) for providing stability for filming.
Native seeds	Seed identification guides	
Hand lenses	Guest speakers or presentations from local plant experts	
Virtual Gallery for student work	Seed Database	