



The Journey Of A Seed / Exploring Seeds Curriculum Connections

Suggested Grades: K, 1, 2, 3, 4, 5, 6

Curriculum Connections: Matter (K-3), Energy (Gr 2), Earth Systems (K-5), Living Systems (Gr 1, 2, 3, 6), Computer Science (K-1), Scientific Methods (Gr 1, 2, 4, 5, 6)

Specific Learning Outcomes:

Kindergarten

- *Matter* - Children examine properties of objects
- *Earth Systems* - Children examine and describe surrounding environments.
- *Computer Science* - Children interpret instructions in various environments.

Grade 1

- *Matter* - Students analyze properties of objects and investigate how they can be changed.
- *Earth Systems* - Students analyze environments and investigate interactions and changes.
- *Living Systems* - Students investigate and examine needs of plants and animals.
- *Scientific Methods* - Students engage in and describe investigation (carry out an investigation, data collection).
- *Computer Science* - Students follow instructions and relate them to outcomes.

Grade 2

- *Matter* - Students investigate properties of materials and relate them to a purpose.
- *Energy* - Students investigate the behaviors of light and sound (sunlight).
- *Earth Systems* - Students investigate Earth, its landforms, its bodies of water, and its relationship to the sun.
- *Living Systems* - Students investigate the growth and development of plants and animals and consider their relationship to humans.
- *Scientific Methods* - Students examine investigation and explain how it is influenced by purpose (methods and processes used in investigation, data collection).

Grade 3

- *Matter* - Students investigate and analyze how materials have the potential to be changed (changes of state - seeds freezing and thawing can impact germination, water cycle as it relates to plant growth, respecting water in local environments, germination as a permanent change).



- *Earth Systems* - Students analyze changes in Earth's surface and explain how its layers hold stories of the past (human activities which change Earth's surface, plant and animal activities which change earth's surface, composition of soil).
- *Living Systems* - Students analyze and describe how plants and animals interact with each other and within environments (plant response to sensory stimuli, protecting plants and animals by respectfully interacting with nature / minimizing disturbances).
- *Scientific Methods* - Students relate investigation to building knowledge (data can be used to analyze).

Grade 4

- *Earth Systems* - Students investigate the systems of Earth and reflect on how their interconnections sustain life (conservation can be practiced through personal actions - connect to growing plants/gardening, revegetation in land reclamation).
- *Scientific Methods* - Students investigate evidence and reflect on its role in science (data can be qualitative or quantitative; data can be represented in tables and graphs)

Grade 5

- *Earth Systems* - Students analyze climate and connect it to weather conditions and agricultural practices (conservation agriculture - connect to importance of plants for revegetation in land reclamation).
- *Scientific Methods* - Students investigate how evidence is gathered and explain the importance of ethics in science (variables).

Grade 6

- *Living Systems* - Students investigate the characteristics and components of and interactions within ecosystems (role of plants, biotic components of ecosystem).
- *Scientific Methods* - Students investigate and describe the role of explanation in science (hypotheses, graphs, tables).