



Growing Up Organic operates on traditional and unceded territory of the Algonquins: now known to many as Ottawa, and now home to many from across Turtle Island and beyond.

Grades 6-7-8

Seed Saving Workshop

Mindfulness minute: If it speaks to you, take two minutes with your students before this workshop to slow down and root down with this mindfulness minute.

LESSON FOCUS AND GOALS

Students will understand what information a seed package has on it and in what order.
Students will design a school seed package.

LEARNING OBJECTIVES

Grade 6

Science and Technology: Understanding Life Systems

OVERALL EXPECTATIONS:

- 1 - Assess human impacts on biodiversity, and identify ways of preserving biodiversity;
- 3 - Demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans.

SPECIFIC EXPECTATIONS:

- 1.1 - Analyze a local issue related to biodiversity taking different points of view into consideration, propose actions that can be taken to preserve biodiversity, and act on the proposal
- 1.2 - Assess the benefits that human societies derive from biodiversity and the problems that occur when biodiversity is diminished
- 3.2 - Demonstrate an understanding of biodiversity as the variety of life on earth, including variety within each species of plant and animal, among species of plants and animals in communities, and among communities and the physical landscapes that support them
- 3.3 - Describe ways in which biodiversity within species is important for maintaining the resilience of those species and communities
- 3.4 - Describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities

Language: Media Literacy

SPECIFIC EXPECTATIONS:

- 1.1 - Explain how a variety of media texts address their intended purpose and audience
- 2.2 - Identify the conventions and techniques used in a variety of media forms and explain how they help convey meaning and influence or engage the audience
- 3.4 - Produce a variety of media texts for specific purposes and audiences, using appropriate forms, conventions, and techniques



Arts: Visual Arts- Creating and Presenting

OVERALL EXPECTATIONS:

D1 -Apply the creative process to produce a variety of two- and three-dimensional art works, using elements, principles, and techniques of visual arts to communicate feelings, ideas, and understandings, using elements, principles, and techniques of visual arts as well as current media technologies;

Grade 7

Science and Technology: Understanding Life Systems

OVERALL EXPECTATIONS:

1 - Assess the impacts of human activities and technologies on the environment, and evaluate ways of controlling these impacts;
2 - Investigate interactions within the environment, and identify factors that affect the balance between different components of an ecosystem;

Geography: Physical Patterns in a Changing World

SPECIFIC EXPECTATIONS:

A3.10 - Describe some key natural processes and human activities (e.g., natural and human influenced climate change, erosion of top soil, deforestation, the use of chemical fertilizers and practice of monoculture, grazing of domestic animals, activities that introduce invasive species into an environment) that create and change natural vegetation patterns.

Mathematics: Number Sense

OVERALL EXPECTATIONS:

B1 - Demonstrate an understanding of numbers and make connections to the way numbers are used in everyday life

Grade 8

Science and Technology: Understanding Life Systems

SPECIFIC EXPECTATIONS:

1.2 - Assess the potential that our understanding of cells and cell processes has for both beneficial and harmful effects on human health and the environment, taking different perspectives into account (e.g., the perspectives of farmers, pesticide manufacturers, etc.)

• Sample issues: (b) Scientists can develop pest-resistant crops that reduce the need for chemical pesticides. But there are some concerns that these crops may cross-breed with native plants and disrupt natural populations and balances.

Geography: Global Settlement

SPECIFIC EXPECTATIONS:

A3.6 - Describe some practices that individuals and communities have adopted to help make human settlements more sustainable



MATERIALS NEEDED

Plants gone to seed in the garden (lettuce, beans, basil, pumpkin)

Various commercial seed packets

Bowl of clean cold water

Colouring pencils

Enveloppes

Biodiversity Powerpoint

STRUCTURE / ACTIVITY

Part 1: Why Save Seed

- Can anyone define what we mean when we say heirloom? Does anyone have heirlooms in their own family?
- Like important family heirlooms, heirloom seed varieties are passed down from generation to generation, preserving biodiversity along the way. While we often rely on only a few varieties of vegetable species, hundreds more exist. Unfortunately, we are losing this biodiversity at a rapid rate.
- How many kinds of squash can we think of? (Make a list).
- View the "Biodiversity Slide Presentation" – can you identify these vegetables?

Why should we save seed?

Station 1: Seed Collecting

Harvest seeds in the garden!

Station 2: Packet Making

Have some commercial seed packets available as examples. Which ones are the most attractive? What kinds of information do they provide? Make a list with the students of the information they need to include on their own packets. What else would be appropriate to include (plant histories or a company logo, for instance)?

Try to identify on the packets provided:

Brand Name

Picture (photo or illustration)

Price

Package Weight

Name of Plant

Annual, biennial or perennial

When to plant

Number of days until the seeds germinate

Number of days until harvest

Spacing needs

Variety

Tips or suggestions (where to use in garden, cooking uses)

Remember, at the store there will be many seed companies selling their seeds as well, so be creative and think about what someone would look for and why someone would choose to buy your seed packet. Using envelopes and colouring pencils, have each student create their own seed packet for the seeds they will collect.