



## Grade 3 Project Overview

Ontario Farming STEMterprise applies STEM skills to meet cross-curricular challenges as students develop a healthy new granola bar for Ontario students, understand where their ingredients come from, and set up a business to test, market, and showcase their product.

The program is designed with flexibility in mind. All teaching resources are editable and lessons can be rearranged to suit learning needs.

### Stage 1:

#### Entrepreneurship Challenge

Students will learn about entrepreneurship to help them meet the challenge of creating a new granola bar business.

**Lessons:**

- Lesson 1 - The Challenge (*Core Lesson*)

**Teaching Resources Include:**

- STEMterprise Pledge

### Stage 2:

#### Starting a Business

Students will learn the basics of setting up a business.

They will examine the competition, define their target customer, determine a business name and slogan, and design a logo.

**Lessons:**

- Lesson 1: Analyzing the Competition
- Lesson 2: Customer, Business Name and Logo (*Core Lesson*)

**Teaching Resources Include:**

- Taste Tally sheet, Marketing Strategy sheet, Business Name and Logo sheet

**TIP!** The taste-testing experience provides real-life practice of organizing data. If food in the classroom is a barrier, teachers are having success with alternate approaches. These are discussed in the resources.

### Stage 3:

#### Becoming a Plant Expert

In this stage, students discuss where food comes from and learn about plants and their characteristics and needs as they begin to think about their granola product.

**Lessons:**

- Lesson 1: Where Does our Food Come From?
- Lesson 2: Parts of a Plant
- Lesson 3: What a Plant Needs to Grow
- Lessons 4: Planting Your Seeds (*Core Lesson*)

**Teaching Resources Include:**

- Amazing Plant Facts sheet, My Research Notes, Parts of the Plant diagram

### Stage 4:

#### Soil in the Environment

Students will learn how important soil is and why it needs to be healthy. They will explore human impact on soil and farmers' role in soil health and the technology they use to mitigate environmental harm.

**Lessons:**

- Lesson 1: What is Soil?
- Lesson 2: Soil Types in Ontario (and Regions)
- Lesson 3: Compaction and Erosion
- Lesson 4: Soil Nutrients
- Lesson 5: STEM and Technology on Farms
- Lesson 6: Designing an Innovative Farm Machine

**Teaching Resources Include:**

- Types of Soil in Ontario, Story of Your Food sheet, Farm Machine Notes

### Stage 5:

#### Recipe Design and Market Research

Students will learn about the role of grains in a healthy diet, apply what they learn to designing and marketing a granola bar, and write their recipe. Making the bars is an optional activity.

**Lessons:**

- Lesson 1: Grains in our Diet
- Lesson 2: Market Research (*Core Lesson*)
- Lesson 3: Designing a Healthy Recipe (*Core Lesson*)

**Teaching Resources Include:**

- Flavour Profile Market Research worksheet, sample letter to families, Recipe Planner.

### Stage 6:

#### Market Your Product

Students will learn how to market their product. They will consider their audience, design promotional materials, create advertisements and packaging.

**Lessons:**

- Lesson 1: Decide on a Selling Price (*Core Lesson*)
- Lesson 2: Media and Audience
- Lesson 3: Promote Your Product (*Core Lesson*)
- Lesson 4: Packaging

**Teaching Resources Include:**

- Cost of Ingredients and Profit template, Audience worksheet, Designing Your Flyer or Poster worksheet, TV or Radio Advertisement worksheet.

### Stage 7:

#### Business Showcase

In this final stage of STEMterprise, students will have the opportunity to showcase their business. There are several ways to do this, whether your students baked granola bars or not.

**Lessons:**

- Approach 1: Bakesale (with play money)
- Approach 2: Dragons' Den/STEM Den
- Approach 3: Business Showcase (with voting system)

**Teaching Resources Include:**

- Awards, Business Showcase invitation, Dragons Den script, Progress Checklist, Voting Card, Voting Instructions, Business Team Decision checklist