



STAGE 3

MARKET RESEARCH AND BUSINESS PLAN

Students will gather and analyze data about customers' pizza preferences. They will learn how to market their product and create promotional materials and responsible packaging.

Lesson 4 • Packaging

Overview

In this lesson, students will explore the role of packaging in branding, marketing, and environmental sustainability. Students will examine how packaging has changed over time and collaboratively design packaging ideas for their pizza business that balance promotion, function, and environmental impact.

Learning Goals

Students will learn:

- How and why packaging has changed over time.
 - To consider the environmental impacts of packaging.
 - About packaging for our pizza company so we can decide on packaging that both promotes our brand and considers environmental impacts.
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Materials Needed

- [Stage 3 Lesson 4 Teaching Slides](#)
 - [Student Resource Packet](#) (all lessons, printable)
 - [STEMterprise Deliverables Tracker](#)
 - Video: [Packaging History](#), [The Evolution of Packaging Material](#), [Make a Pizza Box](#)
 - [Pizza Shop Business Planning Booklet](#)
 - [Eco-Friendly Food Wrap](#)
 - [Design a pizza box](#) (optional)
 - AgScape [Food Photographer](#) and [Food Stylist](#)
 - [Square and triangular pizza box nets](#) (optional)
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Teachers' Notes

This lesson asks students to think about the importance of packaging in branding and marketing as well as the environmental impact of packaging. They will explore how and why packaging has changed over the years. Students will work collaboratively to create packaging options for their pizza business that take both branding and environmental impact into account. Students will use the *Package Planning* (page 11) in their [Pizza Shop Business Booklet](#).

Check out this [Make a Pizza Box](#) video as a great example you can use to help students create their own box.

The following link provides examples of [square and triangular pizza box nets](#). Net templates suitable for pizza boxes might also be found in your math program.



Idea! *Contact your local pizzeria and ask if they can supply free boxes for your students to create their designs.*

Time Frame: 60 min

Completion time will depend on the length of package designing. An optional Promotion and Packaging [Career Connections Slides](#) on the last slide.

Career Connection

There is an optional Career Connection at the end of this and all lesson slides and the [Career Connections Slides](#) can be found at this link.

Curriculum Expectations

The Arts - Strand D Visual Arts

D1 apply the creative process to produce two-and three-dimensional art works to communicate feelings, ideas, understanding

D2 apply critical analysis to communicate responsive feelings, ideas, understandings

Science Properties of and Changes in Matter

C1.1 assess the impacts on society and the environment of various processes used in the manufacture of common products

C1.2 assess how the use of specific materials in the manufacture of common products affects the environment, and identify actions that society and individuals can take to mitigate negative impacts

Transferable Skills:

- 3-dimensional thinking
- Critical thinking
- Problem solving
- Collaboration

Agriculture/Agri-Food Themes:

- Understand the role of the presentation of a product in the context of its reception by consumers
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STEMterprise References for Educators

STEMterprise Webpage: <https://goodineverygrain.ca/ontario-farming-stemterprise/>

Video Links

- [Ontario Farming STEMterprise: Grade 5 Pizza Shop Business](#)
- [Students: Are you ready for your own pizza business?](#)

STEMterprise Teacher Support Resources

- [Ontario Farming Grade 5 Educator Information Packet](#)

- [STEMterprise Grade 5 Assessment Planning](#)
- [Project Overview](#)
- [Combined Grade Activities](#)
- [Career Connections Slides](#)
- [Coding Connections Slides](#)
- [Good in Every Classroom Education Blog](#)
- [Good in Every Classroom Newsletter Sign-Up](#)

Stage 3 | Lesson 4: Packaging

Slide 5: Business Connection	This Business Connection slide is intended to get kids thinking about the learning ahead as it specifically relates to their pizza business. Encourage the students to make early connections about the learning goals and the connection to their business. These simple signposts give students a sense of where they are on their learning journey. You can note the number of stages and which lesson you're on in that particular stage.
Slide 6: Minds On!	Watch the Packaging History video beginning at 1:22. Ask students to share how packaging has changed over time. Children will be very familiar with modern packaging materials. They may be less familiar with paper, glass, and tin packaging. Here is a shorter, alternate video option: The Evolution of Packaging Material.
Slide 7: Packaging	<i>Image Source: CBC article - Supermarkets are being asked to cut plastic waste.</i>
Slide 8: Data (Activity)	Plastic is an excellent packaging material because it easily meets all these purposes while being cheap, plentiful, and it doesn't weigh much. <i>Image Source: CBC article - Supermarkets are being asked to cut plastic waste.</i>
Slide 9: Decisions from Data Analysis (Activity)	Use the slide to lead a discussion about the environmental effects of non-recyclable plastic packaging. Ask students: if plastic is such a problem for the environment, why do we use it? - In business groups, ask the children to brainstorm how they could package their product without using plastic (paper plates, boxes, paper bags, etc.)
Slide 10: What are other options?	Here are some advantages and disadvantages of some common packaging materials. (Customizable refers to how easily a package can be branded.) Here are some advantages and disadvantages of some common packaging materials. (Customizable refers to how easily a package can be branded.) ● Glass packaging is reusable, recyclable, and easy to label or

	customize, but it can be heavy, fragile, and expensive. ● Plastic packaging is lightweight, inexpensive, and available in many shapes and sizes; however, not all plastics are recyclable and plastic waste can have environmental impacts. ● Aluminum cans are lightweight and recyclable, but they require natural resources and may be more expensive. ● Tetra Pak packaging (a multi-layered, recyclable carton solution used primarily for liquid and shelf-stable foods like milk, juice, and soup) is lightweight, durable, and customizable, though recycling options may vary by community. ● Cardboard is inexpensive, lightweight, customizable, and recyclable, but it is less durable and may not be recyclable after food use. ● Multi-layer packaging, such as chip bags, is lightweight and inexpensive, but is often difficult to recycle because it is made from mixed materials.
Slide 11: Did you know?	This is an article from Good in Every Grain that talks about soybean sourced packaging. Eco-Friendly Food Wrap
Slide 12: Design your packaging (Activity)	NOTE: Optional pizza box net samples have been added in the grey space on the left side of the slide for students who wish to create a box. The following link provides examples of square and triangular pizza box nets. Additional net templates suitable for pizza boxes may also be available in your math program resources. Here is a simple DIY pizza box prototype video for reference: Design a pizza box Use the <i>Package Planning (page 11)</i> from student's Pizza Shop Business Booklet with these questions noted: ● What material will you use? Why? ● How will you make the product stand out from others on the shelf? ● How will you highlight the healthy grains in your product? ● Did you include your name and logo? Teachers can have students actually create their package prototypes with reusable materials, use a technology program, or have them draw the packaging. If you wish to provide more time, you may want to assess the packaging as a visual arts project.
Slide 13: Wrap Up	Discuss: What can you do in your daily life to reduce packaging that may be harmful to the environment?

Slide 14: What's Next?	The “What’s Next?” slide is intended to be flexible and may be customized or filled in by teachers based on their classroom needs, pacing, and next steps.
Slide 16: Career Connection	These two careers could be featured at any time during Lessons 3 and 4 in Stage 3. Go to the AgScape Food Photographer and Food Stylist link for the Career Connection.