

Name:	
Date:	
Class/Section:	

Performance Task Description:

Innovation and **entrepreneurship** are essential to develop new ideas and grow the economy. The **engineering design process** is one method used by **inventors** to document their ideas. A **business plan** is one method to take successful ideas to potential funders and seek financial support to launch a new company. In this performance task you will use skills in **innovation** and **entrepreneurship** to develop products and services using the **engineering design process**. You will work to develop a company, a food truck concept and its menu, and a **prototype**. You will create and present your **business plan** to launch your food truck company.

Goals:

- research careers in culinary and hospitality service and management, including food trucks and the impact of alternative services models;
- conduct **market research** and develop products that meet the stated needs of clients, including the development of a food truck concept and food truck menu;
- develop and use a **project schedule**;
- develop a food truck **prototype**;
- create a **business plan** to take a defined product to market, including the development of financial capital to launch the food truck concept;
- present your **business plan** and product concepts to a group of stakeholders;
- use the **project evaluation** template to reflect on the effectiveness of the implementation of your project schedule.

Essential Questions:

- What habits and actions are taken by **innovative** thinkers to develop solutions to real-world problems?
- How can I develop and incorporate **innovative** qualities to help drive my personal and career goals?
- What are common characteristics of **entrepreneurs** and how have these characteristics helped to create **innovation**?
- How can I apply **creativity** to solve problems?
- How can processes such as the **engineering design process** help me develop **innovative** solutions to real-world problems?
- How can I use **the engineering design process** to effectively solve real-world problems?

Directions:

Step 1: Research the Culinary and Hospitality Industries

- Research culinary and hospitality companies and careers in Louisiana and/or your local community.
- Record company profiles; include the name of the company, specific products, and target audience.
- Record occupations and details such as training required, job outlook, potential entry salary, and growth options for the profession.
- Present occupational research and discuss potential career pathways that are available for students who are interested in pursuing a career in the culinary or hospitality field.

Directions:

Step 2: Develop the Food Truck Concept, Menu, and Prototype

- Determine your responsibilities for developing the food truck concept, menu, and **prototype**.
- Use the **engineering design process** to document the development of the food truck concept, menu, and **prototype**; include written outlines and reflections for each phase.
- Implement project management techniques to complete the food truck project; develop project schedules, and evaluation plans as necessary.
- Design and create a food truck concept which includes each of the following elements:
 - type of food truck
 - interior design and floor plan
 - equipment list
- Design a food truck menu that includes
 - 4 to 8 menu items
 - menu item descriptions and pictures
 - product and service specifications and prices
- Design and create a food truck **prototype** that includes
 - physical model of the food truck
 - promotional materials included on the food truck model
 - depiction of food truck location and routine
- Develop evaluation criteria to improve the food truck concept, menu, and **prototype**.
- Seek feedback from potential clients to improve products and services.
- Use the **engineering design process** to document and apply feedback to products and services.

Step 3: Create a Business Plan for the Food Truck

- Develop a business plan for the food truck using the attached outline.
- Ensure that the business plan is typed in 11 point Times New Roman or comparable font, double spaced, one-inch margins

Step 4: Present the Food Truck Business Plan

- Develop a presentation on the food truck **business plan**
- Present the **business plan** and related products to a select group or members of the culinary and hospitality industry, etc.

Resources:

- Engineering Design Process Graphic Organizer
- Food Truck Menu PPT
- Inside a Food Truck PPT
- Creative and Unique Food Trucks PPT
- Team Contract Template
- Project Schedule Template

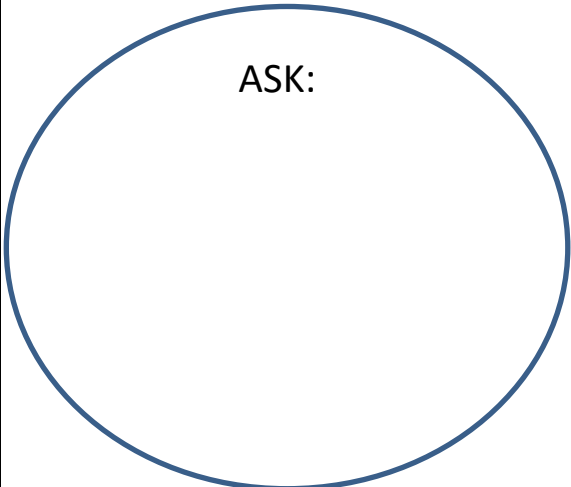
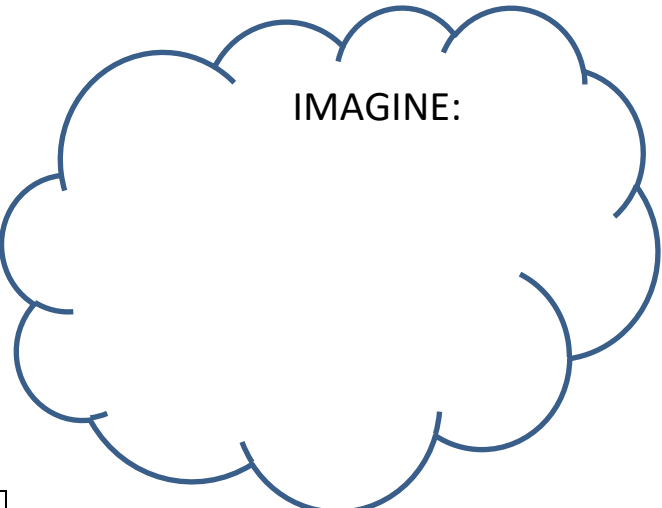
Directions:

- Project Evaluation Template
- [History of Food Trucks](#)
- [The Great Food Truck Wars](#)
- [How Entrepreneurs are Making Big Bucks with Food Trucks](#)

Business Plan Outline

- I. Cover Page (one page)
 - A. company name
 - B. logo
- II. Introduction/Overview (half page)
 - A. introduction to your company and idea
 - B. what products you sell
 - C. target audience/market
 - D. location of your food truck
- III. Company vision and mission statement (two paragraphs/sentences)
 - A. targeted mission statement
 - B. vision statement
- IV. Company goals and objectives (two paragraphs)
 - A. short- and long-term goals
 - B. strategies to accomplish goals
- V. Financial Overview (half page)
 - A. menu
 - B. types of products and services (catering, delivery, retail)
 - C. price of products and services
 - D. expected daily, monthly, and annual revenue
- VI. Marketing Overview (half page)
 - A. marketing strategy (specific food, location, gimmick, etc.)
 - B. marketing products and services (flyers, social media, etc.)
 - C. other promotional ideas (coupons, specials, etc.)
- VII. Operational Overview (half page)
 - A. legal or government issues in your city or state
 - B. policies
 - C. hours of operation and schedule/location pattern

Engineering Design Process and Graphic Organizer

 <p style="font-size: 24px; margin: 0;">ASK:</p>	 <p style="font-size: 24px; margin: 0;">IMAGINE:</p>																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 15%;">Step 1:</td><td style="width: 85%;"></td></tr> <tr><td>Step 2:</td><td></td></tr> <tr><td>Step 3:</td><td></td></tr> <tr><td>Step 4:</td><td></td></tr> <tr><td>Step 5:</td><td></td></tr> <tr><td>Step 6:</td><td></td></tr> <tr><td>Step 7:</td><td></td></tr> <tr><td>Step 8:</td><td></td></tr> <tr><td>Step 9:</td><td></td></tr> <tr><td>Step 10:</td><td></td></tr> </table>	Step 1:		Step 2:		Step 3:		Step 4:		Step 5:		Step 6:		Step 7:		Step 8:		Step 9:		Step 10:		<p style="font-size: 24px; margin: 0;">IMPROVE:</p>
Step 1:																					
Step 2:																					
Step 3:																					
Step 4:																					
Step 5:																					
Step 6:																					
Step 7:																					
Step 8:																					
Step 9:																					
Step 10:																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Name:</td> <td style="width: 40%;">Date:</td> </tr> <tr> <td>Project Title:</td> <td>Reviewed By:</td> </tr> <tr> <td colspan="2" style="text-align: right;">Page # __out of #__:</td> </tr> </table>		Name:	Date:	Project Title:	Reviewed By:	Page # __out of #__:															
Name:	Date:																				
Project Title:	Reviewed By:																				
Page # __out of #__:																					

Project Schedule Template

Team Name _____

A project schedule is used to manage tasks or projects. A project schedule is used to help keep the project on track by mapping dates for activities for each step of the project.

Food Truck Project Schedule Template

Project Name:			
Student Name:			
Due Date:			
Task/Action Steps	Deliverables	Due Date	Complete
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

Task/Action Steps	Deliverables	Due Date	Complete
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

Decision Matrix Template

Student Name: _____

A decision matrix can be used to help you make decisions through the identification of criteria and constraints. List criteria and constraints across the X axis and ideas/products down the Y axis. A peer will rank each of your ideas/products against each criteria/constraint. For example, if you have four ideas/products, your peer will rank each idea/product a 1, 2, 3, or 4 for each criteria/constraint. Calculate the total number of points for each idea/product. The top scoring ideas/products are those that should be considered for the project.

Criteria and Constraints

Decision Matrix Template					
Ideas or Products listed below	Criteria/Constraint #1:	Criteria/Constraint #2:	Criteria/Constraint #3:	Criteria/Constraint #4:	Total Points:
#1					
#2					
#3					
#4					
#5					
#6					

Ideas and/or Products

Project Evaluation Template

Student Name: _____

The purpose of this evaluation is to help you identify your personal areas of strength and improvement. Make sure you take time to truly reflect on your performance.

Project Schedule	
How frequently did you the project schedule? Should you have reviewed it more or less frequently?	
How did you ensure that you were on-track for project completion?	
What steps did you take when the project was off schedule?	
What would you do differently next time?	