

## Food Science

name: \_\_\_\_\_

date: \_\_\_\_\_

class: \_\_\_\_\_

Welcome to the Food Science Student-Led Assignment, a webquest designed to help you become more aware of the science behind successful food product development. Save a copy of this assignment to a cloud storage platform, flash drive or computer. Follow your teacher's directions for submission of your assignment.

Before you begin this activity, you will need a computer with internet access and a writing utensil. Complete the assignment by visiting each of the linked items and answering the following questions. Record your answers in an electronic document or on notebook paper. Follow your teacher's directions for assignment completion and submission.

### Activity 1: Learn about careers in the industry

Watch [this video \(grownextgen.org/career-videos/video/food-science/\)](https://grownextgen.org/career-videos/video/food-science/) about a variety of careers in food science at T. Marzetti's in Columbus, OH. While you watch the video, answer the following questions:

1. What are the areas of the food science industry you can get involved with?

2. What does the "QA" Department do?

3. What does the Regulation Department do?

4. What percent increase will jobs in this area have between 2010-2020?

## Activity 2: Explore the industry

Complete the “**Food Science and Technology**” e-learning course ([elearning.grownextgen.org](http://elearning.grownextgen.org)) to improve your background knowledge about this topic. This course walks you through the basics of the food industry, including food labels, soybean use in food products, and the impact of food on our health. After completing the e-learning course, answer the following questions:

1. Record five things you learned from the e-learning course:
2. In what ways has the growing population of the world impacted the Food Science industry?
3. What would you tell a consumer about food products after completing the e-learning course?
4. Did your opinion change about food science/food products completing the e-learning course? Why or why not? Be specific.

## Activity 3: Share your knowledge

Complete the activity below to explore, in more detail, careers in this industry and the varying levels of education required, from a high school diploma to a graduate school degree. As a part of the assignment, you will select a specific career to explore. Create an 8½" × 11" poster to share with your classmates.

1. Research one of the careers related to food sciences. Include aspects of the career such as salary, education, general description, job outlook, etc.
  - Flavor Chemist
  - Food Biotechnologist
  - Food Chemist
  - Food Engineer
  - Food Ingredient Sales
  - Food Inspector
  - Food Microbiologist
  - Food Product Developer
  - Food Safety Inspector
  - Food Technologist
  - Food Toxicologist
  - Laboratory Director
  - Market Researcher
  - Meat Scientist
  - Natural Products Researcher
  - Packaging Specialist
  - Public Health Official
  - Quality Assurance Manager
  - Sensory Evaluation Expert
  - Sensory Scientist
  - Technical Sales Representative
2. Record your information on a poster. (Use the rubric to be sure you have included all aspects required.) Include: *description, salary, educational requirements/skills needed, occupational outlook, and an example of a task that person might do.*
3. Present your findings and research to the class Think of categories you could use to rate these careers. (i.e. salary range, level of education required, amount of creativity involved, etc.)

Here is the rubric with which your instructor will score your assignment:

|  | <b>4</b>  | <b>3</b>  | <b>2</b>  | <b>1</b>   |
|--|---|---|---|--|
| <b>Required elements for career poster</b> | The poster includes all required elements as well as additional information.  | All required elements are included on the poster.   | All but 1 of the required elements are included on the poster.  | Several required elements were missing.  |
| <b>Labels</b>                              | All items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.      | Almost all items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away. | Many items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away. | Labels are too small to view <i>or</i> no important views were labeled.                                |
| <b>Graphics: relevance</b>                 | All graphics are related to the topic and make it easier to understand. All borrowed graphics have a source citation. | All graphics are related to the topic and most make it easier to understand.  | All graphics relate to the topic. One or two borrowed graphics have a source citation.                            | Graphics do not relate to the topic <i>or</i> several borrowed graphics do not have a source citation. |
| <b>Attractiveness</b>                      | The poster is exceptionally attractive in terms of design, layout, and neatness.                                      | The poster is attractive in terms of design, layout, and neatness.  | The poster is acceptably attractive though it may be a bit messy.   | The poster is distractingly messy or very poorly designed. It is not attractive.                       |
| <b>Grammar</b>                             | There are no grammatical/mechanical mistakes on the poster.   | There are 1–2 grammatical/mechanical mistakes on the poster.  | There are 3–4 grammatical/mechanical mistakes on the poster.  | There are more than 4 grammatical/mechanical mistakes on the poster.                                   |