

Food Science? Food Scientists? Guided Note taking

What is food science?

- The study of producing, processing, preparing, _____, and using food
 - What does this mean to you?

Food scientists in history

- Sir Francis Bacon – Preservation through _____
- Justus von Liebig – *Researches on the Chemistry of Foods*
- _____ – *Boston Cooking School Cookbook*
- George Washington Carver – Developed more than _____ products from peanuts, sweet potatoes, and pecans
- Clarence Birdseye – _____

Areas of food science

1. _____
2. Processing
3. Evaluation
4. _____

Food production

_____ – process in which matter and energy transfer between organisms as food.

Name: _____ Period: _____ Date: _____

Food Production – Techniques for raising crops and animals for food.

*Example:

_____ – Scientist use the tools of modern genetics in the age-old process of improving plants, animals, and microorganisms for food production.

*Example:

Food processing

- _____ – takes food that has been produced and puts it through steps to create a final marketable result.
- Researcher in food science helps develop more affordable means of producing foods and retaining nutrients.
- Quality Control Specialists monitor foods through the stages of processing to ensure the foods meet _____ and _____ standards.

*Check storage areas for cleanliness

*Develop food labels after testing foods for nutrient content.

Food preparation

Food scientists are responsible for the cooking _____ on the back of our food products.

Science is used to determine cooking factors, such as _____ and _____. These factors are based on the type of food and how different ingredients will react under certain situations.

*This keeps our food _____ and _____!

Food scientists answer the “WHYS” we come across in the kitchen.

Evaluation of food

- Evaluation – A _____ and _____ process
- Test kitchens and evaluation laboratories conduct crucial research to determine whether people will buy a product.
- They focus on _____, texture, appearance, _____, and other similar qualities.
- _____ – Food is evaluated to be cost-effective.
- Later – Evaluation of the products determines two things:
 - 1.
 - 2.

Utilization of food

Food Scientists are always searching for new uses for food items, but now more than ever before.

Why?

Looking for every possible use of a food has led to soybeans in our newsprint items and corn in our gasoline!