

Study Guide

The Food Supply

Directions: Read chapter 3, and answer the following questions. Later, you can use this study guide to review.

1. Describe an ecosystem.

2. Identify the four main components of the food chain and explain the purpose of each.

3. Explain the value of biodiversity.

4. Name three essential natural resources that support every ecosystem.

5. Identify the ways to preserve fresh foods so they will not rot.

6. Describe five uses of food additives.

7. Why do industrialized countries have an abundant food supply?

8. List five obstacles that developing nations face when trying to feed their people.

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Chapter 3 Study Guide (continued)

9. What percentage of the earth's water is available for human needs? Identify two or three water problems for the future.

10. Name some of the causes of water contamination or pollution.

11. Describe at least three ways to increase and improve the food supply in developing countries.

12. Name at least three ways we can preserve natural resources in this country, and give an example of each.

Activity 1

The Food Supply

Visit a Farmer

Directions: There is nothing like eating an ear of corn freshly picked from the field or biting into a tomato warm from the sun. If there is a farm or farmer’s market nearby, visit one and look at the varieties of produce displayed. Ask your teacher to provide samples for a tomato taste test. Have the class taste and record the differences in flavor, color, and texture. Rate each item on a scale of 1 to 3. 1 = didn’t like, 2 = OK, 3 = loved.

Product	Rating		
	Flavor	Color	Texture
1. Heirloom tomato			
2. Supermarket fresh tomato			
3. Gourmet brand of whole canned tomatoes			
4. Supermarket brand of whole canned tomatoes			

5. Compare the results with classmates. What conclusions do you draw from this experiment?

Activity 2

The Food Supply

Food Additives

Directions: Using food labels or empty containers of food supplied by your teacher, identify nine additives from the list of ingredients on each of these labels. Look up these additives on the Internet, and determine why each additive is in the product. Is it there for flavor, color, texture, or nutrition; as a preservative; or to assist in reducing the aging process? One item has been completed as an example in the chart below.

Name of Additive	Purpose
1. High fructose corn syrup	Flavor
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

11. What are the pros and cons of using food additives to increase the food supply?

Pros: _____

Cons: _____

