Section 1 Carbohydrates, Fats, and Proteins

Key Ideas

- Carbohydrates, fats, and proteins can all be used by the body as sources of energy.
- When your body uses the nutrients in foods, a series of chemical reactions occur inside your cells. As a result, energy is released.
- Carbohydrates supply energy for your body’s functions.
- Fats supply your body with energy, form your cells, maintain body temperature, and protect your nerves.

Vocabulary

- nutrient (192)
- carbohydrate (194)
- fiber (195)
- fat (196)
- unsaturated fat (196)

Section 2 Vitamins, Minerals, and Water

Key Ideas

- There are two classes of vitamins: fat-soluble vitamins, which dissolve in fatty materials, and water-soluble vitamins, which dissolve in water.
- Nearly all of the body’s chemical reactions, including those that produce energy and build new tissues, take place in a water solution.
- You need seven minerals—calcium, sodium, potassium, magnesium, phosphorus, chlorine, and sulfur—in significant amounts.

Vocabulary

- vitamin (203)
- antioxidant (205)
- mineral (205)
- anemia (206)
- homeostasis (208)
- dehydration (209)

Section 3 Making Healthy Food Choices

Key Ideas

- The Dietary Guidelines provide information on how to make smart food choices, balance food intake with physical activity, get the most nutrition out of the calories you consume, and handle food safely.
- Unlike past plans, the MyPyramid plans differ with a person’s age, sex, and activity level. The pyramid also includes physical activity as an important part of staying healthy.

Vocabulary

- Dietary Guidelines for Americans (210)
- nutrient-dense food (211)
- MyPyramid plan (213)

Key Ideas Review

L3 Have each student write a quiz show question about one of the Key Ideas in the chapter. Students should also supply the answer to the question. Collect the questions and answers, and use them for a class quiz game.

L2 Have students write true or false questions based on the Key Ideas from the chapter. Students can exchange questions with a partner and answer them. For each statement that is false, students should rewrite it to make it true.

Vocabulary Review

EL Have students use as many of the vocabulary terms as they can to make a concept map. Students should use the term nutrients to begin the map.

L3 Divide the class into groups of four, and have students write each vocabulary term on a separate index card to make a deck of terms. Then have students in each group sit in a circle. One student starts by holding the entire deck of terms and saying phrases that the term on the top card relates to. As soon as the term is identified, the student takes the card and passes the deck to the next student. Play continues until all the cards have been used. The group that finishes first is the winner.

Food for Thought

List three ways the video helped you become a smarter consumer.
Reviewing Key Ideas

Section 1
1. Complex carbohydrates are
   a. composed of sugars linked together.
   b. found in grain products.
   c. good sources of energy.
   d. all of the above.
2. Which of the following foods is high in protein?
   a. an apple
   b. lettuce
   c. candy
   d. chicken
3. What is the role of glucose in the body?
4. Why is fiber necessary for the proper functioning of the digestive system?
5. How can you limit your intake of fats and cholesterol?
6. What are amino acids? Why are some of them called “essential”?
7. Critical Thinking In many cultures, people get very little protein from animal sources. How might these people obtain the protein they need?

Section 2
8. Which of these nutrients is sometimes associated with high blood pressure?
   a. sodium
   b. calcium
   c. iron
   d. carbohydrate
9. Loss of water through heavy perspiring can result in
   a. homeostasis
   b. dehydration
   c. anemia
   d. metabolism
10. Explain how antioxidants are important to your health. Which foods are good sources of antioxidants?
11. Which mineral can help build strong bones and teeth? Name one nondairy source of this mineral.
12. Give three reasons why water is such an important nutrient.
13. Critical Thinking If a person’s diet does not contain enough iron, his or her tissues may not get all the oxygen they need. Explain why this is so.

Section 3
15. Which of the following is not used to determine the amounts you should consume from each food group in the MyPyramid plan?
   a. age
   b. sex
   c. weight
   d. activity level
16. The Dietary Guidelines recommend that you make smart food choices. Explain what this recommendation means.
17. Which band in the MyPyramid plan is the widest? Explain what this means.

Critical Thinking
18. Several friends are planning a week-long backpacking trip in the mountains. They must carry all of their food in backpacks, so amounts must be limited. What kind of foods could they take to meet their nutritional needs?

Building Health Skills

19. Analyzing Influences Many American teenagers have diets high in fats. Write a letter to the editor of your local newspaper explaining why. Suggest steps that can be taken to improve teen diets. WRITING
20. Accessing Information Laurie dislikes dairy products. Research and plan three meals that include calcium-rich foods.
21. Setting Goals Write down everything you eat for a week. Classify the foods into the groups in the MyPyramid plan. Then, come up with a plan to align your diet with the amounts recommended for your age, sex, and activity level. See how you do for the next week.

Food Pantry Visit Volunteer at a local food pantry or soup kitchen for a day. You may be involved in preparing food, chatting with patrons, or cleaning up afterward. What did you find out that you didn’t know before? Write an editorial describing your experience. WRITING

17. The grain band is the widest. Grain products should make up most of one’s diet.
18. Foods suggested should be low in weight, but high in energy and nutrient density and cover all the food groups. Examples include whole-grain crackers, dried vegetables and fruits, powdered milk, nuts, legumes.
19. Letters should explain that teens tend to eat a lot of fast foods, chips, and processed foods because they like the taste and convenience. Suggestions might include making more low-fat choices available at fast-food restaurants and in the school cafeteria; providing fresh fruit, nuts, and other healthy snacks in vending machines; and more nutrition education.