

**Grade 4 Language**  
**Apple**

**Student Name:** \_\_\_\_\_

**Class:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Instructions:**      **Read each question carefully. Circle the answer that most closely represents the underlined word in each sentence.**

1.      As apples ripen, the amount of starch decreases and is converted to sugar.
  - A.      develops
  - B.      grows
  - C.      lessens
  - D.      raises
  
2.      Apples are ripe when most of the starch becomes sugar.
  - A.      immature
  - B.      aged
  - C.      undeveloped
  - D.      raw
  
3.      The apples left on the tree can grow bigger because there is less competition for nutrients.
  - A.      cooperation
  - B.      assistance
  - C.      excitement
  - D.      struggle
  
4.      New trees created by grafting or budding live in a protected nursery for about twelve months before they are replanted in an orchard.
  - A.      guarded
  - B.      insecure
  - C.      unsheltered
  - D.      vulnerable

5. The soluble fiber in apples works to regulate blood sugar and prevent its sudden fluctuation.
- A. movement
  - B. increase
  - C. stoppage
  - D. bleeding
6. Each variety of apples requires different conditions; computers help keep the specified conditions constant.
- A. consistent
  - B. changeable
  - C. stable
  - D. unchanging
7. Since every apple seed is made from its own unique set of genetic material, you can plant 10 seeds from a single apple and get 10 entirely different kinds of apples.
- A. normal
  - B. common
  - C. usual
  - D. individual
8. The GoldRush is a great apple to grow because it has qualities that make it resistant to common diseases.
- A. everyday
  - B. rare
  - C. unusual
  - D. noteworthy

**Grade 4 Writing**  
**Apple**

**Student Name:** \_\_\_\_\_

**Class:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Instructions:**      **Read the question carefully and write your answer below.**

**Extended Response**

An entomologist studies insects and their relationship to the environment, humans and other organisms. Explain what role insects play in apple development. Remember, insects can be harmful or beneficial to both the apple and the apple tree. Use your own knowledge along with other available sources to explain your answer.

**Grade 4 Science**  
**Apple**

**Student Name:** \_\_\_\_\_

**Class:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Instructions:**      **Read each question carefully and circle the correct answer.**

1.      What is another word for seed pockets?
  - A.      variety
  - B.      strength
  - C.      seed
  - D.      carpel
  
2.      This describes the term for inserting a section of a stem with leaf buds into the stock of a tree.
  - A.      grafting
  - B.      calyx
  - C.      pollination
  - D.      budding
  
3.      Fill in the blank.

The study of fruit and fruit growing is known as \_\_\_\_\_.

  - A.      embryology
  - B.      fruitology
  - C.      pomology
  - D.      arborology
  
4.      As an apple ripens, the amount of starch decreases and is converted into which of the following?
  - A.      juice
  - B.      sauce
  - C.      spice
  - D.      sugar

5. Which of the following would make an apple sweeter?
- A. less starch
  - B. more starch
  - C. heavy starch
  - D. high carbohydrates
6. Which of the following describes why fresh apples float?
- A. Fresh apples have sugar, which is lighter than water.
  - B. An apple is 25% air.
  - C. Grafting has assisted in making apples float.
  - D. Johnny Appleseed planted them to float.
7. Apples are a member of which family of plants?
- A. rose
  - B. pear
  - C. coconut
  - D. strawberry
8. Name the juice of a fruit that attracts insects and birds that pollinates flowers.
- A. pollen
  - B. petals
  - C. high fructose corn syrup
  - D. nectar

**Grade 4 Social Studies**  
**Apple**

**Student Name:** \_\_\_\_\_

**Class:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Instructions:**      **Read each question carefully and circle the correct answer.**

1.      What two countries in the Western Hemisphere make up almost half of the United States apple export market?
  - A.      Mexico and Canada
  - B.      Mexico and Cuba
  - C.      Australia and Canada
  - D.      Oregon and Mexico
  
2.      Name the world's largest apple producing country.
  - A.      Japan
  - B.      United States
  - C.      China
  - D.      India
  
3.      Select the answer that completes the following historical sequence.

Apple parer invented, McIntosh apple discovered, \_\_\_\_\_

  - A.      Pippin exports apples to London
  - B.      Apple Nursery opened in Flushing, New York
  - C.      Granny Smith apples discovered
  - D.      Pilgrims planted apples
  
4.      From 2006 to 2010, how many of the top 15 apple producing countries saw a decrease in apple production?
  - A.      one
  - B.      seven
  - C.      nine
  - D.      all of them

5. In which two states did John Chapman, also known as Johnny Appleseed, start orchards?
- A. Washington and New York
  - B. Ohio and Indiana
  - C. Ohio and Washington
  - D. Indiana and Iowa
6. Name the continent on which the Granny Smith apple was discovered.
- A. North America
  - B. South America
  - C. Asia
  - D. Australia
7. Which top apple producing state is located farthest north?
- A. Washington
  - B. Michigan
  - C. Ohio
  - D. California
8. Which top apple producing state is located farthest south?
- A. Washington
  - B. Michigan
  - C. Ohio
  - D. California

**Grade 4 Math**  
**Apple**

**Student Name:** \_\_\_\_\_

**Class:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Instructions:**      **Read each question carefully and circle the correct answer.**

1. Use the following graph to answer the question.



Which fraction shows how many of the apples are whole?

- A.  $\frac{2}{3}$   
B.  $\frac{3}{5}$   
C.  $\frac{1}{6}$   
D.  $\frac{3}{10}$
2. If I have nine apples, and I eat three apples, and give two apples to my friend, Kim, how many apples do I have left?
- A. 4  
B. 5  
C. 6  
D. 7
3. We collected 12,840 apples from 3 orchards. The same number of apples were taken from each orchard. How many apples were taken from each orchard?
- A. 4,280  
B. 9,312  
C. 6,420  
D. 2,364

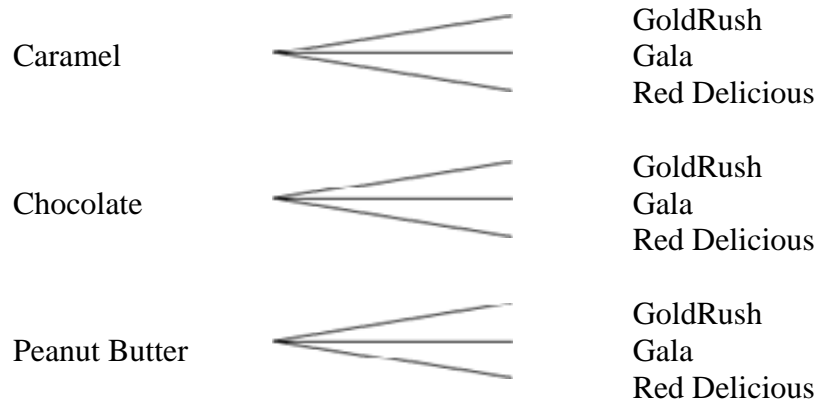


4. I picked 20 apples, while at Mr. Rush's farm, to take home and bake in a pie. If I used 50% of the apples I picked in my pie, how many apples did I use?

- A. 10
- B. 8
- C. 12
- D. 6

5. Use the following information to answer the next two questions.

Jackie has a GoldRush apple, a Gala apple, and a Red Delicious apple. She has caramel, chocolate and peanut butter to use as toppings for her apples.



How many possible choices does Jackie have to choose from?

- A. 12
- B. 9
- C. 3
- D. 6

6. If Jackie decides she doesn't want a Red Delicious apple, how many choices does she have?

- A. 12
- B. 9
- C. 3
- D. 6

## **Answer Key:**

### **Language**

1. C. lessens
2. B. aged
3. D. struggle
4. A. guarded
5. A. movement
6. B. changeable
7. D. individual
8. A. everyday

### **Science**

1. D. carpel
2. A. grafting
3. C. pomology
4. D. sugar
5. A. less starch
6. B. An apple is 25% air.
7. A. rose
8. D. nectar

### **Social Studies**

1. A. Mexico and Canada
2. C. China
3. C. Granny Smith apples discovered
4. C. nine
5. B. Ohio and Indiana
6. D. Australia
7. A. Washington
8. D. California

### **Math**

1. D.  $\frac{3}{10}$
2. A. 4
3. A. 4,280
4. A. 10
5. B. 9
6. D. 6