

• Reading Comprehension 3 Level 7

Directions: Read the passage. Then answer the questions below.

Have you ever wondered what keeps a hot air balloon flying? The same principle that keeps food frozen in the open chest freezers at the grocery store allows hot air balloons to fly. It's a very basic principle: Hot air rises and cold air falls. So while the super-cooled air in the grocery store freezer settles down around the food, the hot air in a hot air balloon pushes up, keeping the balloon floating above the ground. In order to understand more about how this principle works in hot air balloons, it helps to know more about hot air balloons themselves.

A hot air balloon has three major parts: the basket, the burner, and the envelope. The basket is where passengers ride. The basket is usually made of wicker. This ensures that it will be comfortable and add little extra weight. The burner is positioned above the passenger's heads and produces a huge flame to heat the air inside the envelope. The envelope is the colorful fabric balloon that holds the hot air. When the air inside the envelope is heated, the balloon rises.

The pilot can control the up-and-down movements of the hot air balloon by regulating the heat in the envelope. To ascend, the pilot heats the air in the envelope. When the pilot is ready to land, the air in the balloon is allowed to cool and the balloon becomes heavier than air. This makes the balloon descend.

Before the balloon is launched, the pilot knows which way the wind is blowing. This means that she has a general idea about which way the balloon will go. But, sometimes the pilot can actually control the direction that the balloon flies while in flight. This is because the air above the ground is sectioned into layers in which the direction of the wind may be different. So even though the pilot can't steer the balloon, she can fly or higher or lower into a different layer of air. Some days the difference between the direction of the wind between layers is negligible. But other days the difference is so strong that it can actually push the balloon in a completely different direction!

Questions

- 1) According to the passage, balloon pilots control the balloon's altitude by
 - A. moving into a different layer of air
 - B. regulating the air temperature inside the balloon
 - C. adjusting the amount of air in the envelope
 - D. changing the amount of weight contained in the basket

- 2) As used in paragraph 3, which is the best synonym for **ascend**?
 - A. move
 - B. fly
 - C. sink
 - D. climb

- 3) As used in paragraph 3, which is the best antonym for **descend**?
- A. fall
 - B. float
 - C. rise
 - D. drop
- 4) According to the author, wicker is
- I. comfortable
 - II. lightweight
 - III. durable
- A. I only
 - B. I and II only
 - C. II and III only
 - D. I, II, and III
- 5) If the hot air balloon pilot wants to change directions during flight, what might he or she do to accomplish this?
- A. head toward a mountain peak
 - B. wait for it to rain
 - C. fly into a cloud
 - D. fly higher
- 6) Using the passage as a guide, it can be inferred that which of the following statements is not true?
- A. Air goes up and out the top of a chimney when you light a fire.
 - B. Cool air collects about the ceiling when you open a refrigerator.
 - C. Smoke from a candle rises after you blow out the flame.
 - D. Cold air coming from an air conditioning vent settles about the floor.
- 7) Based on its use in paragraph 4, it can be understood that **negligible** belongs to which of the following word families?
- A. solemn, grave, serious
 - B. substantial, considerable, large
 - C. exhilarating, thrilling, exciting
 - D. insignificant, small, unnoticeable