

Passage 1

The first navigational lights in the New World were probably lanterns hung at harbor entrances. The first lighthouse was put up by the Massachusetts Bay Colony in 1766 on Little Brewster Island at the entrance to Boston Harbor. Paid for and maintained by light dues levied on ships, the original beacon was blown up in 1776. By then there were only a dozen or so true lighthouses in the colonies. Little over a century later, there were 700 lighthouses.

The first eight erected on the West Coast in the 1850's featured the same basic New England design: a Cape Cod dwelling with the tower rising from the center or standing close by. In New England and elsewhere, though, lighthouses reflected a variety of architectural styles. Since most stations in the Northeast were built on rocky eminences, enormous towers were not the rule. Some were made of stone and brick, others of wood or metal. Some stood on pilings or stilts: some were fastened to rock with iron rods. Farther south, from Maryland through the Florida Keys, the coast was low and sandy. It was often necessary to build tall towers there – massive structures like the majestic Cape Hatteras, North Carolina lighthouse, which was lit in 1870. At 190 feet, it is the tallest brick lighthouse in the country.

Notwithstanding differences in appearance and construction, most American lighthouses shared several features: a light, living quarters, and sometimes a bell (or, later, a foghorn). They also had something else in common: a keeper and, usually, the keeper's family. The keeper's essential task was trimming the lantern 'Nick in order to maintain a steady bright flame. The earliest keepers came from every walk of life—they were seamen. Farmers, mechanics, rough mill hands—and appointments were often handed out by local customs commissioners as political plums. After the administration of lighthouses was taken over in 1852 by the United States Lighthouse 803rd, an agency of the Treasury Department, the keeper corps gradually became highly professional.

1. What is the best title for the passage.
 - (A) The Lighthouse on Little Brewster Island
 - (B) The Life of a Lighthouse Keeper
 - (C) Early Lighthouses in the United States
 - (D) The Modern Profession of Lighthouse Keeping
2. Why does the author mention the Massachusetts Bay Colony?
 - (A) It was the headquarters of the United States Lighthouse Board.
 - (B) Many of the tallest lighthouses were built there.
 - (C) The first lantern wicks were developed there.
 - (D) The first lighthouse in North America was built there.
3. It can be inferred from the passage that light-houses in the Northeast did not need high towers because
 - (A) ships there had high masts
 - (B) coastal waters were safe
 - (C) the coast was straight and unobstructed
 - (D) the lighthouse were built on high places
4. According to the passage, where can the tallest brick lighthouse in the United States be found?
 - (A) Little Brewster Island
 - (B) The Florida Keys
 - (C) Cape Hatteras
 - (D) Cape Cod

5. In line 19, to which of the following does the word "They" refer?
(A) Lighthouses (B) Differences (C) Quarters (D) Features
6. It can be inferred from the passage that the Treasury Department, after assuming control of the lighthouses, improved which of the following?
(A) The training of the lighthouse keepers (B) The sturdiness of the lighthouses
(C) The visibility of the lights (D) The locations of the lighthouses
7. Where in the passage does the author tell how lighthouses in the Northeast were fastened to the surrounding rock?
(A) Lines 3-4 (B) Line 12 (C) Lines 14-15 (D) Line 19

Passage 2

Homing pigeons are placed in a training program from about the time they are twenty-eight days of age. They are taught to enter the loft through a trap and to exercise above and around the loft, and gradually they are taken away for short distances in wicker baskets and released. They are then expected to find their way home in the shortest possible time.

In their training flights or in actual races, the birds are taken to prearranged distant points and released to find their way back to their own lofts. Once the birds are liberated, their owners, who are standing by at the home lofts, anxiously watch the sky for the return of their entries. Since time is of the essence, the speed with which the birds can be induced to enter the loft trap may make the difference between gaining a win or a second place.

The head of a homing pigeon is comparatively small, but its brain is one quarter larger than that of the ordinary pigeon. The homing pigeon is very intelligent and will persevere to the point of stubbornness some have been known to fly a hundred miles off course to avoid a storm.

Some homing pigeon experts claim that this bird is gifted with a form of built-in radar that helps it find its own loft after hours of flight, for hidden under the head feathers are two very sensitive ears, while the sharp, prominent eyes can see great distances in daytime.

Why do homing pigeons fly home? They are not unique in this inherent skill: it is found in most migratory birds, in bees, ants, toads, and even turtles, which have been known to travel hundreds of miles to return to their homes. But in the animal world, the homing pigeon alone can be trusted with its freedom and trained to carry out the missions that people demand.

1. What is the purpose of the passage?
(A) To convince the reader to buy a homing pigeon
(B) To inform the reader about homing pigeons and their training
(C) To protect homing pigeons against the threat of extinction
(D) To encourage the owners of homing pigeons to set the birds free
2. According to the passage, what happens to homing pigeons when they are about a month old?
(A) They are kept in a trap. (B) They enter their first race.

- (C) They begin a training program.
marked.
- (D) They get their wings clipped and marked.
3. In line 8, when the author states that the owners "anxiously watch the sky" there is the implication that the owners
- (A) want their pigeon to win the race
(B) are sending radar signals to their pigeons
(C) do not know whether the race began on time
(D) do not trust the rules set down by the judges
4. According to the passage, what is the difference between a homing pigeon and an ordinary one?
- (A) The span of the wings
(B) The shape of the eyes
(C) The texture of the feathers
(D) The size of the brain
5. The author mentions all of the following at tributes that enable a homing pigeon to return home EXCEPT
- (A) instinct
(B) air sacs
(C) sensitive ears
(D) good eyes
6. In line 16, the pronoun "it" refers to which of the following?
- (A) Radar
(B) Bird
(C) Loft
(D) Form
7. Why does the author mention bees, ants, toads, and turtles in the last paragraph?
- (A) To describe some unusual kinds of pets
(B) To measure distances traveled by various animals
(C) To compare their home-finding abilities with those of homing pigeons
(D) To interest the reader in learning about other animals

Passage 3

Central Park, emerging from a period of abuse and neglect, remains one of the most popular attractions in New York City, with half a million out-of-towners among the more than 3 million people who visit the park yearly. About 15 million individual visits are made each year.

Summer is the season for softball, concerts, and Shakespeare; fall is stunning; winter is wonderful for sledding, skating, and skiing; and springtime is the loveliest of all. It was all planned that way.

About 130 years ago Frederic Law Olmsted and his collaborator Calvert Vaux submitted their landscaping plan for a rectangular parcel two miles north of the town's center. The barren swampy tract, home for squatters and a bone-boiling works that made glue, was reported as 'a pestilential spot where miasmatic odors taint every breath of air.' It took 16 years for workers with pickaxes and shovels to move 5 million cubic feet of earth and rock, and to plant half a million trees and shrubs, making a tribute to nature—a romantic nineteenth-century perception of nature.

What exists today is essentially Olmsted and Vaux's plan. with more trees, buildings, and asphalt. Landscape architects still speak reverently of Olmsted's genius and foresight, and the sensitive visitor can see the effects he sought.

1. With what subject is the passage mainly concerned?
- (A) The lives of Olmsted and Vaux
(B) New York City's tourist industry

- (C) Examples of nineteenth-century art in New York City
(D) The development of Central Park
2. According to the passage, which is the prettiest time of year in Central Park?
(A) Winter (B) Spring (C) Summer (D) Fall
3. It can be inferred that the rectangular parcel mentioned in line 9 is
(A) the site of Central Park (B) a gift presented to New York
(C) a skyscraper in New York (D) the proposed design for Central Park
4. According to the passage, before Olmsted and Vaux began their work, the area now occupied by Central Park was
(A) a romantic place (B) an infertile, marshy space
(C) a green and hilly park (D) a baseball field
5. It can be inferred from the passage that today's landscape architects praise Olmsted for his
(A) enthusiasm for sport
(B) skill at designing factories
(C) concern for New York's homeless people
(D) foresight in anticipating New York's urbanization
6. Where in the passage does the author mention unpleasant smells?
(A) Lines 1-3 (B) Lines 5-7 (C) Lines 10-12 (D) Lines 15-16

Passage 4

The difference between a liquid and a gas is obvious under the conditions of temperature and pressure commonly found at the surface of the Earth. A liquid can be kept in an open container and fills it to the level of a free surface. A gas forms no free surface but tends to diffuse throughout the space available; it must therefore be kept in a closed container or held by a gravitation field, as in the case of a planet's atmosphere. The distinction was a prominent feature of early theories describing the phases of matter. In the nineteenth century, for example, one theory maintained that a liquid could be "dissolved" in a vapor without losing its identity, and another theory held that the two phases are made up of different kinds of molecules: liquidons and gasons. The theories now prevailing take a quite different approach by emphasizing what liquids and gases have in common. They are both forms of matter that have no permanent structure, and they both flow readily. They are fluids.

The fundamental similarity of liquids and gases becomes clearly apparent when the temperature and pressure are raised somewhat. Suppose a closed container partially filled with a liquid is heated. The liquid expands, or in other words becomes less dense; some of it evaporates. In contrast, the vapor above the liquid surface becomes denser as the evaporated molecules are added to it. The combination of temperature and pressure at which the densities become equal is called the critical point. Above the critical point the liquid and the gas can no longer be distinguished; there is a single, undifferentiated fluid phase of uniform density.

1. Which of the following would be the most appropriate title for the passage?
(A) The Properties of Gases and Liquids (B) High Temperature Zones on the Earth
(C) The Beginnings of Modern Physics (D) New Containers for Fluids

2. According to the passage, the difference between a liquid and a gas under normal conditions on Earth is that the liquid

(A) is affected by changes in pressure	(B) has a permanent structure
(C) forms a free surface	(D) is considerably more common
3. It can be inferred from the passage that the gases of the Earth's atmosphere are contained by

(A) a closed surface	(B) the gravity of the planet
(C) the field of space	(D) its critical point
4. According to the passage, in the nineteenth century some scientists viewed liquids and gases as

(A) fluids	(B) dissolving particles
(C) heavy molecules	(D) different types of molecules
5. According to the passage, what happens when the temperature is increased in a closed container holding a liquid?
 - (A) The liquid and gas phases become more similar.
 - (B) The liquid and the gas become less dense.
 - (C) The container expands.
 - (D) The liquid evaporates out of the container.
6. According to the passage, which of the following is the best definition of the critical point?
 - (A) When the temperature and the pressure are raised
 - (B) When the densities of the two phases are equal
 - (C) When the pressure and temperature are combined
 - (D) When the container explodes

Passage 5

Lucinda Childs's spare and orderly dances have both mystified and mesmerized audiences for more than a decade. Like other so-called "postmodern" choreographers, Childs sees dance as pure form. Her dances are mathematical explorations of geometric shapes, and her dancers are expressionless, genderless instruments who etch intricate patterns on the floor in precisely timed, repetitive sequences of relatively simple steps. The development of Childs's career, from its beginning in the now legendary Judson Dance Theater, paralleled the development of minimalist art, although the choreographer herself has taken issue with those critics who describe her work as minimalist. In her view, each of her dances is simply "an intense experience of intense looking and listening," in addition to performing with her troupe, the Lucinda Childs Dance Company. Childs has appeared in the avant-garde opera *Einstein on the Beach*, in two of Broadway plays, and in the films *Jeonnie d'Iman* by Marie Jimenez and *21:12 Piano Bar*.

As a little girl, Childs had dreamed of becoming an actress. She appeared regularly in student productions throughout her school years, and when she was about eleven she began to take drama lessons. It was at the suggestion of her acting coach that the youngster, who was, by her own admission, "clumsy, shapeless, and on the heavy side," enrolled in a dancing class. Among her early teachers were Hanya Holm, the dancer and choreographer who introduced the Wigman system of modern dance instruction to the United States, and Helen Tamiris, the Broadway choreographer. Pleased with her pupil's progress, Ms. Tamiris eventually asked the girl to perform onstage. After that exhilarating experience, Lucinda Childs "wasn't sure [she] even wanted to be an actress anymore."

1. What is the passage mainly about?
- (A) Minimalist art
(B) Mathematical forms
(C) A choreographer
(D) Broadway plays
2. The word "its" in line 6 refers to
- (A) career
(B) development
(C) steps
(D) the Judson Dance Theater
3. The work of Lucinda Childs has been compared to which of the following?
- (A) Avant-garde opera
(B) The Wigman system
(C) Realistic drama
(D) Minimalist art
4. In which artistic field did Childs first study
- (A) Painting
(B) Dance
(C) Drama
(D) Film