

Now begin work on the questions.
Questions 1-10

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As Philadelphia grew from a small town into a city in the first half of the eighteenth century, it became an increasingly important marketing center for a vast and growing agricultural hinterland. Market days saw the crowded city even more crowded, as farmers from within a radius of 24 or more kilometers brought their sheep, cows, pigs, vegetables, cider, and other products for direct sale to the townspeople. The High Street Market was continuously enlarged throughout the period until 1736, when it reached from Front Street to Third. By 1745 New Market was opened on Second Street between Pine and Cedar. The next year the Callowhill Market began operation. Along with market days, the institution of twice-yearly fairs persisted in Philadelphia even after similar trading days had been discontinued in other colonial cities. The fairs provided a means of bringing handmade goods from outlying places to would-be buyers in the city. Linens and stockings from Germantown, for example, were popular items.

Auctions were another popular form of occasional trade. Because of the competition, retail merchants opposed these as well as the fairs. Although governmental attempts to eradicate fairs and auctions were less than successful, the ordinary course of economic development was on the merchants' side, as increasing business specialization became the order of the day. Export merchants became differentiated from their importing counterparts, and specialty shops began to appear in addition to general stores selling a variety of goods.

One of the reasons Philadelphia's merchants generally prospered was because the surrounding area was undergoing tremendous economic and demographic growth. They did their business, after all, in the capital city of the province. Not only did they cater to the governor and his circle, but citizens from all over the colony came to the capital for legislative sessions of the assembly and council and the meetings of the courts of justice.

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Aviculturists, people *who* raise birds for commercial sale, have not yet learned how to simulate the natural incubation of parrot eggs in the wild. They continue to look for better ways to increase egg production and *to* improve chick survival rates. When parrots incubate their eggs in the wild, the temperature and humidity of the nest are controlled naturally. Heat is transferred from the bird's skin to the top portion of the eggshell, leaving the sides and bottom of the egg at a cooler temperature. This temperature gradient may be vital to successful hatching. Nest construction can contribute to this temperature gradient. Nests of loosely arranged sticks, rocks, or dirt are cooler in temperature at the bottom where the egg contacts the nesting material. Such nests also act as humidity regulators by allowing rain to drain into the bottom sections of the nest so that the eggs are not in direct contact with the water. As the water that collects in the bottom of the nest evaporates, the water vapor rises and is heated by the incubating bird, which adds significant humidity to the incubation environment.

In artificial incubation programs, aviculturists remove eggs from the *nests* of parrots and incubate them under laboratory conditions. Most commercial incubators heat the eggs fairly evenly from top to bottom, thus ignoring the bird's method of natural incubation, and perhaps reducing the viability and survivability of the hatching chicks. When incubators are not used, aviculturists sometimes suspend wooden boxes outdoors to use as nests in which to place eggs. In areas where weather can become cold after eggs are laid, it is very important to maintain a deep foundation of nesting material to act as insulator against the cold bottom of the box. If eggs rest against the wooden bottom in extremely cold weather conditions, they can become chilled to a point where the embryo can no longer survive. Similarly, these boxes should be protected from direct sunlight to avoid high temperatures that are also fatal to the growing embryo. Nesting material should be added in sufficient amounts to avoid both extreme temperature situations mentioned above and assure that the eggs have a soft, secure place to rest.

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Line

The mineral particles found in soil range in size from microscopic clay particles to large boulders. The most abundant particles—sand, silt, and clay—are the focus of examination in studies of soil texture. *Texture* is the term used to describe the composite sizes of particles in a soil sample, typically several representative handrails. To measure soil texture, the sand, silt, and clay particles are sorted out by size and weight. The weights of each size are then expressed as a percentage of the sample weight.

In the field, soil texture can be estimated by extracting a handful of sod and squeezing the damp soil into three basic shapes; (1) cast, a lump formed by squeezing a sample in a clenched fist; (2) thread, a pencil shape formed by rolling soil between the palms; and (3) ribbon, a flattish shape formed by squeezing a small sample between the thumb and index finger. The behavioral characteristics of the soil when molded into each of these shapes if they can be formed at all, provides the basis for a general textural classification. The behavior of the soil in the hand test is determined by the amount of clay in the sample. Clay particles are highly cohesive, and when dampened, behave as a plastic. Therefore the higher the clay content in a sample, the more refined and durable the shapes into which it can be molded.

Another method of determining soil texture involves the use of devices called sediment sieves, screens built with a specified mesh size. When the soil is filtered through a group of sieves, each with a different mesh size, the particles become grouped in corresponding size categories. Each category can be weighed to make a textural determination. Although sieves work well for silt, sand, and larger particles, they are not appropriate for clay particles. Clay is far too small to sieve accurately; therefore, in soils with a high proportion of clay, the fine particles are measured on the basis of their settling velocity when suspended in water. Since clays settle so slowly, they are easily segregated from sand and silt. The water can be drawn off and evaporated, leaving a residue of clay, which can be weighed

Questions 34-43

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A number of factors related to the voice reveal the personality of the speaker.

Line The first is the broad area of communication, which includes imparting information by use of language, communicating with a group or an individual, and specialized communication through performance. A person conveys thoughts and ideas through choice of words, by a tone of voice that is pleasant or unpleasant, gentle or harsh, by the rhythm that is inherent within the language itself, and by speech rhythms that are flowing and regular or uneven and hesitant, and finally, by the pitch and melody of the utterance. When speaking before a group, a person's tone may indicate unsureness or fright, confidence or calm. At interpersonal levels, the tone may reflect ideas and feelings over and above the words chosen, or may belie them. Here the conversant's tone can consciously or unconsciously reflect intuitive sympathy or antipathy, lack of concern or interest, fatigue, anxiety, enthusiasm or excitement, all of which are usually discernible by the acute listener. Public performance is a manner of communication that is highly specialized with its own techniques for obtaining effects by voice and / or gesture. The motivation derived from the text, and in the case of singing, the music, in combination with the performer's skills, personality, and ability to create empathy will determine the success of artistic, political, or pedagogic communication.

Second, the voice gives psychological clues to a person's self-image, perception of others, and emotional health. Self-image can be indicated by a tone of voice that is confident, pretentious, shy, aggressive, outgoing, or exuberant, to name only a few personality traits. Also the sound may give a clue to the facade or mask of that person, for

example, a shy person hiding behind an overconfident front. How a speaker perceives the listener's receptiveness, interest, or sympathy in any given conversation can drastically alter the tone of presentation, by encouraging or discouraging the speaker. Emotional health is evidenced in the voice by free and melodic sounds of the happy, by constricted and harsh sound of the angry, and by dull and lethargic qualities of the depressed.

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Line

As the twentieth century began, the importance of formal education in the United States increased. The frontier had mostly disappeared and by 1910 most Americans lived in towns and cities. Industrialization and the bureaucratization of economic life combined with a new emphasis upon credentials and expertise to make schooling increasingly important for economic and social mobility. Increasingly, too, schools were viewed as the most important means of integrating immigrants into American society.

The arrival of a great wave of southern and eastern European immigrants at the turn of the century coincided with and contributed to an enormous expansion of formal schooling. By 1920 schooling to age fourteen or beyond was compulsory in most states, and the school year was greatly lengthened. Kindergartens, vacation schools, extracurricular activities, and vocational education and counseling extended the influence of public schools over the lives of students, many of whom in the larger industrial cities were the children of immigrants. Classes for adult immigrants were sponsored by public schools, corporations, unions, churches, settlement houses, and other agencies.

Reformers early in the twentieth century suggested that education programs should suit the needs of specific populations. Immigrant women were one such population. Schools tried to educate young women so they could occupy productive places in the urban industrial economy, and one place many educators considered appropriate for women was the home.

Although looking after the house and family was familiar to immigrant women, American education gave homemaking a new definition. In preindustrial economies, homemaking had meant the production as well as the consumption of goods, and it commonly included income-producing activities both inside and outside the home, in the highly industrialized early-twentieth-century United States, however, overproduction rather than scarcity was becoming a problem. Thus, the ideal

American homemaker was viewed as a consumer rather than a producer. Schools trained women to be consumer homemakers cooking, shopping, decorating, and caring for children "efficiently" in their own homes, or if

economic necessity demanded, as employees in the homes of others. Subsequent reforms have made these notions seem quite out-of-date.