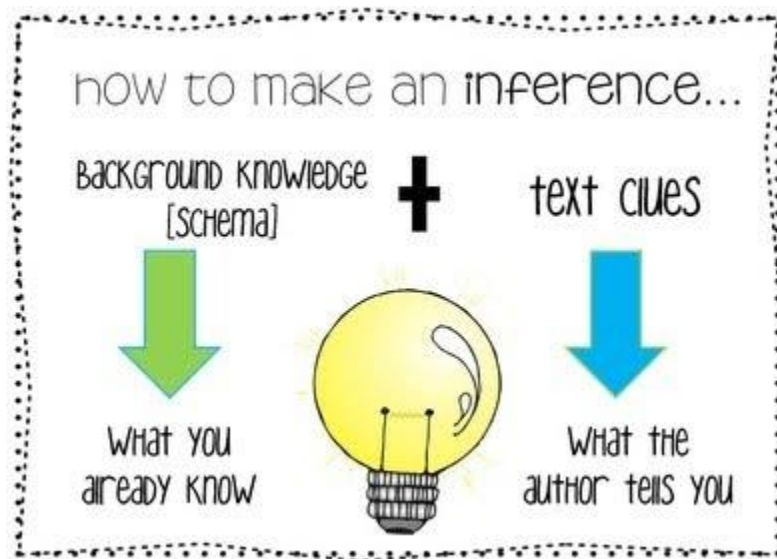


LESSON 5



COMPREHENSION STRATEGY: Inference

Inference: A logical conclusion you draw about something by using the information you already have about it.



Read the following passages and choose the best answer.

TEXT 1

Most economists seem captivated by the spell of the free market. Consequently, nothing seems good or normal that does not accord with the requirements of the free market. A price that is determined by the seller or for that matter, established by anyone other than the aggregate of consumers seems pernicious. Accordingly, it requires a major act of will to think of price fixing (the determination of prices by the seller) as both “normal” and having a valuable economic function. In fact, price-fixing is normal in all industrialized societies because the industrial system itself provides, as an effortless consequence of its own development, the price-fixing that requires. Modern industrial planning requires and rewards great size.

Hence a comparatively small number of large firms will be competing for the same group of consumers. That each large firm will act with consideration of its own needs and thus avoid selling its products for more than its competitors charge is commonly recognized by advocates of free-markets economic theories. But each large firm will also act with full consideration of the needs that it has in common with the other large firms competing for

the same customers. Each large firm will thus avoid significant price cutting, because price cutting would be prejudicial to the common interest in a stable demand for products. Most economists do not see price-fixing when it occurs because they expect it to be brought about by several explicit agreements among large firms; it is not.

Moreover, those economists who argue that allowing the free market to operate without interference is the most efficient method of establishing prices have not considered the economies of non-socialist countries other than the United States. These economies employ intentional price-fixing usually in an overt fashion. Formal price fixing by cartel and informal price fixing by agreements covering the members of an industry are commonplace.

If there were something peculiarly efficient about the free market and inefficient about price fixing, the countries that have avoided the first and used the second would have suffered drastically in their economic development. There is no indication that they have. Socialist industry also works within a framework of controlled prices. In early 1970's, the Soviet Union began to give firms and industries some of the flexibility in adjusting prices that a more informal evolution has accorded the capitalist system. Economists in the United States have hailed the change as a return to the free market. But Soviet firms are no more subject to prices established by free market over which they exercise little influence than are capitalist firms.

It can be inferred from the author's argument that a price fixed by the seller "seems pernicious" because...

- a. people do not have confidence in large firms.
- b. people do not expect the government to regulate prices.
- c. most economists believe that consumers as a group should determine prices.
- d. most economists associate fixed prices with communist and socialist economies.

TEXT 2

Railroads reshaped the North American environment and reoriented North American behavior. "In a quarter of a century", claimed the *Omaha Daily Republican* in 1883, "they have made the people of the United States homogeneous, breaking through the peculiarities and provincialisms which marked separate and unmingling sections."

The railroad simultaneously stripped the landscape of the natural resources, made velocity of transport and economy of scale necessary parts of industrial production, and carried consumer goods to households; it dispatched immigrants to unsettled places, drew emigrants away from farms and villages to cities, and sent men and guns to battle. It standardized time and travel, seeking to annihilate distance and space by allowing movement at any time and in any season or type of weather. In its grand and impressive terminals and stations, architects recreated historic Roman temples and public baths, French chateaus and Italian bell towers—edifices that people used as stages for many of everyday life's high emotions: meeting and parting, waiting and worrying, planning new starts or coming home.

Passenger terminals, like the luxury express trains that hurled people over spots, spotlight the romance of railroading. (The twentieth-Century Limited sped between Chicago and New York in twenty hours by 1915). Equally important to everyday life were the slow freight trans chugging through industrial zones, the morning and evening commuter locals shuttling back and forth between suburban and urban terminals, and the incessant comings and goings that occurred in the classifications, or switching, yards.

Moreover, in addition to its being a transportation pathway equipped with a mammoth physical plant of tracks signals, crossings, bridges, and junctions, plus telegraph and telephone lines the railroad nurtured factory complexes, coal piles, warehouses, and generating stations, forming along its right-of-way what has aptly been called "the metropolitan corridor" of the American landscape.

It can be inferred from the quote from the *Omaha Daily Republican* that railroads...

- a. made all sections of the nation much wealthier.
- b. brought more unity to what had been a fragmented nation.
- c. reduced dependence on natural resources.
- d. had no effect on the environment of the United States.

TEXT 3

Often enough the craft worker's place of employment in ancient Greece was set in rural isolation. Potter, for instance, found it convenient to locate their workshops near their source of clay, regardless of its relation to the center of settlement. At Corinth and Athens, however, two of the best-known potters' quarters were situated on the cities' outskirts, and potters and makers of terra-cotta figurines were also established well within the city of Athens itself. The techniques of pottery manufacture had evolved well before the Greek period, but marked stylistic developments occurred in shape and in decoration, for example, in the interplay of black and other glazes with the red surface of the fired pot.

Athenian black-figure and red-figure decoration, which emphasized human figures rather than animal images, was adopted between 630 and 530 B.C.; its distinctive color and luster were the result of the skillful adjustments of the kiln's temperature during an extended three-stage period of firing the clayware. Whether it was the potters or the vase-painters who initiated changes in firing is unclear; the functions of making and decorating were usually divided between them, but neither group can have been so specialized since they did not share in the concerns of the other.

The broad utility of terra-cotta was such that workers in clay could generally afford to confine themselves to either decorated ware and housewares like cooking pots and storage jars or building materials like roof tiles and drainpipes. Some sixth- and fifth-century B.C.

Athenian pottery establishments are known to have concentrated on a limited range of fine ware, but a rural pottery establishment on the island of Thasos produced many types of pottery and roof tiles too, presumably to meet local demand. Molds were used to create particular effects for some products, such as relief-decorated vessels and figurines; for other products such as roof tiles, which were needed in some quantity, they were used to facilitate mass production. There were also a number of poor-quality figurines and painted pots produced in quantity by easy, inexpensive means- as numerous featureless statuettes and unattractive cases testify.

It can be inferred from the passage that most pottery establishments in ancient Greece were situated...

- a. in city centers.
- b. on the outskirts of cities.
- c. where clay could be found.
- d. near other potters' workshops.

It can be inferred from the passage that terra-cotta had which of the following advantages"

- a. It did not break during the firing process.
- b. It was less expensive than other available materials.
- c. Its surface had a lasting shine.
- d. It could be used for many purposes.

TEXT 4

The railroad industry could not have grown as large as it did without steel. The first rails were made of iron. But iron rails were not strong enough to support heavy trains running at high speeds. Railroad executives wanted to replace them with steel rails because steel was ten or fifteen times stronger and lasted twenty times longer. Before the 1870's, however, steel was too expensive to be widely used. It was made by a slow and expensive process of heating, stirring, and reheating iron ore.

Then the inventor Henry Bessemer discovered that directing a blast of air at melted iron in a furnace would burn out the impurities that made the iron brittle. As the air shot, through the furnace, the bubbling metal would erupt in showers of sparks. When the fire cooled, the metal had been changed, or converted, to steel. The Bessemer converter made possible the mass production of steel. Now three to five tons of iron could be changed into steel in a matter of minutes.

Just when the demand for more and more steel developed, prospectors discovered huge new deposits of iron ore in the Mesabi Range, a 120-mile-long region in Minnesota near Lake Superior. The Mesabi deposits were so near the surface that they could be mined with steam' shovels.

Barges and steamers carried the iron ore through Lake Superior to depots on the southern shores of Lake Michigan and Lake Erie. With dizzying speed Gary, Indiana, and Toledo, Youngstown, and Cleveland, Ohio, became major steel-manufacturing centers. Pittsburgh was the greatest steel city of all.

Steel was the basic building material of the industrial age. Production skyrocketed from seventy-seven thousand tons in 1870 to over eleven million tons in 1900.

It can be inferred from the passage that the mass production of steel caused...

- a. a decline in the railroad industry.
- b. a revolution in the industrial world.
- c. an increase in the price of steel.
- d. a feeling of discontent among steel workers.

TEXT 5

The history of clinical nutrition, or the study of the relationship between health and how the body takes in and utilizes food substances, can be divided into four distinct eras: the first began in the nineteenth century and extended into the early twentieth century when it was recognized for the first time that food contained constituents that were essential for human function and that different foods provided different amounts of these essential agents. Near the end of this era, research studies demonstrated that rapid weight loss was associated with nitrogen imbalance and could only be rectified by providing adequate dietary protein associated with certain foods.

The second era was initiated in the early decades of the twentieth century and might be called "the vitamin period." Vitamins came to be recognized in foods, and deficiency syndromes were described. As vitamins became recognized as essential food constituents necessary for health, it became tempting to suggest that every disease and condition for which there had been no previous effective treatment might be responsive to vitamin therapy. At that point in time, medical schools started to become more interested in having their curricula integrate nutritional concepts into the basic sciences. Much of the focus of this education was on the recognition of vitamin deficiency symptoms. Herein lay the beginning of what ultimately turned from ignorance to denial of the value of nutritional therapies in medicine. Reckless claims were made for effects of vitamins that went far beyond what could actually be achieved from the use of them.

In the third era of nutritional history in the early 1950's to mid-1960's, vitamin therapy began to fall into disrepute. Concomitant with this, nutrition education in medical schools also became less popular. It was just a decade before this that many drug companies had found their vitamin sales skyrocketing and were quick to supply practicing physicians with generous samples of vitamins and literature extolling the virtue of supplementation for a variety of health-related conditions. Expectations as to the success of vitamins in disease control were exaggerated. As is known in retrospect, vitamin and mineral therapies are much less effective when applied to health-crisis conditions than when applied to long-term problems of under nutrition that lead to chronic health problems.

It can be inferred from the passage that which of the following discoveries was made during the first era in the history of nutrition?

- a. Protein was recognized as an essential component of diet.
- b. Vitamins were synthesized from foods.
- c. Effective techniques of weight loss were determined.
- d. Certain foods were found to be harmful to good health.

It can be inferred from the passage that medical schools began to teach concepts of nutrition in order to...

- a. convince medical doctors to participate in research studies on nutrition.
- b. encourage medical doctors to apply concepts of nutrition in the treatment of disease.
- c. convince doctors to conduct experimental vitamin therapies on their patients.
- d. support the creation of artificial vitamins.

TEXT 6

Iron production was revolutionized in the early eighteenth century when coke was first used instead of charcoal for refining iron ore. Previously the poor quality of the iron had restricted its use in architecture to items such as chains and tie bars for supporting arches, vaults, and walls. With the improvement in refining ore, it was now possible to make cast-iron beams, columns, and girders. During the nineteenth century further advances were made, notably Bessemer's process for converting iron into steel, which made the material more commercially viable.

Iron was rapidly adopted for the construction of bridges, because its strength was far greater than that of stone or timber, but its use in the architecture of buildings developed more slowly. By 1800 a complete internal iron skeleton for buildings had been developed in industrial architecture replacing traditional timber beams, but it generally remained concealed. Apart from its low cost, the appeal of iron as a building material lay in its strength, its resistance to fire, and its potential to span vast areas. As a result, iron became increasingly popular as a structural material for more traditional styles of architecture during the nineteenth century, but it was invariably concealed.

Significantly, the use of exposed iron occurred mainly in the new building types spawned by the Industrial Revolution: in factories, warehouses, commercial offices, exhibition hall, and railroad stations, where its practical advantages far outweighed its lack of status. Designers of the railroad stations of the new age explored the potential of iron, covering huge areas with spans that surpassed the great vaults of medieval churches and cathedrals. Paxton's Crystal Palace, designed to house the Great Exhibition of 1851, covered an area of 1.848 feet by 408 feet in prefabricated units of glass set in iron frames.

The Paris Exhibition of 1889 included both the widest span and the greatest height achieved so far with the Halle Des Machines, spanning 362 feet, and the Eiffel Tower 1,000 feet high. However, these achievements were mocked

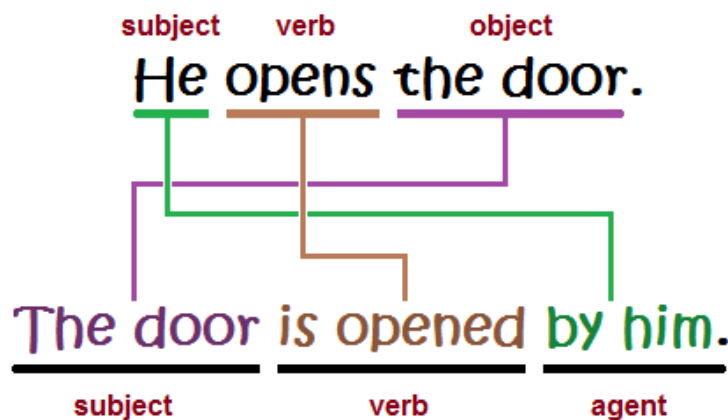
by the artistic elite of Paris as expensive and ugly follies. Iron, despite its structural advantages, had little aesthetic status. The use of an exposed iron structure in the more traditional styles of architecture was slower to develop.

It can be inferred that the delayed use of exposed iron structures in traditional styles of architecture is best explained by the...

- a. impracticality of using iron for small, noncommercial buildings.
- b. association of iron architecture with the problems of the Industrial Revolution.
- c. general belief that iron offered less resistance to fire and harsh weather than traditional materials.
- d. general perception that iron structures were not aesthetically pleasing.



GRAMMAR TOPIC: Passive Voice



Function: The passive voice is used when the focus is on the action rather than on who or what performs the action.



Read the following text, and then do the activities that follow.

If food **is allowed** to stand for some time, it putrefies. When the putrefied material **is examined** microscopically, it **is found** that is teeming with bacteria. Where do these bacteria come from, since they **are not seen** in fresh food? Even until the mid-nineteenth century, many people believed that such microorganisms originated by spontaneous generation, a hypothetical process by which living organisms develop from nonliving matter.

The most powerful opponent of the theory of spontaneous generation was the French chemist and microbiologist Louis Pasteur (1822-1895). Pasteur showed that structures present in air closely resemble the microorganisms seen in putrefying materials. He did this by passing air through guncotton filters, the fibers of which stop solid particles. After the guncotton **was dissolved** in a mixture of alcohol and ether, the particles that it had trapped fell to the bottom of the liquid and **were examined** on a microscope slide. Pasteur found that in ordinary air there exists a variety of solid structures ranging in size from 0.01 mm to more than 1.0 mm. Many of these bodies resembled the reproductive structures of common molds, single-celled animals, and various other microbial cells.

As many as 20 to 30 of them **were found** in fifteen liters of ordinary air, and they **could not be distinguished** from the organisms found in much larger numbers in putrefying materials, Pasteur concluded that the organisms found

in putrefying materials originated from the organized bodies present in the air. He postulated that these bodies **are** constantly **being deposited** on all objects.

Pasteur showed that if a nutrient solution **was sealed** in a glass flask and heated to boiling to destroy all the living organisms contaminating it, it never putrefied. The proponents of spontaneous generation declared that fresh air was necessary for spontaneous generation and that the air inside the sealed flask **was affected** in some way by heating so that it would no longer support spontaneous generation. Pasteur constructed a swan-necked flask in which putrefying materials **could be heated** to boiling, but air could reenter. The bends in the neck prevented microorganisms from getting in the flask. Material sterilized in such a flask did not putrefy.



The highlighted verbs in the text are examples of Passive Voice. Identify at least one example of passive voice in the following tenses. Use the grammar booklet to solve this exercise.

TENSE	EXAMPLE
Simple Present	
Simple Past	
Present Continuous	
Modal Verb	



2) The agent is not found in the following passive voice sentences. Can you infer who performs the action in these sentences? Use the grammar booklet to solve this exercise.

SENTENCE FROM THE TEXT	AGENT INFERRED
If food is allowed to stand for some time, it putrefies.	<i>los consumidores</i>
When the putrefied material is examined microscopically, it is found that is teeming with bacteria.	
Where do these bacteria come from, since they are not seen in fresh food?	
After the guncotton was dissolved in a mixture of alcohol and ether, the particles that it had trapped fell to the bottom of the liquid and were examined on a microscope slide.	
As many as 20 to 30 of them were found in fifteen liters of ordinary air, and they could not be distinguished from the organisms found in much larger numbers in putrefying materials, Pasteur concluded (...)	

He postulated that these bodies are constantly being deposited on all objects.	
Pasteur showed that if a nutrient solution was sealed in a glass flask and heated to boiling to destroy all the living organisms contaminating it (...)	
Pasteur constructed a swan-necked flask in which putrefying materials could he heated to boiling (...)	



REVISION TOPIC 1: Prepositions in Relative Clauses

The relative pronouns which and whom can function as the object of a preposition, as the examples set below:

the room **in which** we are staying
 an achievement **of which** I am very proud
 the man **with whom** she has an affair
 the report **to which** he is referring

However this use sounds rather formal, and it is much more common to place the preposition towards the end of the clause rather than before the relative pronoun, as in e.g.:

the room **which** we are staying **in**
 an achievement **which** I am very proud **of**
 the man **who** she has an affair **with**
 the report **which** he is referring **to**



Translate the following sentences from the text. All of them have a preposition in a relative clause before the relative pronoun or after the clause.

- Even until the mid-nineteenth century, many people believed that such microorganisms originated by spontaneous generation, a hypothetical process by which living organisms develop from nonliving matter.

.....

- He did this by passing air through guncotton filters, the fibers of which stop solid particles.

.....

- Pasteur constructed a swan-necked flask in which putrefying materials could be heated to boiling, but air could reenter.
-

Not in the text

- The jungle the tribe lived in was full of strange and unusual animals.
-

- He liked the people that he lived with.
-

- The tree under which they had their picnic was the largest and oldest in the park.
-

- To the east of the city was a lake that many people went to on the weekend.
-

- The person with whom he is negotiating is the chairman of a large company.
-

- It is a society to which many important people belong.
-



REVISION TOPIC 2: Indefinite Relative Pronouns

When it doesn't matter how, what, when, etc., we add -ever to wh-words like how, what, which, when, where and who, and we change their meaning.

<p>However</p> <p>Any way at all or It doesn't matter how</p> <p><i>Example</i></p> <p><i>However</i> you look at it, it's going to cost a lot.</p> 	<p>Whatever</p> <p>Anything at all or It doesn't matter what</p> <p><i>Example</i></p> <p><i>Whatever</i> you do, try your best.</p> 
<p>Whoever</p> <p>Any person at all or It doesn't matter who</p> <p><i>Example</i></p> <p><i>Whoever</i> made this cake is a real artist.</p> 	<p>Whichever</p> <p>Any one at all or It doesn't matter which</p> <p><i>Example</i></p> <p><i>Whichever</i> day you come, we will be pleased to see you.</p> 
<p>Whenever</p> <p>Any time at all or It doesn't matter when</p> <p><i>Example</i></p> <p><i>Whenever</i> I go to London I feel like a provincial.</p> 	<p>Wherever</p> <p>Any place at all or It doesn't matter where</p> <p><i>Example</i></p> <p><i>Wherever</i> we are going, it doesn't matter as long as we're together.</p> 

Whatsoever: It is an emphatic form of *whatever*. It is most common after a negative phrase. Eg. He seems to have no ambitions whatsoever.



Translate the following sentences.

- However you try to explain it, I still can't understand it.

.....

- Please take whatever you want from the fridge if you feel hungry.

.....

- Whatever you do, don't lose this key.

.....

- Choose whichever time suits you best then write your name against that time on the list.

.....

- I can see no reason whatsoever why she should not attend classes.

.....

- Call in whenever you like. I'm always at home.

.....

- Wherever you live, you have the right to a good postal service.

.....

- Whoever you ask, you will get the same answer: no.

.....

WELL DONE!

Answers will be available next week!