

ECAT Pre General Science English Chapter 8 Comprehension

Sr	Questions	Answers Choice
1	<p>Chocolate – there’s nothing quite like it, is there? Chocolate is simply delicious. What is chocolate? Where does it come from?</p> <p>Christopher Columbus was probably the first to take cacao beans from the New World to Europe in around 1502. But the history of chocolate goes back at least 4,000 years! The Aztecs, who lived in America, through that their bitter cacao drink was a divine gift from heaven. In fact, the scientist Carolus Linnaeus named the plant Theobroma, which means “food of the gods”</p> <p>The Spanish explorer Hernando Cortez went to America in 1519. He visited the Mexican emperor Montezuma. He saw that Montezuma drank cacao mixed with vanilla and spices. Cortez took some cacao home as a gift to the Spanish King Charles. In Spain, people began to drink Cortez’s chocolate in drink with chili peppers. However, the natural taste of cacao was too bitter for most people. To sweeten the drink, Europeans added sugar to the cacao drink. As a sweet drink, it became more popular. By the 17th century, rich people in Europe were drinking it.</p> <p>Later, people started using chocolate in pastries, like pies and cakes. In 1828, Dutch chocolate makers started using a new process for removing the fat from cacao beans, and getting to the center of the cacao bean. The Dutch chocolate maker Conrad J. Van Houten made a machine that pressed the fat from the bean. The resulting powder mixed better with water than cacao did. Now, some call van Houten’s chocolate “Dutch chocolate.”</p> <p>It was easy to mix Dutch chocolate powder with sugar. So other chocolate makers started trying new recipes that used powdered chocolate. People started mixing sweetened chocolate with cocoa butter to make solid chocolate bars. In 1849, an English chocolate maker made the first chocolate bar. In the 19th century, the Swiss started making milk chocolate by mixing powdered milk with sweetened chocolate. Milk chocolate has not changed much since this process was invented.</p> <p>Today, two countries – Brazil and Ivory Coast – account for almost half the world’s chocolate. The United States imports most of the chocolate in the world, but the Swiss eat the most chocolate per person. The most chocolate eaten today is sweet milk chocolate, but people also eat white chocolate and dark chocolate.</p> <p>Cocoa and dark chocolate are believed to help prevent heart attacks, or help keep from happening. They are supposed to be good for the circulatory system. On the other hand, the high fat content of chocolate can cause weight gain, which is not good for people’s health. Other health claims for chocolate have not been proven, but some research shows that chocolate could be good for the brain.</p> <p>Chocolate is a popular holiday gift. A popular Valentine’s Day gift is a box of chocolate candies with a card and flowers. Chocolate is sometimes given for Christmas and birthdays. Chocolate eggs are sometimes given at Easter.</p> <p>Chocolate is toxic to some animals. An ingredient in chocolate is poisonous to dogs, cats, parrots, small rodents, and some livestock. Their bodies cannot process some of the chemicals found in chocolate. Therefore, they should never be fed chocolate.</p> <p>Who made the first powdered chocolate?</p>	<p>A. Cortez B. Linnaeus C. Columbus D. Van Houten</p>
2	<p>Q.3 Democratic societies from the earliest times have expected their governments to protect the weak against the strong No era of good feeling can justify discharging the police force or giving up the idea of public control over concentrated private wealth On the other hand it is obvious that a spirit of self denial and moderation on the part of those who hold economic power will greatly soften the demand for absolute equality Men are more interested in freedom and security than in an equal distribution of wealth the extent to which Government must interfere with business therefore is not exactly measured by the extent to which economic power is concentrated into few hands The required degree of government interference depends mainly on whether economic powers are oppressively used and on the necessity of keeping economic factors in a tolerable state of balance However with the necessity of meeting all these dangers and threats to liberty the powers of government are</p>	<p>A. Unhappy with the rich people B. More interested in freedom and security C. Unhappy with their lot D. Clamorous for absolute equality</p>

unavoidably increased whichever political party may be in office. The growth of government is a necessary result of the growth of technology and of the problems that go with the use of machines and science since the Government in our nation must take on more powers to meet its problems there is no way to preserve freedom except by making democracy more powerful.

b. A spirit of moderation on the economically sound people would make the less privileged

D. Guarantueess for absolute equality

3

The purpose of education is to make the student an expert in his subject. This must be clearly understood, and mere mudding through lessons and lectures and books and passing examinations are relegated to secondary importance as means to the end-which is excellence in the field chosen.

But there are so many fields, and no man can become an expert in all the fields it is necessary to decide which fields are important ones that a man should know well.

It is clear that one's own work is the most important. This has been realized and modern civilization has accordingly provided vocational education. It is now possible to acquire high professional skill in the various fields, medicine, engineering production, commerce and so on-but with good and bad mixed together, and no standard for guidance.

The modern civilization has provided:

- A. Vocational education
- B. Art of conversation
- C. Adult education
- D. Higher education

4

What do you do with your orange peels and corn cobs after you are done eating? Most people throw them in the trash can. But food leftovers do not have to go into the trash. They are biodegradable, which means that they can be broken down by bacteria into natural materials. People who like to garden often put their fruit and vegetable scraps in a special place known as a compost pile. A compost pile is a spot outdoors where food waste can break down into compost, which gardeners use. This process takes several months. Once the compost is created, people spread this mixture in their gardens to add nutrients to the soil. The compost in the soil helps new plants grow in the garden. How do you take care of a compost pile? It needs air, water, and heat. Bacteria and other microorganisms break down the food waste into more basic elements like water and carbon dioxide. This process requires oxygen, so people use a shovel to turn compost regularly and help air reach all parts of the pile. The pile cannot dry out, so it could be covered to keep moisture in. Finally, heat speeds up the process. This means a compost pile should be in the sun for at least part of the day. Food leftovers are not the only things that turn into compost. You can also add yard waste like grass clippings, dried leaves, and straw. In fact, you should add these things to create a healthy balance in your compost. But do not add any weeds to your compost pile unless you want to grow weeds in your garden. Sometimes seeds are left behind in the compost. This can be a welcome surprise if you find a tomato plant sprouting where you had not planted one. The tomato seed was hiding in the compost, waiting to begin a new life in the garden.

Question:

Gardeners use compost to

- A. reduce the amount of trash on the planet
- B. break down food waste
- C. add nutrients to the soil
- D. take care of bacteria and other microorganisms

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Q.5 Recent advances in science and technology have made it possible for geneticists to find out abnormalities in the unborn foetus and take remedial action to rectify some defects which would otherwise prove to be fatal to the child. Though genetic engineering is still at its infancy, a scientist can now predict with greater accuracy a genetic disorder. It is not yet an exact science since they are not in a position to predict when exactly a genetic disorder will set in. While they have not yet been able to change the genetic order of the gene in germs they are optimistic and are holding out that in the near future they might be successful in achieving this feat they have however acquired the ability in manipulating tissue cells. However genetic mis-information can sometimes be damaging for it may adversely affect people psychologically. Genetic information may lead to a tendency to brand some people as inferiors. Genetic information can therefore be abused and its application in deciding the sex of the foetus and its subsequent abortion is now hotly debated on ethical lines but on this issue geneticists cannot be squarely blamed though this charge has often been leveled at them it is mainly a societal problem. At present genetic engineering is a costly process of detecting disorders but scientists hope to reduce the costs when technology becomes more advanced. This is why much progress in this area has been possible in scientifically advanced and rich countries like the U.S.A, U.K and Japan. It remains to be seen if in the future this science will lead to the development of a race of supermen or will be able to obliterate disease from this world.

n. According to the author the present state of knowledge about heredity has made geneticists

- A. Introspective
- B. Accusative
- C. Arrogant
- D. Optimistic

The history of the modern world is a record of highly varied activity, of incessant change, and of astonishing achievement. The lives of men have, during the last few centuries, increasingly diversified, their powers have greatly multiplied, their horizons have been enormously enlarged. New interests have arisen in rich profusion to absorb attention and to provoke exertion. New aspirations and new emotions have come to move the soul of men. Amid all the bewildering phenomena, interest, in particular, has stood out in clear and growing pre-eminence, has expressed itself in a multitude of ways and with an emphasis more and more pronounced, namely, the determination of the race to gain a larger measure of freedom than it has ever known before, freedom in the life of the intellect and spirit,

6 freedom in the realm of government and law, freedom in the sphere of economic and social relationship. A passion that has prevailed so widely, that has transformed the world so greatly, and is still transforming it, is one that surely merits study and abundantly rewards it, its operations constitute the very pith and marrow of modern history.

- A. In the economic sphere
- B. In larger control of the forces of nature
- C. Increasing accumulation of knowledge in different fields of human activity
- D. All of these

Not that this passion was unknown to the long ages that preceded the modern periods. The ancient Hebrews, the ancient Greeks and Roman blazed the way leaving behind them a precious heritage of accomplishments and suggestions and the men who were responsible for the Renaissance of the fifteenth century and the Reformation of the sixteenth century contributed their imperishable part to this slow and difficult emancipation of the human race. But it is in modern times the pace and vigour, the scope and sweep of this liberal movement have so increased unquestionably as to dominate the age, particularly the last three centuries that have registered great triumphs of spirit.

In what areas do you think have the powers of men greatly multiplied during the last few centuries?

7 Q.4 Educational planning should aim at meeting the educational needs of the entire population of all age groups while the traditional structure of education as a three layer hierarchy from the primary stage to the university represents the core we should not overlook the periphery which is equally important Under modern conditions workers need to rewind or renew their enthusiasm or strike out in a new direction or improve their skills as much as any university professor the retired and the aged have their needs as well Educational planning in their words should take care of the needs of everyone. Our structures of education have been built up on the assumption that there is a terminal point to education This basic defect has become all the more harmful today. A UNESCO report entitled Learning to be prepared by Edgar Faure and others in 1973 asserts that the education of children must prepare the future should consist of modules with different kinds of functions serving a diversity of constituent And performance not the period of study should be the basis for credentials the writing is already on the wall In view of the fact that the significance of a commitment of lifelong learning and lifetime education is being discussed only in recent years even in educationally advanced countries the possibility of the idea becoming an integral part of the idea becoming an integral part of educational thinking seems to be a far cry For to move in that direction means such more than some simple rearrangement of the present organization of education but a good beginning can be made by developing open university programs for older learners of different categories and introducing extension services in the conventional colleges and schools also these institutions should learn to cooperate with the numerous community municipal recreational programs health services etc.

- A. As old as traditional education
- B. Still in formative stages
- C. In vogue in advanced countries
- D. Not practical

i. According to the author the concept of lifetime education is

8 In the early 1920's, settlers came to Alaska looking for gold. They traveled by boat to the coastal towns of Seward and Knik, and from there by land into the gold fields. The trail they used to travel inland is known today as the Iditarod Trail, one of the National Historic Trails designated by the congress of the United States. The Iditarod Trail quickly became a major thoroughfare in Alaska, as the mail and supplies were carried across this trail. People also used it to get from place to place, including the priests, ministers, and judges who had to travel between villages down this trail was via dog sled. Once the gold rush ended, many gold-seekers went back to where they had come from, and suddenly there was much less travel on the Iditarod Trail. The introduction of the airplane in the late 1920's meant dog teams were mode of transportation, of course airplane carrying the mail and supplies, there was less need for land travel in general. The final blow to the use of the dog teams was the appearance of snowmonies. By the mid 1960's most Alasknas didn't even know the Iditarod Trail existed, or that dos teens had played a crucial role in Alaska's early settlements.

Dorothy G. Page, a self-made historian, recognized how few people knew about the former use of sled dogs as working animals and about the Iditarod Trail's role in Alaska's colorful history. To she came up with the idea to have a dog sled race over the Iditarod Trail. She presented her idea to an enthusiastic musher, as dog sled drivers are known, named Joe Redington, Sr. Soon the pages and the Redintons were working together to promote the idea of the Iditarod race. Many people worked to make the first Iditarod Trail Sled Dog Race a reality in 1967. The Aurora Dog Mushers Club, along with men from the Adult Camp in Sutton, helped clear years of overgrowth from the first nine miles of the Iditarod Trail. To raise interest in the race, a \$25,000 purse was offered, with Joe Redington donating one acre of his land to help raise the funds. The short race, approximately 27 miles long, was put on a second time in 1969. After these first two successful races, the goal was to lengthen the race a little further to the ghost town of Iditarod by 1973. However in 1972, the U.S. Army reopened the trail as a winter exercise, and so in 1973, the decision was made to take the race all the way to the city of Nome-over 1,000 miles. There were who believed it could bot be done and that it was crazy to send a bunch out into vast, uninhabited Alaskan wilderness. But the race went! 22 mushers finished that year, and to date over 400 people have completed it.

- A. More modern forms of transportation
- B. Depleted gold mines
- C. Highway routes to ghost towns
- D. Reduced demand for land travel

Based on information in the passage, it can be inferred that all of the following contributed to the disuse of the Iditarod Trail except

When we are young, we learn that tigers and sharks are dangerous animals. We might be scared of them because they are big and powerful. As we get older, however, we learn that sometimes the most dangerous animals are also the smallest animals. In fact, the animal that kills the most people every year is one that you have probably killed yourself many times: the mosquito.

While it may seem that all mosquitoes are biters, this is not actually the case. Male mosquitoes eat plant nectar. On the other hand, female mosquitoes feed on animal blood. They need this blood to live and produce eggs. When a female mosquito bites a human being, it transmits a small amount of saliva into the blood. The saliva may or may not contain a deadly disease. The result of the bite can be as minor as an itchy bump or as serious as death.

Because a mosquito can bite many people in the course of its life, it can carry diseases from one person to another very easily. Two of the most deadly diseases carried by mosquitoes are malaria and yellow fever. More than 700 million people become sick from these diseases every year. At least 2 million of these people will die from these diseases.

- 9 Many scientists are working on safer and better ways to kill mosquitoes, but so far, there is no sure way to protect everyone in the world from their deadly bites. Mosquito nests can be placed over beds to protect people against being bitten. These nets help people stay safe at night, but they do not kill any mosquitoes. Mosquitoes have many natural enemies like bats, birds, dragonflies, and certain kinds of fish. Bringing more of these animals into places where mosquitoes live might help to cut down the amount of mosquitoes in that area. This is a natural solution, but it does not always work very well. Mosquitoes can also be killed with poisons or sprays. Even though these sprays kill mosquitoes, they may also harm other plants or animals.

- A. I only
- B. I and II only
- C. II and III only
- D. I, II, and III

Although mosquitoes may not seem as scary as larger, more powerful animals, they are far more dangerous to human beings. But things are changing. It is highly likely that one day scientists will find a way to keep everyone safe from mosquitoes and the diseases they carry.

Based on the information in paragraph 2, we can understand that

- I male mosquitoes and female mosquitoes have different eating habits
- II male mosquitoes are harmless to humans
- III female mosquitoes are responsible for transmitting disease to humans

This is the age of machine. Machines are everywhere, in the fields, in the factory, in the home, in the street, in the city, in the country, everywhere. To fly, it is not necessary to have wings; there are machines. To swim under the sea, it is not necessary to have gills; there are machines. To kill our fellowmen in overwhelming numbers, there are machines. Petrol machines alone provide ten times more power than all human beings in the world. In the busiest countries, each individual has six hundred human slaves in his machines.

- 10 What are the consequences of this abnormal power? Before the war, it looked as though it might be possible, for the first time in history to provide food and clothing and shelter for the teeming population of the world—every man, woman and child. This would have been the greatest triumphs of science. And yet, if you remember, we saw the world crammed, full of food and people hungry. Today, the leaders are bare and millions, starving. That's more begin to hum, are we going to see again more and more food, and people still hungry? For the goods, it makes the goods, but avoids the consequences.

- A. Machine
- B. Animal husbandry
- C. Agriculture
- D. Wars

This is the age of the?

Educational planning should aim at meeting the educational needs of the entire population of all age group. While the traditional structure of education as a three layer hierarchy from the primary stage to the university represents the core, we should not overlook the periphery which is equally important. Under modern conditions, workers need to rewind, or renew their enthusiasm, or strike out in a new direction, or improve their skills as much as any university professor. The retired and the age have their needs as well. Educational planning, in their words, should take care of the needs of everyone.

Our structures of education have been built up on the assumption that there is a terminal point to education. This basic defect has become all the more harmful today. A UNESCO report entitled 'learning to Be' prepared by Edgar Faure and others in 1973 asserts that the education of children must prepare the future adult for various

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1973 asserts that the education of children must prepare the future adult for various forms of self-learning. A viable education system of the future should consist of modules with different kinds of functions serving a diversity of constituents. And performance, not the period of study, should be the basis for credentials. The writing is already on the wall.

- A. Approaching
- B. Contacting
- C. Introducing
- D. Satisfying

In view of the fact that the significance of a commitment of lifelong learning and lifetime education is being discussed only in recent years even in educationally advanced countries, the possibility of the idea becoming an integral part of educational thinking seems to be a far cry. For, to move in that direction means such more than some simple rearrangement of the present organization of education. But a good beginning can be made by developing Open University programs for older learners of different categories and introducing extension services in the conventional colleges and schools. Also these institutions should learn to cooperate with the numerous community organizations such as libraries, museums, municipal recreational programs, health services etc.

Which of the following is most nearly the same in meaning as the word 'meeting' as used in the passage?

Chocolate – there's nothing quite like it, is there? Chocolate is simply delicious. What is chocolate? Where does it come from?

Christopher Columbus was probably the first to take cacao beans from the New World to Europe in around 1502. But the history of chocolate goes back at least 4,000 years! The Aztecs, who lived in America, thought that their bitter cacao drink was a **divine** gift from heaven. In fact, the scientist Carolus Linnaeus named the plant Theobroma, which means "food of the gods"

The Spanish explorer Hernando Cortez went to America in 1519. He visited the Mexican emperor Montezuma. He saw that Montezuma drank cacao mixed with vanilla and spices. Cortez took some cacao home as a gift to the Spanish King Charles. In Spain, people began to drink Cortez's chocolate in drink with chili peppers. However, the natural taste of cacao was too bitter for most people. To sweeten the drink, Europeans added sugar to the cacao drink. As a sweet drink, it became more popular. By the 17th century, rich people in Europe were drinking it.

Later, people started using chocolate in **pastries**, like pies and cakes. In 1828, Dutch chocolate makers started using a new process for removing the fat from cacao beans, and getting to the center of the cacao bean. The Dutch chocolate maker Conrad J. Van Houten made a machine that pressed the fat from the bean. The resulting powder mixed better with water than cacao did. Now, some call van Houten's chocolate "Dutch chocolate."

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It was easy to mix Dutch chocolate powder with sugar. So other chocolate makers started trying new **recipes** that used powdered chocolate. People started mixing sweetened chocolate with cocoa butter to make solid chocolate bars. In 1849, an English chocolate maker made the first chocolate bar. In the 19th century, the Swiss started making milk chocolate by mixing powdered milk with sweetened chocolate. Milk chocolate has not changed much since this process was invented.

- A. The Dutch
- B. The Swiss
- C. The English
- D. The Mexicans

Today, two countries – Brazil and Ivory Coast – account for almost half the world's chocolate. The United States imports most of the chocolate in the world, but the Swiss eat the most chocolate per person. The most chocolate eaten today is sweet milk chocolate, but people also eat white chocolate and dark chocolate.

Cocoa and dark chocolate are believed to help **prevent** heart attacks, or help keep from happening. They are supposed to be good for the circulatory system. On the other hand, the high fat content of chocolate can cause weight gain, which is not good for people's health. Other health claims for chocolate have not been proven, but some research shows that chocolate could be good for the brain.

Chocolate is a popular holiday gift. A popular Valentine's Day gift is a box of chocolate candies with a card and flowers. Chocolate is sometimes given for Christmas and birthdays. Chocolate eggs are sometimes given at Easter.

Chocolate is **toxic** to some animals. An ingredient in chocolate is poisonous to dogs, cats, parrots, small rodents, and some livestock. Their bodies cannot process some of the chemicals found in chocolate. Therefore, they should never be fed chocolate.

Which people eat the most chocolate per person?

Paul's wife knows Paul loves to read cookbooks. She decides to get him one for his

- 13 Paul's wife knows Paul likes to read cookbooks. She decides to get him one for his birthday. Paul tells her he will try to make a new recipe for three days in a row. On Monday, Paul makes blueberry pancakes for breakfast. He gets the blueberries from the farmers' market. On Tuesday, Paul makes beef soup for dinner. He puts in cubes of beef, carrots, and onions. The recipe calls for cream, but Paul does not cream. He uses water instead. On Wednesday, Paul makes a tomato salad with cucumbers and onions. He picks the cucumbers and tomatoes from his garden. He likes this dish best. It was also the easiest for him to make.

- A. From his wife
- B. From his store
- C. From his garden
- D. From the farmers' market

What does Paul get cucumbers and tomatoes?

- 14 The purpose of education is to make the student an expert in his subject. This must be clearly understood, and mere mudding through lessons and lectures and books and passing examinations are relegated to secondary importance as means to the end-which is excellence in the field chosen.

But there are so many fields, and no man can become an expert in all the fields it is necessary to decide which fields are important ones that a man should know well.

- A. An expert in all fields
- B. An expert in his subject
- C. Only capable of earning
- D. Confident only

It is clear that one's own work is the most important. This has been realized and modern civilization has accordingly provided vocational education. It is now possible to acquire high professional skill in the various fields, medicine, engineering production, commerce and so on-but with good and bad mixed together, and no standard for guidance.

The purpose of education is to make the student:

- 15 Lilly loves her town. She loves the mall. She loves the parks. She also loves her school. Most of all, though, Lilly loves the seasons. In her old town, it was hot all of the time.

Sometimes it is cold in Lilly's new town. The cold season is in winter. Once in a while it snows. Lilly has never seen snow before. So far her, the snow is exciting as well as very beautiful. Lilly has to wear gloves to keep her hands warm. She also wear a scarf around her neck.

In spring, flowers bloom and the trees turn green with new leaves. Pollen falls on the cars and windowsills and makes Lilly sneeze. People work in their yards and mow their grass.

- A. Skeptical, meaning questioning or showing doubt
- B. Apprehensive, meaning anxious or worried
- C. Overjoyed, meaning extremely happy
- D. Content, meaning satisfied with what one is or has

In summer, Lilly wears her old shorts and sandals- the same ones she used to wear in her old town. It is hot outside, and dogs lie in the shade. Lilly and her friends go to a pool or play in the water sprinkler. Her father cooks hamburgers on the grill for dinner.

Lilly's favorite season is autumn. In autumn, the leaves on the trees turn yellow, gold, red, and orange. Halloween comes in autumn, and this Lilly's favorite holiday. Every Halloween, Lilly wears a costume. Last year she wore a mouse costume. This year she will wear a fish costume.

One evening in autumn, Lilly and her mom are on sitting together on the porch. Mom tells Lilly that autumn is also called "fall". This is a good idea, Lilly thinks, because in the fall all of the leaves fall down from the trees.

Which of the following words best describes the way Lilly feels about living in her new town

- 16 Q.1 The history of literature really began was the earliest of the arts. Man danced for joy round his primitive camp fire after the defeat and slaughter of his enemy He yelled and shouted as he danced and gradually the yells and shouts became coherent and caught the measure of the dance and thus the first war song was sung As the idea of God developed prayers were framed The songs and prayers became traditional and were repeated from one generation to another each generation adding something of its own As man slowly grew more civilized he was compelled to invent some method of writing by three urgent necessities. There were certain things that it was dangerous to forget and which therefore had to be recorded it was often necessary to communicate with persons who were some distance away and it was necessary to communicate with persons who were some distance away and it was necessary to product ones property by making tools cattle and so on in some distinctive manner so man taught himself to write and having learned to write purely for utilitarian reasons he used this new method for preserving his war songs and his prayers of course among these ancient peoples there were only a very few individuals who learned to write and only a few could read what was written.
- b.As the war songs and prayers each generation

- A. Added something of its own to the stock
- B. Blindly repeated the songs and prayers
- C. Composed its own songs and prayers
- D. سوا

Where does chocolate come from? Believe it or not, it grows on trees. Not as a sweet chocolate candy bar wrapped in foil, but as a cocoa bean. These cocoa beans grow on a cacao tree, which is found in tropical areas such as Central and South America. The fruit of these are called pods, and they are long and hard. Inside the pods is a soft, white pulp that

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surrounds the thirty or so seeds. These seeds are what we call cocoa beans. They are very hard and bitter to the taste. To make chocolate, people start by carefully taking the beans out of the pods, still covered in the white pulp, and leaving them in a bucket. The bucket is often covered with banana leaves and left for anywhere from a few days to a few weeks. This process is called fermenting. Then the beans are left to dry in the sun. Fermenting and drying the beans makes them less bitter. Then the beans are shipped to a factory to be turned into chocolate. At the factory, beans are roasted in ovens to bring out their flavor. After roasting, the outer covering of the bean is removed. The inner bean is then crushed to form a paste known as chocolate liquor. From this paste, people can either make cocoa powder or the chocolate we buy in stores. To make cocoa powder, the paste is crushed and pressed repeatedly to remove the fat, leaving behind only a dry, ground powder. To make chocolate, people need to add other ingredients to the paste such as milk, sugar, and cocoa butter. They then mix and heat the concoction several times to create a substance we would recognize as chocolate. It may even have fruit, nuts, or candy added to it before it is molded into a shape. Considering all that must happen to turn a bitter cocoa bean into a chocolate bar, a dollar seems like a small price to pay for such a delicious sweet treat.

Question:

Which of the following best describes a 'concoction'?

- A. To make the smoothie, Daryl blended strawberries, bananas, yogurt, and juice
- B. When Jenna left the room, the pot of milk boiled for twenty minutes before boiling over
- C. A sprinkle of powdered sugar on top makes everything sweeter
- D. Elaine heated the lasagna, froze it, and then heated it again before serving it two weeks later

The year 2006 was the golden anniversary, or the 50th birthday, of the Dwight D. Eisenhower National System of Interstate and Defense Highways. This system, usually referred to as The Interstate Highway System, is a system of freeways named after the U.S. President who supported it. The system is the largest highway system in the world, consisting of 46,876 miles (75,440 km) of freeways. The construction of the interstate highway system is an important part of American history. It has played a major role in **preserving** and maintaining the American way of life.

The interstate highway system has several major functions. One of its major functions is to **facilitate** the distribution of US goods. Because the interstate passes through many downtown areas, it plays an important role in the **distribution** of almost all goods in the United States. Nearly all products travel at least part of the way to their destination on the Interstate System. Another major function of the interstate is to facilitate military troop movement to and from airports, seaports, rail terminals and other military destinations. The Interstate highways are connected to route in the Strategic Highway Network, which is a system of highways that are **vital** to the U.S. Department of Defense.

Today, most of the Interstate system consists of newly constructed highways. The longest section of the Interstate system runs from Boston, Massachusetts to Seattle, Washington. It covers 3,020.54 miles. The shortest two-digit interstate is from Emery, North Carolina to Greensboro, North Carolina. It covers only 12.27 miles. All state capitals except five are served by the system. The five that are not directly served are Juneau, AK, Dover, DE, Jefferson City, MO, Carson City, NV, and Pierre, SD. The Interstate Highway System serves almost all major U.S. cities.

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EACH Interstate highway is marked with a red, white, and blue shield with the word "Interstate," the name of the state, and the route number. Interstate highways are named with one or two-digit numbers. North-south highways are **designated** with odd numbers; east-west highways are named with even numbers. The north-south Interstate highways begin in the west with the lowest odd number; the east-west highways begin in the south with the lowest even numbers. There are mile markers at each mile of the interstate system, starting at the westernmost or southernmost point on the highway. Every Interstate highway begins with the number "0". Interchanges are numbered according to their location on the highway in relation to mileage; an exit between milepost 7 and milepost 8 would be designated "Exit 7." This system allows drivers estimate the distance to a desired exit, which a road is leading off the highway. Despite the common acceptance of the numbering system on the Interstate highways, some states have adopted different numbering systems. For example, a portion of the Interstate 19 in Arizona is measured in kilometers instead of miles since the highway goes south to Mexico.

- A. Made
- B. Saved
- C. Required
- D. Marked

Since the Interstate highways are freeways-highways that do not have signs and cross streets – they have the highest speed limits in the nation. Most interstate highways have speed limits between 65 – 75 miles per hour (105 – 120 kilometers per hour), but some areas in Texas and Utah have an 80 mile-per-hour (130 kilometer-per-hour) speed limit.

The federal government primarily funds interstate highways. However, they are owned and operated by the individual states or toll authorities in the states. The federal government generally funds up to 90% of the cost of an Interstate highway, while the states pay the remainder of the cost.

If something is designated, it is

Fleas are perfectly designed by nature to feast on anything containing blood. Like a shark in the water or a wolf in the woods, fleas are ideally equipped to do what they

do, making them very difficult to defeat. The bodies of these tiny parasites are extremely hardy and well-suited for their job.

A flea has a very hard exoskeleton, which means the body is covered by a tough, tile-like plate called a sclerite. Because of these plates, fleas are almost impossible to squish. The exoskeletons of fleas are also waterproof of fleas are also waterproof and shock resistant, and therefore fleas are highly resistant to the sprays and chemicals used to kill them.

Little spines are attached to his plate. The spine the flea scurries through an animal's fur in – search of grooming pet tries to pull a flea off through the hair coat, these spines will extend and stick to the fur like Velcro.

Fleas are some of the best jumpers in the natural world. A flea can jump seven inches, or 150 times its own length, either vertically or horizontally. An equivalent jump for a person would be 555 feet, the height of the Washington Monument. Fleas can jump 30,000 times in a row without stopping, and they are able to accelerate through the air at an incredibly high rate – a rate which is over ten times what humans can withstand in an airplane.

- 19 Fleas have very long rear legs with huge thigh muscles and multiple joints. When they get ready to jump. They fold their long legs up and crouch like a runner on a starting block. Several of their joints contain a protein called resilin, which helps catapult fleas into the air as they jump, similar to the way a rubber band provides momentum to a slingshot. Outward facing claws on the bottom of their legs grip anything they touch when they land.

The adult female flea mates after her first blood meal and begins producing eggs in just 1 to 2 days. One flea can lay up to 50 eggs in one day and over 2,000 in her lifetime. Flea eggs can be seen with the naked eye, but they are about the size of a grain of salt. Shortly after being laid, the eggs begin to transform into cocoons. In the cocoon state, fleas are fully developed adults, and will hatch immediately if conditions are favorable. Fleas can detect warmth, movement, and carbon dioxide in exhaled breath, and these three factors stimulate them to emerge as new adults. If the flea does not detect appropriate conditions, it can remain dormant in the cocoon state for extended periods. Under ideal conditions, the entire life cycle may only take 3 weeks, so in no time at all, pets and homes can become infested.

Because of these characteristics, fleas are intimidating opponents. The best way to control fleas, therefore, is to take steps to prevent an infestation from ever occurring.

Based on information in the passage, the reader can understand that

- A. Fleas will die without access to blood
- B. Fleas survive at a higher rate in outdoor habitats
- C. Fleas will die after they produce 2,000 eggs
- D. Newly hatched fleas are the size of a grain of salt

- 20 The Baxter house is located at the end of the street. This house sits farther back from the curb than the other houses. It is almost difficult to see from the road without peering behind the deformed oak tree that has obscured it for years. Even so, the Baxter house stands out from the other houses on the street. It is tall and white. However, this white is no longer pristinely white, but a dingy grayish cream color. Long vines hang from the tattered roof. The Baxter house is two stories tall and has a large yard in the back that has never been mowed. The other houses on the street are a mere one story and have been painted a variety of colors. The newer, single story properties all appear to have been built around the same time; the yards mostly being of the same size, and the houses appearing to be clones of one another. Aside from the Baxter house at the end, this street is a perfect slice of middle America. The inhabitants of the other houses wonder who lives in the ancient, dilapidated house at the end of the street.

What makes the other houses on the street stand out visually from the Baxter house?

- A. The other houses have large families living in them
- B. The other houses on the street are a mere one story
- C. The Baxter house is at the end of the street
- D. The Baxter house is almost difficult to see from the road