

ECAT Pre General Science English Chapter 8 Comprehension

Sr	Questions	Answers Choice
1	<p>Right now, I am looking at a shelf full of relics, a collection of has-beens, old-timers, antiques, fossils. Right now I am lolling at a shelf full of books. Yes that's right. If you have some spare cash (the doing rate is about \$89) and are looking to enhance your reading experience, then I highly suggest you consider purchasing an e-reader. E-readers are replacing the books of old, and I welcome them with open arms (as you should).</p> <p>If you haven't heard of an e-reader and don't know what it is, then please permit the following explanation. An e-reader is a device that allows you to read e-books. An e-book is a book-length publication in digital form, consisting of text, images, or both, and produced on, published through, and readable on computers or other electronic devices. Sometimes the equivalent of a conventional printed book, e-books can also be born digital. The Oxford Dictionary or English defines the e-book as "an electronic version of a printed book, "but e-book can and do exist without any printed equivalent.</p> <p>So now you know what an e-reader is. But you still may be wondering why they put printed books to shame. E-readers are superior to printed books because they save space, are environmentally friendly, and provide helpful reading tips and tools that printed books do not.</p> <p>E-readers are superior to printed books because they save space. The average e-reader can store thousands of digital book, providing a veritable library at your fingertips. What is more, being the size and weight of a thin hardback, the e-reader itself is relatively petite. It is easy to hold and can fit in a pocketbook or briefcase easily. This makes handling ponderous behemoths such as War and Peace, Anna Karenina, and Les Miserables a breeze. Perhaps the only drawback to the space-saving aspect of an e-reader is that it requires you to find new things to put on your shelves.</p> <p>In addition, e-readers are superior to books because they are environmentally friendly. The average novel is about 300 pages long. So, if a novel is printed 1000 times, it will use 300,000 pieces of paper. That's a lot of paper! If there are about 80,000 pieces of paper in a tree, this means it takes almost 4 trees to make these 1000 books. Now, we know that the average bestseller sells about 20,000 copies per week. That means that it takes over 300 trees each month to sustain this rate. And for the super bestsellers, these figures increase dramatically. For example, the Harry Potter book series has sold over 450 million copies. That's about 2 million trees! Upon viewing these figures, it is not hard to grasp the severe impact of printed books on the environment. Since e-reader use no trees, they represent a significant amount of preservation in terms of the environment and its resources.</p> <p>Finally, e-reader are superior to books because they provide helpful reading tips and tolls that printed books do not. The typical e-reader allows its user to customize letter size, font, and line spacing. It also allows highlighting and electronic bookmarking. Furthermore, it grants users the ability to get an overview of a book and then jump to a specific electronic bookmarking. Furthermore, it grants users the ability to get an overview of a book and then jump to a specific location based on that overview. While these are all nice features, perhaps the most helpful of all is the ability to get dictionary definitions at the touch of a finger. On even the most basic e-reader, users can conjure instant definitions without having to hunt through a physical dictionary.</p> <p>It can be seen that e-readers are superior to printed books. They save space, are environmentally friendly, and provide helpful reading tips and tools that printed books do not. So what good are printed books? Well, they certainly make nice decorations.</p> <p>As used in paragraph 5, which is the best <u>synonym</u> for 'sustain'?</p>	<p>A. Maintain B. Allow C. Enforce D. Yield</p>

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 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 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. Traditional systems should be strengthened
- B. Formal education is more important than non-formal
- C. One should never cease to learn
- D. It is impossible to meet the needs of everyone

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.

What is the main thrust of the author?

The history of civilization shows how man always has to choose between making the right and wrong use of the discoveries of science. This has never been more true than in our own age. In a brief period amazing discoveries have been made and applied to practical purposes.

It would be ungrateful not to recognize how immense are the boons which science has given to mankind. It has brought within the reach of multitudes benefits and advantages which only a short time ago were the privilege of the few. It has shown how malnutrition, hunger and disease can be overcome. It has not only lengthened life but it has depended its quality. Fields of the work of science the ordinary and fuller life than was ever possible to his grandparents.

- A. Few
- B. Found nowhere
- C. Immense
- D. Very few

The boons of science are:

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 retrain 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 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. 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. Lifelong learning is a recent concept
- B. Workers' knowledge and skills also need to be updated constantly
- C. Learning to Be defends that there is a terminal point to education
- D. Schools and colleges should open extension services

h. Which of the following is not true in context of the given passage?

Next week I am on vacation. While I am on a vacation, I will work on two projects. First, I will fix the washing machine. The washing machine has been broken for two weeks. To fix it, I will need three tools: a screwdriver, a wrench, and a clamp. It will take one day to fix the washing machine. Next, I will fix our back porch. This is a bigger project. It will probably take about two days to fix the back porch, and will require a screwdriver, a hammer, nails, and a saw. My vacation starts on Monday. I have a lot of work to do, but hopefully I can relax after I finish my work.

- A. a screwdriver
- B. a wrench
- C. nails
- D. a saw

Question:

Which of the following tools does the author not need to fix the back porch?

The purpose of education is to make the student an expert in his subject. This must be clearly understood, and mere muddling 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.

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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. Excellence in the filed chosen
- B. Passing the examination
- C. Earning more and more
- D. Cramming lectures and books

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.

What, according to the writer, is the end?

7

Elephants on the coast of Thailand are acting strange. They stamp their feet and motion toward the hulls. The sea draws back from the beaches. Fish flop in the mud. Suddenly, a huge wave appears. This is no ordinary wave. It is a tsunami (pronounced "soo-nah-mee") waves are larger and faster than normal surface waves. A tsunami wave can travel as fast as a jet plane and can be as tall as a ten-story building. Imagine dropping a stone into a pond. The water on the surface ripples. A tsunami is like a very powerful ripple. Tsunamis begin when the ocean rises or falls very suddenly. Large amounts of seawater are displaced. This movement causes huge waves. For a tsunami to occur, there must be some kind of force that causes the ocean water to become displaced. Most tsunamis are caused by underwater earthquakes. However, volcanoes, landslides, large icebergs, and even meteorites are capable of causing one of these mighty waves. Tsunamis are extremely powerful. Ordinary waves lose power when they break. Tsunami waves can remain powerful for several days. Because tsunami waves are so strong, they can kill people, damage property, and completely ruin an ecosystem in just one hour. Scientists have no way of predicting when a tsunami will hit. However, if a powerful enough earthquake occurs, scientists can issue a warning or a watch. A warning means that a tsunami will very likely hit soon. A watch means that conditions are favorable for a tsunami. When people are notified about a watch or a warning, they have more time to prepare. It is best not to get caught unaware when a tsunami is on the way. As used paragraph, 'displaced' most nearly means

- A. moved out normal place
- B. pushed by human force
- C. sloshed around quickly
- D. pulled to great heights

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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 snowmoniles.

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 god 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.

- A. More people could compete in the Iditarod race
- B. The mushers had to get permission from the U.S. Army to hold the race
- C. The Trail was cleared all the way to Nome
- D. The Iditarod race became a seasonal Army competition

Many people worked to make the first Iditarod Trail Sled Dog Race a reality in 1967. The Aurora Dog Musers 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 wad 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.

Based on information in the passage, it can be inferred that because the U.S. Army reopened the Iditarod Trail in 1972,

At the time Jane Austen's novels were published – between 1811 and 1818 – English literature was not part of any academic curriculum. In addition, fiction was under strenuous attack. Certain religious and political groups felt novels had the power to make so-called immoral characters so interesting that young readers would identify with them; these groups also considered novels to be of little practical use. Even Coleridge, certainly no literary reactionary, spoke for many when he asserted

Even Coleridge, certainly no literary reactionary, spoke for many when he asserted that "novel-reading occasions the destruction of the mind's powers."

These attitudes towards novels help explain why Austen received little attention from early nineteenth-century literary critics. (In any case a novelist published anonymously, as Austen was, would not be likely to receive much critical attention.) The literary response that was accorded to her, however, was often as incisive as twentieth-century criticism. In his attack in 1816 on novelistic portrayals "outside of ordinary experience," for example. Scott made an insightful remark about the merits of Austen's fiction.

Her novels, wrote Scott, "present to the reader an accurate and exact picture of ordinary everyday people and places, reminiscent of seventeenth-century Flemish painting." Scott did not use the word 'realism', but he undoubtedly used a standard of realistic probability in judging novels. The critic Whately did not use the word 'realism', either, but he expressed agreement with Scott's evaluation, and went on to suggest the possibilities for moral instruction in what we have called Austen's 'realistic method' her characters, wrote Whately, are persuasive agents for moral truth since they are ordinary persons "so clearly evoked that we feel an interest in their fate as if it were our own." Moral instruction, explained Whately, is more likely to be effective when conveyed through recognizably human and interesting characters than when imparted by a sermonizing narrator. Whately especially praised Austen's ability to create character who "mingle goodness and villainy, weakness and virtue, as in life they are always mingled." Whately concluded his remarks by comparing Austen's art of characterization to Dickens', starting his preference for Austen's.

- A. False
- B. Wrong
- C. Exaggerated
- D. Appearing true

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Yet, the response of nineteenth-century literary critics to Austen was not always so laudatory, and often anticipated the reservations of twentieth-century literary critics. An example of such a response was Lewes complaint in 1859 that Austen's range of subject and characters was too narrow. Praising her verisimilitude, Lewes added that, nonetheless her focus was too often only upon the unlofty and the commonplace. (Twentieth-century Marxists, on the other hand, were to complain about what they saw as her exclusive emphasis on a lofty upper middle class.) In any case having being rescued by literary critics from neglect and indeed gradually lionized by them, Austen steadily reached, by the mid-nineteenth century, the enviable pinnacle of being considered controversial.

How would you describe the synonym of the word "Verisimilitude"?

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, scientists 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

- A. Insulted
- B. Talked about
- C. Killed
- D. Misused

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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. In the passage, 'abused' mean

- A. I only
- B. I and
- C. I only
- D. I and

Gold used in jewelry is mixed with harder metals to add strength and durability. The metals added can also be used to change gold's color, giving it a for the natural yellow tone of pure gold. Mixtures like these, of less costly metals with more valuable ones, are called alloys. Copper and silver are the most common metals mixed with gold to make yellow gold jewelry. White gold is usually made with an alloy of gold and nickel. The measure of is called gold's purity is called a karat. The higher the karat rating, the higher the amount of pure gold. 24 karat is pure gold, 18 karat is 75% pure gold, 14 karat is 58.5% pure gold, and 9 karat is 37.5% pure gold. All other things being equal, the higher the percentage of pure gold used in the alloy, the more valuable and expensive the jewelry will be. Gold jewelry pieces are usually stamped with a marking to identify the karat amount. White gold that is 24K is too soft for jewelry, 18K, 14K and 9K gold are all appropriate for jewelry, and they all make pieces that look great and wear beautifully.

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that look great and wear beautifully.

Question:

According to the passage, the use of other metals in gold alloys

- I. can be used to make the gold different color
- II. makes jewelry more expensive
- III. makes gold more flexible

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Although cynics may like to see the government's policy for women in terms of the party's internal power struggles, it will nevertheless be churlish to deny that it represents a pioneering effect aimed at bringing about sweeping social reforms. In its language, scope and strategies, the policy documents displays a degree of understanding of women's needs that is uncommon in government pronouncements. This is due in large part to the participatory process that marked its formulation, seeking the active involvement right from the start of women's groups, academic institutions and non-government organizations with grass roots experience. The result is not just a lofty declaration of principles but a blueprint for a practical program of action. The policy delineates a series of concrete measures to accord women a decision-making role in the political domain and greater control over their economic status. Of especially far-reaching impact are the devolution of control of economic infrastructure to women, notably at the gram panchayat level, and the amendment proposed in the Act of 1956 to give women comparcenary rights.

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And enlightened aspect of the policy is its recognition that actual change in the status of women cannot be brought about by the mere enactment of socially progressive legislation. Accordingly, it focuses on reorienting development programs and sensitizing administrations to address specific situations as, for instance, the growing number of households headed by women, which is a consequence of rural-urban migration. The proposal to create an equal-opportunity police force and give women greater control of police stations is an acknowledgement of the biases and callousness displayed by the generally all-male law-enforcement authorities in case of dowry and domestic violence. While the mere enunciation of such a policy has the salutary effect of sensitizing the administration as a whole, it does not make the task of its implementation any easier. This is because the changes it envisages in the political and economic status of woman strike at the root of power structures in society and the basis of man-woman relationship. There is also the danger that reservation for women in public life, while necessary for their greater visibility, could lapse into tokenism or become a tool in the hands of vote seeking politicians. Much will depend on the dissemination of the policy and the ability of elected representatives and government agencies to reorder their priorities.

- A. After the interim report
- B. From the start
- C. At the final stages
- D. Not mentioned in the passage

At which stage were the grass-root level organizations involved for the policy?

13

Q.2 The public distribution system which provides food at low prices is a subject of vital concern. There is a growing realization that though Pakistan has enough food to feed its masses three square meals a day the monster of starvation and food insecurity continues to haunt the poor in our country. Increasing the purchasing power of the poor through providing productive employment leading to rising income and thus good standard of living is the ultimate objective of public policy. However till then there is a need to provide assured supply of food through a restructured more efficient and decentralized public distribution system (PDS). Although the PDS is extensive it is one of the largest such systems in the world it has yet to reach the rural poor and the far off places it remains an urban phenomenon with the majority of the rural poor still out of its reach due to lack of economic and physical access the poorest in the cities and the migrants are left out for they generally do not possess ration cards. The allocation of PDS supplies in big cities is larger than in rural areas in view of urgently needs to be streamlined. In addition considering the large food grains production combined with food subsidy on one hand and the continuing slow starvation and dismal poverty of the rural population on the other there is a strong case for making PDS target group oriented. The growing salaried class is provided job security regular income and percent insulation against these gains of development have not percolated down to the vast majority of our working population. If one only dearness allowance to the employees in public and private sector and looks at its growth in the past few years the rising food subsidy is insignificant to the point of inequity. The food subsidy is a kind of D.A to the poor the self-employed and those in the unorganized sector of the economy. It is true that subsidies should not become a permanent feature except for the destitute disabled widows and the old it is also true dependence and hence is habit-forming killing the general initiative of the people by making PDS target group oriented not only the poorest and neediest would be reached without additional cost but it will actually cut overall costs incurred on large cities and for better off localities when the food and food subsidy are limited the rural and urban poor

- A. Reducing the cost of living index by increasing supplies
- B. Providing enough food to all the citizens
- C. Good standard of living through productive employment
- D. Equalizing per capita income across different strata of society

should have the priority in the PDS supplies The PDS should be closely linked with programs of employment generation and nutrition improvement.

b. What according to the passage is the main purpose of public policy in the long run

Philadelphia is a city known for many things. It is where the Declaration of independence was signed in 1776, and it was also the first capital of the United States. But one fact about Philadelphia is not so well-known: it is home to nearly 3,000 murals painted on the sides of homes and buildings around the city. In fact, it is said that Philadelphia has more murals than any other city in the world, with the exception of Rome. How did this come to be?

More than 20 years ago, a New Jersey artist named Jane Golden started a program pairing troubled youth with artists to paint murals on a few buildings around the city. From this small project, something magical happened. The young people involved helped to create magnificent pieces of art, but there were other, perhaps more important benefits. The young people learned to collaborate and get along with many different kinds of people during the various steps required to paint and design a mural. They learned to be responsible, because they needed to follow a schedule to make sure the murals were completed. They also learned to take pride in their community. It is hard for any resident to see the spectacular designs and not feel proud to be a part of Philadelphia.

Take a walk around some of the poorest neighborhoods in Philadelphia, neighborhoods full of broken windows and littered front steps, and you will find beautiful works of art on the sides and fronts of buildings. Of course the murals are not just in poor neighborhoods, but more affluent ones as well. Special buses take tourists to different parts of the city to see the various murals, which range from huge portraits of historical heroes, to cityscapes, to scenes depicting the diverse ethnic groups that call Philadelphia home.

As a result of its success, the mural program created by Jane Golden has now become the nation's largest public art program and a model for troubled youth.

Based on information in the passage, the author most likely believes that

- A. There are too many murals in Philadelphia
- B. The mural program was an inspirational ideal
- C. All troubled youth should learn how to paint
- D. Every city in the country should adopt the mural program

14

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.

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,

- A. When they outgrow the cocoon
- B. After a period of 3 weeks
- C. When they sense there is access to blood
- D. If there is too much carbon dioxide in the cocoon

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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.

It can be inferred that fleas will emerge from eggs as adults

16

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 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:

To make chocolate, what is the first thing people must do to the cocoa beans?

- A. leave them in a bucket
- B. roast them in an oven
- C. dry them in the sun
- D. ship them to the factory

17

On January 3, 1961, nine days after Christmas, Richard Legg, John Byrnes, and Richard McKinley were killed in a remote desert in eastern Idaho. Their deaths occurred when a nuclear reactor exploded at a top-secret base in the National Reactor Testing Station (NRTS). Official reports state that the explosion and subsequent reactor meltdown resulted from the improper retraction of the control rod. When questioned about the events that occurred there, officials were very reticent. The whole affair, in fact, was discussed much, and seemed to disappear with time.

In order to grasp the mysterious nature of the NRTS catastrophe, it helps to know a bit about how nuclear reactors work. After all, the generation of nuclear energy may strike many as an esoteric process. However, given its relative simplicity, the way in which the NRTS reactor functions is widely comprehensible. In this particular kind of reactor, a cluster of nine-ton uranium fuel rods are positioned lengthwise around a central control rod. The reaction begins with the slow removal of the control rod, which starts a controlled nuclear reaction and begins to heat the water in the reactor. This heat generates steam, which builds pressure inside the tank. As pressure builds, the steam looks for a place to escape. The only place this steam is able to escape is through the turbine. As it passes through the turbine on its way out of the tank, it turns the giant fan blades and produces energy.

On the morning of January 3, after the machine had been shut down for the holidays, the three men arrived at the station to restart the reactor. The control rod needed to be pulled out only four inches to be reconnected to the automated driver. However, records indicate that Byrnes yanked it out 23 inches, over five times the distance necessary. In milliseconds the reactor exploded. Legg was impaled on the ceiling; he would be discovered last. It took one week and a lead-shielded crane to remove his body. Even in full protective gear, workers were only able to work a minute at a time. The three men are buried in lead-lined coffins under concrete in New York, Michigan, and Arlington Cemetery, Virginia.

The investigation took nearly two years to complete. Did Byrnes have a dark motive? Or was it simply an accident? Did he know how precarious the procedure was? Other operators were questioned as to whether they knew the consequences of pulling the control rod out so far. They responded "Of course! We often talked about what we would do if we were at a radar station and the Russians came.

"We'd yank it out."

Official reports are oddly ambiguous, but what they do not explain, gossip does. Rumors had it that there was tension between the men because Byrnes suspected the other two of being involved with his young wife. There is little doubt that he, like the other operators, knew exactly what would happen when he yanked the control rod.

Based on information in the passage, it can be inferred that, after the explosion and subsequent meltdown, the reactor was

- A. Not mentioned in any official report about the incident
- B. Contaminated with toxic elements
- C. Completely annihilated
- D. Honored as a memorial to the tragic incident

Although cynics may like to see the government's policy for women in terms of the

party's internal power struggles, it will nevertheless be churlish to deny that it represents a pioneering effect aimed at bringing about sweeping social reforms. In its language, scope and strategies, the policy documents displays a degree of understanding of women's needs that is uncommon in government pronouncements. This is due in large part to the participatory process that marked its formulation, seeking the active involvement right from the start of women's groups, academic institutions and non-government organizations with grass roots experience. The result is not just a lofty declaration of principles but a blueprint for a practical program of action. The policy delineates a series of concrete measures to accord women a decision-making role in the political domain and greater control over their economic status. Of especially far-reaching import are the devolution of control of economic infrastructure to women, notably at the gram panchayat level, and the amendment proposed in the Act of 1956 to give women comparcenary rights.

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And enlightened aspect of the policy is its recognition that actual change in the status of women cannot be brought about by the mere enactment of socially progressive legislation. Accordingly, it focuses on reorienting development programs and sensitizing administrations to address specific situations as, for instance, the growing number of households headed by women, which is a consequence of rural-urban migration. The proposal to create an equal-opportunity police force and give women greater control of police stations is an acknowledgement of the biases and callousness displayed by the generally all-male law-enforcement authorities in case of dowry and domestic violence. While the mere enunciation of such a policy has the salutary effect of sensitizing the administration as a whole, it does not make the task of its implementation any easier. This is because the changes it envisages in the political and economic status of woman strike at the root of power structures in society and the basis of man-woman relationship. There is also the danger that reservation for women in public life, while necessary for their greater visibility, could lapse into tokenism or become a tool in the hands of vote seeking politicians. Much will depend on the dissemination of the policy and the ability of elected representatives and government agencies to reorder their priorities.

Which of the following is true about the policy?

- A. This is another pronouncement by the government
- B. It is a pioneering effort
- C. It is not based on the understanding of woman's needs
- D. It has made many big declarations

I am writing in response to response to the article "Protecting our public spaces" in issue 14, published this spring in it, the author claims that "all graffiti is public spaces." I would like to point out that many people believe that graffiti is an art from that can benefit our public spaces just as much as sculpture, fountains, or other, more accepted art forms.

People who object to graffiti usually do so more because of where it is, not what it is. They argue, as your author does, that posting graffiti in public places constitutes an illegal act of property damage. But the location of such graffiti should not prevent the images themselves from being considered genuine art.

I would argue that graffiti is the ultimate public art form. Spray paint is a medium unlike any other. Though graffiti, the entire world has become a canvas. No one has to pay admission or travel to a museum to see this kind of art. The artists usually do not receive payment for their efforts. These works of art dotting the urban landscape are available, free of charge, to everyone who passes by.

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To be clear, I do not consider random words or names sprayed on stop signs to be art. Plenty of graffiti is just vandalism, pure and simple. However, there is also graffiti that is breathtaking in its intricate detail, its realism, or its creativity. It takes great talent to create such involved designs with spray paint.

Are these creators not artists just because they use a can of spray paint instead of a paintbrush, or because they cover the side of a building rather than a canvas?

To declare that all graffiti is vandalism, and nothing more, is an overly simplistic statement that I find out of place in such a thoughtful publication as your magazine. Furthermore, graffiti is not going anywhere, so might as well find a way to live with it and enjoy its benefits. One option could be to make a percentage of public space, such as walls or benches in parks, open to graffiti artists. By doing this, the public might feel like part owners of these works of art, rather than just the victims of a crime.

Based on its use in paragraph 4, which of the following accurately describes something that is intricate?

- A. Everyone was amazed to see the hot air balloon finally swell with air and lift off over the trees
- B. On the enormous billboard, a painted can of soda stood nearly 12 feet high
- C. The photograph was so sharply focused that you could see the individual eyelashes on the subject's faces
- D. The maze had many different paths that curled around each other in a complicated pattern

When Greg went to the giant aquarium near his house, he had one type of animal that he loved to watch. He liked dolphins and manatees, but he loved whales. Baluga whales from the arctic were really neat, but it was the Killer Whales especially that had his heart. For hours, from the park opening until closing, he could watch them. Their black-and-white patterned skin reminded him of a tuxedo, a penguin, or even a zebra, but on the whales it

seemed even more special. It made them stand out in the water. Their playfulness and intelligence amazed him, too. He liked to watch the trainers coax them through jumps, leaps, and other tricks. They talked and squawked at the trainers. One time the trainer even got launched into the air off the whale's nose. It was an impressive feat. It always surprised him how fast and agile such a massive creature could be. He always expected them to be slow and lumbering, but they were fast like a bullet, darting through their huge tanks and exploding from the water. In the park, they were fast like a bullet, darting through their huge tanks and exploding from the water. In the park, they ate fish and other snacks, and lots of them. In the wild, he understood why they had their fierce name. They could eat seals, sea lions, small whales, and just about anything they could catch. Their teeth were sharp and predatory. They were the top of the food chain - even more dangerous than sharks. The Killer Whales were amazing animals. They inspired him to learn more about the sea. He thought that some day he might want to be a marine biologist. Then, he could learn about his favourite animals as a job. For now, he'd have to settle for watching them through the tank's glass and reading about them. However, there was always the future.

Question:

Which of these is NOT a reason why Greg likes killer whales?

- A. their speed and power
- B. their colors
- C. their slowness
- D. their intelligence