

第1课: Section C 仔细阅读---冲刺1

课堂讲义

51. What does the example of climate change serve to show?

- A)The importance of climate data is increasingly recognized.
- B)Adequate government funding is vital to scientific research.
- C)Government regulation helps the public understand science.
- D)Common folks' scientific knowledge can sway policy making.

52. What should non-scientists do to ensure their quality of life?

- A)Seek personalized medical assistance from doctors.
- B)Acquire a basic understanding of medical science.
- C)Have their individual genome sequenced.
- D)Make informed use of animal models.

53. Why is it important for scientists to build a good relationship with the media?

- A)It helps them to effectively popularize new scientific information.
- B)It enables the public to develop a positive attitude toward science.
- C)It helps them to establish a more positive public image.
- D)It enables them to apply their findings to public health.

54. What does the author say is the problem with science journalism?

- A)It is keen on transmitting sensational information.
- B)It tends to oversimplify people's health problems.
- C)It may give inaccurate or distorted information to the public.
- D)It may provide information open to different interpretations.

55. What should scientists do to impart their latest findings to the public more effectively?

- A)Give training to science journalists.
- B)Stimulate public interest in science.
- C)Seek timely assistance from the media.
- D)Improve their communication skills.

① The public must be able to understand the basics of science to make informed decisions. Perhaps the most dramatic example of the negative consequences of poor communication between scientists and the public is the issue of climate change, where a variety of factors, not the least of which is a breakdown in the transmission of fundamental climate data to the general public, has contributed to widespread mistrust and misunderstanding of scientists and their research.

② The issue of climate change also illustrates how the public acceptance and understanding of science (or the lack of it) can influence governmental decision-making with regard to regulation, science policy and research funding.

③ However, the importance of effective communication with a general audience is not limited to hot issues like climate change. It is also critical for socially charged neuroscience issues such as the genetic basis for a particular behavior, the therapeutic potential of stem cell therapy for neurodegenerative diseases, or the use of animal models, areas where the public understanding of science can also influence policy and funding decisions. Furthermore, with continuing advances in individual genome (基因组) sequencing and the advent of personalized medicine, more non-scientists will need to be comfortable analyzing complex scientific information to make decisions that directly affect their quality of life.

④ Science journalism is the main channel for the popularization of scientific information among the public. Much has been written about how the relationship between scientists and the media can shape the efficient transmission of scientific advances to the public. Good science journalists are specialists in making complex topics accessible to a general audience, while adhering to scientific accuracy.

⑤ Unfortunately, pieces of science journalism can also oversimplify and generalize their subject material to the point that the basic information conveyed is obscured or at worst, obviously wrong. The impact of a basic discovery on human health can be exaggerated so that the public thinks a miraculous cure is a few months to years away when in reality the significance of the study is far more limited.

⑥ Even though scientists play a part in transmitting information to journalists and ultimately the public, too often the blame for ineffective communication is placed on the side of the journalists. We believe that at least part of the problem lies in places other than the interaction between scientists and members of the media, and exists because for one thing we underestimate how difficult it is for scientists to communicate effectively with a diversity of audiences, and for another most scientists do not receive formal training in science communication.

作业

46. What may farmers be able to do with robots appearing on the farming scene?

- A) Upgrade farm produce
- B) Enjoy more leisure hours.
- C) Modify the genes of crops.
- D) Cut down farming costs.

47. What will “farmbots” be expected to do?

- A) Take up many of the farmers’ routines.
- B) Provide medical treatments for livestock.
- C) Lead the trend in farming the world over.
- D) Improve the quality of pastures for grazing.

48. What can robots do when equipped with high-tech sensors and complex learning algorithms?

- A) Help farmers choose the most efficient and safest passages.
- B) Help farmers simplify their farming tasks and management.
- C) Allow farmers to learn instantly what is occurring on the farm.
- D) Allow farmers to give them real-time instructions on what to do.

49. Why are farmers pressing for robotic farming?

- A) Farming costs are fast increasing.
- B) Robotics technology is maturing.
- C) Robotic farming is the trend.
- D) Labor short is worsening

50. What does the author think future farms will be like?

- A) More and more automated.
- B) More and more productive.
- C) Larger and larger in scale.
- D) Better and better in condition.

①Perhaps it is time for farmers to put their feet up now that robots are used to inspect crops, dig up weeds, and even have become shepherds, too. Commercial growing fields are astronomically huge and take thousands of man-hours to operate. One prime example is one of Australia's most isolated cattle stations, Suplejack Downs in the Northern Territory, extending across 4,000 square kilometers, taking over 13 hours to reach by car from the nearest major town—Alice Springs.

②The extreme isolation of these massive farms leaves them often unattended, and monitored only once or twice a year, which means if the livestock falls ill or requires assistance, it can be a long time for farmers to discover.

③However, robots are coming to the rescue.

④Robots are currently under a two-year trial in Wales which will train “farmbots” to herd, monitor the health of livestock, and make sure there is enough pasture for them to graze on. The robots are equipped with many sensors to identify conditions of the environment, cattle and food, using thermal and vision sensors that detect changes in body temperature.

⑤“You’ve also got color, texture and shape sensors looking down at the ground to check pasture quality,” says Salah Sukkarieh of the University of Sydney, who will carry out trials on several farms in central New South Wales.

⑥During the trials, the robot algorithms (算法) and mechanics will be fine-tuned to make it better suited to ailing livestock and ensure it safely navigates around potential hazards including trees, mud, swamps, and hills.

⑦ “We want to improve the quality of animal health and make it easier for farmers to maintain large landscapes where animals roam free,” says Sukkarieh.

⑧The robots are not limited to herding and monitoring livestock. They have been created to count individual fruit, inspect crops, and even pull weeds.

⑨ Many robots are equipped with high-tech sensors and complex learning algorithms to avoid injuring humans as they work side by side. The robots also learn the most efficient and safest passages, and allow engineers and farmers to analyze and better optimize the attributes and tasks of the robot, as well as provide a live stream giving real-time feedback on exactly what is happening on the farms.

⑩Of course, some worry lies in replacing agricultural workers. However, it is farmers that are pushing for the advancements due to ever-increasing labor vacancies, making it difficult to maintain large-scale operations.

⑪The robots have provided major benefits to farmers in various ways, from hunting and pulling weeds to monitoring the condition of every single fruit. Future farms will likely experience a greater deal of autonomy as robots take up more and more farm work efficiently.

第2课：六级阅读C篇 --- 冲刺2

课堂真题讲解：

46. What does the author say about ordinary Americans?

- A) They struggle to solve math problems.
- B) They think math is a complex subject.
- C) They find high-level math of little use.
- D) They work hard to learn high-level math.

47. What is the general complaint about America's math education according to Hacker?

- A) America is not doing as well as China.
- B) Math professors are not doing a good job.
- C) It doesn't help students develop their literacy.
- D) There has hardly been any innovation for years.

48. What does Andrew Hacker's Numeracy 101 aim to do?

- A) Allow students to learn high-level math step by step.
- B) Enable students to make practical use of basic math.
- C) Lay a solid foundation for advanced math studies.
- D) Help students to develop their analytical abilities.

49. What does Maria Droujkova suggest math teachers do in class?

- A) Make complex concepts easy to understand.
- B) Start teaching children math at an early age.
- C) Help children work wonders with calculus.
- D) Try to arouse students' curiosity in math.

50. What does Pamela Harris think should be the goal of math education?

- A) To enable learners to understand the world better.
- B) To help learners to tell fake math from real math.
- C) To broaden Americans' perspectives on math.
- D) To exert influence on world development.

① While human achievements in mathematics continue to reach new levels of complexity, many of us who aren't mathematicians at heart (or engineers by trade) may struggle to remember the last time we used calculus (微积分).

② It's a fact not lost on American educators, who amid rising math failure rates are debating how math can better meet the real-life needs of students. Should we change the way math is taught in schools, or eliminate some courses entirely?

③ Andrew Hacker, Queens College political science professor, thinks that advanced algebra and other higher-level math should be cut from curricula in favor of courses with more routine usefulness, like statistics.

④ "We hear on all sides that we're not teaching enough mathematics, and the Chinese are running rings around us," Hacker says. "I'm suggesting we're teaching too much mathematics to too many people...not everybody has to know calculus. If you're going to become an aeronautical (航空的) engineer, fine. But most of us aren't."

⑤ Instead, Hacker is pushing for more courses like the one he teaches at Queens College: Numeracy 101. There, his students of "citizen statistics" learn to analyze public information like the federal budget and corporate reports. Such courses, Hacker argues, are a remedy for the numerical illiteracy of adults who have completed high-level math like algebra but are unable to calculate the price of, say, a carpet by area.

⑥Hacker’s argument has met with opposition from other math educators who say what’s needed is to help students develop a better relationship with math earlier, rather than teaching them less math altogether.

⑦Maria Droujkova is a founder of Natural Math, and has taught basic calculus concepts to 5-year-olds. For Droujkova, high-level math is important, and what it could use in American classrooms is an injection of childlike wonder.

⑧“Make mathematics more available,” Droujkova says. “Redesign it so it’s more accessible to more kinds of people: young children, adults who worry about it, adults who may have had bad experiences.”

⑨Pamela Harris, a lecturer at the University of Texas at Austin, has a similar perspective. Harris says that American education is suffering from an epidemic of “fake math”—an emphasis on rote memorization (死记硬背) of formulas and steps, rather than an understanding of how math can influence the ways we see the world.

⑩Andrew Hacker, for the record, remains skeptical.

⑪“I’m going to leave it to those who are in mathematics to work out the ways to make their subject interesting and exciting so students want to take it,” Hacker says. “All that I ask is that alternatives be offered instead of putting all of us on the road to calculus.”

作业

51.What does the author say about people making decisions?

- A)They may become exhausted by making too many decisions for themselves.
- B)They are more cautious in making decisions for others than for themselves.
- C)They tend to make decisions the way they think advantageous to them.
- D)They show considerable differences in their decision-making abilities.

52.What does the example about the physicians illustrate?

- A)Patients seldom receive due care towards the end of the day.
- B)Prescription of antibiotics can be harmful to patients'health.
- C)Decision fatigue may prevent people making wise decisions.
- D)Medical doctors are especially susceptible to decision fatigue.

53.When do people feel less decision fatigue?

- A)When they take decision shortcuts.
- B)When they help others to make decisions.
- C)When they have major decisions to make.
- D)When they have advisers to turn to.

54.What are people likely to do when decision fatigue sets in?

- A)They turn to physicians for advice.
- B)They tend to make risky decisions.
- C)They adopt a totally new perspective.
- D)They refrain from trying anything new.

55.What does the passage say about taking some risk in decision making?

- A)It is vital for one to reach the goal desired.
- B)It is likely to entail serious consequences.
- C)It will enable people to be more creative.
- D)It will more often than not end in regret.

①If you've ever started a sentence with, "If I were you..."or found yourself scratching your head at a colleague's agony over a decision when the answer is crystal-clear, there's a scientific reason behind it. Our own decision-making abilities can become depleted over the course of the day causing indecision or poor choices, but choosing on behalf of someone else is an enjoyable task that doesn't suffer the same pitfalls.

②The problem is "decision fatigue," a psychological phenomenon that takes a toll on the quality of your choices after a long day of decision making, says Evan Polman, a leading psychologist.

③Physicians who have been on the job for several hours, for example, are more likely to prescribe antibiotics to patients when it's unwise to do so. "Presumably it's because it's simple and easy to write a prescription and consider a patient case closed rather than investigate further,"Polman says.

④But decision fatigue goes away when you are making the decision for someone else. When people imagine themselves as advisers and imagine their own choices as belonging to someone else, they feel less tired and rely less on decision shortcuts to make those choices. "By taking upon the role of adviser rather than decision maker,one does not suffer the consequences of decision Mtigue," he says."It is as if there is something fun and liberating about making someone else's choice."

⑤Getting input from others not only omrs a fresh perspective and thought process, it often also includes riskier choices. While this sounds undesirable, it can be quite good, says Polman. "when people experience decision fatigue-when they are tired of making choices-they have a tendency to choose to go with status quo (现状),"he says. "But the status quo can be problematic. since a change in the course of action can sometimes be important and lead to a positive outcome."

⑥In order to achieve a successful outcome or reward, some level of risk is almost always essential. "people who are susceptible to decision fatigue will likely choose to do nothing over something," he says. "That's not to say that risk is always good, but it is related to taking action, whereas decision fatigue assuredly leads to inaction and the possible chagrin (懊恼) of a decision maker who might otherwise prefer a new course but is unfortunately hindered."

⑦Just because you can make good choices for others doesn't mean you'll do the same for yourself, polman cautions. "Research has found that women negotiate higher salaries for others than they do for themselves," he says, adding that people slip in and out of decision roles.