29 Which country gets most of its power from nuclear power?

A. France
B. Germany
C. India
D. China

30 What best paraphrases the following sentence in the last paragraph?

In the end, is any of these sources alone the answer to our current energy problems?

A. Is there an energy source that can solve all of our energy problems on its own?
B. Can our current energy problems be solved by making sure we stop burning fossil fuel?
C. Can we solve our energy problems by using all the alternative energy sources together?
D. Is finding a new alternate to fossil fuels the only way to solve our energy problems?

HỌC TỪ VỰNG

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PASSAGE 4

Questions 31-40

15 minutes

GHI CHÚ

Các câu hỏi dễ hơn cần ưu tiên trả lời đúng

★ Câu hỏi thông tin chi tiết: **32, 36, 38**
★ Câu hỏi tham chiếu: **33**
★ Câu hỏi từ vựng: **34**
★ Câu hỏi ý chính: **31, 39**

In the 1966 science-fiction film *Fantastic Voyage*, a team of scientists and doctors are shrunk and injected into the body of an injured man to save his life. The tiny crew travels through the body's dangerous environment to locate and repair the damaged part of the man's body. Eventually, the group manages to complete their task and the man awakens, fully cured.

LIVEWORKSHEETS

[A] But what if it were possible to cure a disease like cancer using tiny particles injected into a person – particles that would not only find the cancer, but also destroy it without harming anything else in the body? Although it may seem like science fiction, tools like this are now being developed and may, in fact, become common in the near future – thanks to research currently being done in the field of nanotechnology. The main thing to know about nanotechnology is that it's small – really small. The prefix *nano* refers to a nanometer, which is one-billionth of a meter. A comma on a page of a book or magazine, for instance, may be more than half a million nanometers wide. [B]

Researcher Ted Sargent, a leader in the field of nanotechnology, describes how using quantum dots – particles that are a few nanometers in size – will help diagnose a disease. The particles, Sargent explains, shine brightly when exposed to UV light and can be inserted into the body. **They** can also be programmed to bond only to a certain type of cell – a particular cancer cell, for example. Doctors can then use a camera and look for the colored particles, which will help them **determine** where cancer cells are growing in a person's body.

[C] Using this technology, it will be possible to detect cancer at a stage when there are perhaps only a thousand bad cells. Compare this to what happens today: Doctors can diagnose cancer only after the dangerous cells have multiplied into the millions and developed into a tumor. One of the advantages of detecting and treating cancer at an early stage is that the cells are less likely to become resistant to drug treatment. In later stages, cancer cells often change and adapt to certain drugs so rapidly that many medicines become ineffective.

Once a certain type of cancer is detected, nanotechnology will also radically improve the way it is treated. Right now, most cancer treatments kill not only the cancerous cells but the healthy ones as well, causing a number of side effects in people. Nanoparticles, on the other hand, will allow doctors to attack cancerous tumors without disturbing healthy cells by delivering cancer-killing drugs to the bad cells only. A second method will be to destroy cancer cells (identified by nanoparticles) using laser rays. Ultimately, technologies like this will allow doctors to deliver cancer treatment earlier, faster, and more thoroughly, with fewer side effects. [D]

Unfortunately, even though nanoparticles have great medical potential, there are serious concerns that these same materials could have negative environmental and health effects. In recent studies, researchers found that half the human cells died after exposing lab-grown human cells to water containing large amounts of nanoparticles.

LIVEWORKSHEETS

Because nanotechnology is so potentially useful, many scientists don't think research into its many uses should be stopped; learning more about nanotechnology should remain a priority. But scientists do believe that governments should allocate more money for safety-related studies – to make sure that large concentrations of nanoparticles do not get into our food and water supplies and cause serious problems.

31 What is the passage mainly about?

A. a fantastic voyage within the human body

B. how nanotechnology can be used in medical science

C. the dangers and side effects of nanotechnology

D. the various ways of detecting cancer

32 How big is a nanometer?

A. the size of a comma

B. the same size as a quantum dot

C. a billion nanoparticles wide

D. one-billionth of a meter

33 The word '**they**' in paragraph 3 refers to

A. quantum dots

B. cells

C. doctors

D. UV rays

34 In paragraph 3, the word '**determine**' could be replaced by

A. discover

B. report

C. miss

D. hide

35 What is NOT a problem with most cancer treatments instead of nanotechnology?

A. They cause many side effects

B. They kill both cancerous and healthy cells.

C. They use laser rays which are harmful to people's health.

D. They might be ineffective in later stages because of drug resistance.

36 Exposing human cells to large amounts of nanoparticles

A. has no effect

B. should remain a priority

C. is how cancer can be treated

D. can result in 50% cell death

LIVEWORKSHEETS

37 Which of these statements about nanotechnology is NOT true?

A. It could lead to early diagnosis of cancer.

B. Doctors could potentially use it to destroy cancer cells.

C. It will allow doctors to avoid destroying healthy cells.

D. It is completely safe for humans and animals.

38 Why do scientists concern about using nanotechnology to cure cancer?

A. It causes many side effects.

B. It costs a lot of money to use it.

C. It has bad effects on the environment and people's health.

D. It has too little research about using it.

39 What is the main idea of paragraph 7?

A. Nanotechnology has not proved useful, and most scientists want the research halted.

B. Scientists want to see research into nanotechnology continue, but carefully.

C. Nanotechnology is so useful that many governments are investing in research.

D. Many scientists think that nanotechnology is too dangerous to be permitted.

40 In which space (marked A, B, C and D in the passage) will the following sentence fit?

Such an idea, while fun, sounds extraordinary to many.

A. [A] **B.** [B]

C. [C] **D.** [D]

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This is the end of the reading paper.
Now please submit your test paper and your answer sheets.

LIVEWORKSHEETS