

Passage 1

It is well known and documented that pregnancy in women over 40 brings an increased probability of health complications for the baby. For example, a woman's risk of having a baby with chromosomal abnormalities increases with her age. The most well-known complication of advanced maternal age is Down syndrome, a genetic disorder where the baby presents with both cognitive problems and physical irregularities. 5

What is not commonly known is that recent studies have revealed that men over 40 also risk passing on serious medical conditions to their children. In addition to problems such as low birth weight, advanced paternal age can cause schizophrenia, bipolar disorder, and autism. Scientists are focusing their research on 10 sperm—mainly its genetic quality, but also its volume and mobility, all of which typically decrease with age—as a possible cause.

Passage 2

The cerebral cortex is the outside part of the brain that looks like a maze. Much like the intestines, the shape allows for more surface area in a confined space. The cerebral cortex plays a fundamental role in memory, attention, perceptual awareness, 15 thought, language, and consciousness.

Studies have found that in people with brain disorders that originate during fetal development, such as autism, certain areas of the cerebral cortex are shaped differently than those of healthy people.

Therefore, there must be a link between problems in the physical development 20 of the brain during pregnancy and mental illnesses.

24. Which one of the following statements can be inferred from Passage 1?

- (A) Medical, intelligence, and psychiatric screening should be mandatory for all parents.
- (B) Until recently, the role of older fathers in health problems was not public knowledge or fully investigated by scientists.
- (C) Too much sperm creates problems for the children of older fathers.
- (D) The number of older fathers has decreased in the past couple of decades.
- (E) More research could lead to better therapies or cures for these mental illnesses.

25. What topic do Passages 1 and 2 have in common?

- (A) The shape of the cerebral cortex
- (B) New treatments and therapies for autism patients
- (C) The risks of pregnancy in women over 40
- (D) Causes of health problems during pregnancy
- (E) Research into the paternal age effect

26. As used in line 5 of Passage 1, the word “presents” most nearly means

- (A) exhibits
- (B) emulates
- (C) vindicates
- (D) reproaches
- (E) quells

27. Which one of the following statements best supports the main point of Passage 2?

- (A) Dolphins, whales, apes, and even dogs have similar folds in their cortices.
- (B) The size of a person’s brain indicates certain personality traits and intellectual ability.
- (C) Disorders may be triggered when the nerves that pull the cortex into place are damaged during fetal development.
- (D) Parents can mold the size and shape of their child’s brain after birth through vitamin supplements.
- (E) Phrenology has been increasingly accepted as more than just a pseudoscience.

28. The phrase “chromosomal abnormalities” in line 3 of Passage 1 refers to

- (A) mental illnesses
- (B) the cerebral cortex
- (C) physical deformities
- (D) genetic malformation
- (E) low birth weight

29. Which of the following, if true, would most undermine the assertion in the second sentence of Passage 1?

- (A) The reported link between autism and vaccines has been completely discredited.
- (B) Down syndrome is the most common chromosomal abnormality in humans.
- (C) Complications during the fetal stage are less likely to occur in teen pregnancies.
- (D) In a recent study, only 13 percent of people polled knew that Down syndrome is a health complication from pregnancy in women over 40.
- (E) Mothers from middle- and upper-class families are less likely to experience fetal health problems.

30. The author of Passage 2 mentions the intestines in order to

- (A) illustrate the meandering nature of the brain's structure
- (B) emphasize the size of the human appetite
- (C) suggest a link between the brain and the digestive system
- (D) imply that the brain is analogous to the stomach
- (E) provide a contrast to the shape of the kidneys

31. In line 6 of Passage 1, the word "irregularities" most nearly means

- (A) deviations
- (B) rejuvenations
- (C) avarices
- (D) mercenaries
- (E) prodigies

32. The major difference between the passages is that Passage 1 is concerned with

- (A) pregnancy, while Passage 2 is concerned with fertility
- (B) physical irregularities, while Passage 2 is concerned with mental illness
- (C) Down syndrome, while Passage 2 is concerned with autism
- (D) genetics, while Passage 2 is concerned with fetal development
- (E) advanced maternal age, while Passage 2 is concerned with advanced paternal age

33. As used in line 15 of Passage 2, the word "fundamental" most nearly means

- (A) intolerant
- (B) disreputable
- (C) essential
- (D) generic
- (E) tranquil

Charter schools are public schools—they receive public money, and they don't charge tuition, have a religious affiliation, or admit students through a selective admissions process. However, they are founded by entities such as nonprofit companies, individuals, universities, and state education boards, and are managed more like a private school.

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A charter school is created by a contract—or charter—that outlines the school's mission and delineates a system for evaluating whether the school has met those goals and objectives, instead of having to adhere to state laws regulating school performance.

Charter schools are free from those regulations, and are held accountable for 10 academic results rather than the quotas that hamper success at other public schools. Thus, they are the best type of primary and secondary educational institution, and there should be more of them in every district in the United States.

34. Based on the last paragraph, the author would most likely describe nonchartered public schools as

- (A) ineffective
- (B) rebellious
- (C) spasmodic
- (D) odoriferous
- (E) plebeian

35. In line 8, the word “adhere” most nearly means

- (A) fasten
- (B) exhort
- (C) condescend
- (D) insinuate
- (E) obey

36. In the second paragraph (lines 6–9), the author suggests that

- (A) public schools should have more regulation
- (B) religion should be a part of public school education
- (C) state laws restrict progress and achievement
- (D) nonprofit companies have no place in primary and secondary education
- (E) a selective admissions process is not important

37. It can be inferred from the passage that the author believes that

- (A) not every public school has the right mission
- (B) academic results are equal to success
- (C) public schools should be run by the federal government
- (D) more charter school students attend college
- (E) private schools are the best competition for charter schools

38. Which of the following most seriously undermines the author's conclusion?

- (A) Charter schools tend to be small, so they provide students with specialized attention.
- (B) Charter schools drain away funds that could be used for regular public schools.
- (C) Charter schools increase competition, enhancing the quality of all public schools.
- (D) Communities that are dissatisfied with nonchartered public schools are grateful for these alternative institutions.
- (E) Many charter schools have closed because of poor management or inferior academic performance.

39. The primary purpose of the passage is to

- (A) promote an increase in the number of charter schools
- (B) advocate for a decrease in funding for charter schools
- (C) explain the origins of charter schools
- (D) provide sample goals and objectives of certain charter schools
- (E) describe the most successful of all charter schools

With the world's population swelling and the water supply dwindling, the availability of fresh water for human consumption is a growing concern.

Conventional ways of getting more fresh water—such as using geological surveys to find new sources of fresh water underground or building dams in arid places such as Nevada to manage the flow of river water—are expensive endeavors. 5 These projects can double the cost per cubic meter for fresh water.

Steps have also been taken to encourage developed nations to use water more economically. Manufacturers now produce toilets that need almost no water to remove waste, as well as dishwashers that are much more efficient. Public awareness campaigns are also common, urging people to use less water during their daily 10 routine, such as when they shower or brush their teeth. While these steps are laudable, more needs to be done.

As sources of water disappear and the price gap closes, desalination of ocean water is growing in popularity. However, it is still a more costly and complicated way to get fresh water when compared with traditional methods. 15

40. As used in line 4, the word "arid" most nearly means

- (A) insatiable
- (B) scorched
- (C) deleterious
- (D) sedentary
- (E) ephemeral

41. Which of the following statements support(s) the main point of the passage?

- I. Less than half of one percent of human water needs is currently met by desalination.
- II. It can cost several dollars to produce a cubic meter of desalinated water, while drawing fresh water from a river can cost as little as 10 cents.
- III. Desalination is the process of removing excess salt and other minerals from water.

- (A) I
- (B) II
- (C) III
- (D) I and II
- (E) II and III

42. Which of the following is NOT mentioned as a possible cause of decreased availability of fresh water?

- (A) An increasing world population
- (B) A smaller number of fresh water sources
- (C) The harmful effects of desalination to the environment
- (D) Wasteful use of fresh water in developed nations
- (E) The cost of establishing new fresh water projects

43. As used in line 12, the word “laudable” most nearly means

- (A) nonchalant
- (B) praiseworthy
- (C) resilient
- (D) acerbic
- (E) untoward

44. Lines 11–12 suggest that the author believes that

- (A) desalination is a problematic and unwise solution
- (B) dishwashers should be made much more efficient
- (C) geological surveys are the key to more fresh water sources being found
- (D) developed nations are still too careless with fresh water supplies
- (E) public awareness campaigns have been ineffective