

Main Point

1. Whether the world is Euclidean or non-Euclidean is still an open question. However, if a star's position is predicted based on non-Euclidean geometry, then when a telescope is pointed to where the star should be it will be there. Whereas, if the star's position is predicted based on Euclidean geometry, then when a telescope is pointed to where the star should be it won't be there. This strongly indicates that the world is non-Euclidean.

Which one of the following best expresses the main idea of the passage?

- (A) The world may or may not be Euclidean.
- (B) The world is probably non-Euclidean.
- (C) The world is non-Euclidean.
- (D) The world is Euclidean.
- (E) The world is neither Euclidean nor non-Euclidean.

2. As symbols of the freedom of the wilderness, bald eagles have the unique capacity to inspire people and foster in them a sympathetic attitude toward the needs of other threatened species. Clearly, without that sympathy and the political will it engenders, the needs of more obscure species will go unmet. The conservation needs of many obscure species can only be met by beginning with the conservation of this symbolic species, the bald eagle.

Which one of the following is the main point of the passage as a whole?

- (A) Because bald eagles symbolize freedom, conservation efforts should be concentrated on them rather than on other, more obscure species.
- (B) The conservation of bald eagles is the first necessary step in conserving other endangered species.
- (C) Without increased public sympathy for conservation, the needs of many symbolic species will go unmet.
- (D) People's love of the wilderness can be used to engender political support for conservation efforts.
- (E) Other threatened species do not inspire people or foster sympathy as much as do bald eagles.

3. Some legislators refuse to commit public funds for new scientific research if they cannot be assured that the research will contribute to the public welfare. Such a position ignores the lessons of experience. Many important contributions to the public welfare that resulted from scientific research were never predicted as potential outcomes of that research. Suppose that a scientist in the early twentieth century had applied for public funds to study molds: who would have predicted that such research would lead to the discovery of antibiotics—one of the greatest contributions ever made to the public welfare?

Which one of the following most accurately expresses the main point of the argument?

- (A) The committal of public funds for new scientific research will ensure that the public welfare will be enhanced.
- (B) If it were possible to predict the general outcome of a new scientific research effort, then legislators would not refuse to commit public funds for that effort.
- (C) Scientific discoveries that have contributed to the public welfare would have occurred sooner if public funds had been committed to the research that generated those discoveries.
- (D) In order to ensure that scientific research is directed toward contributing to the public welfare, legislators must commit public funds to new scientific research.
- (E) Lack of guarantees that new scientific research will

contribute to the public welfare is not sufficient reason for legislators to refuse to commit public funds to new scientific research.

4. Psychologists have studied the impact a person's attitude has on his ability to accomplish tasks. In one study, a group of college students was outfitted with contraptions designed to administer soothing heat pulses to the students' neck and shoulder muscles. The students were told that the pulses would enhance their performance of in-class assignments. Only half of these contraptions worked, but neither the students nor the psychologists were told which students would actually receive these pulses. This component of the experiment is often frustrated, however, because _____

Which one of the following selections, if it is true, completes the sentence most appropriately?

- (A) frequently the faces of the students who actually receive the pulses become a little flushed.
- (B) students who believe they are receiving the warm pulses do better on their class assignments.
- (C) students who participate in the studies are volunteers who must be told that some of them will not receive the heat pulses.
- (D) many students will not complete the experiment if the sessions last too long.
- (E) many of the participating students suffer from tension headaches which readily respond to the heat pulses.

5. In clinical trials of new medicines, half of the subjects receive the drug being tested and half receive a physiologically inert substance—a placebo. Trials are designed with the intention that neither subjects nor experimenters will find out which subjects are actually being given the drug being tested. However, this intention is frequently frustrated because_____.

Which one of the following, if true, most appropriately completes the explanation?

- (A) often the subjects who receive the drug being tested develop symptoms that the experimenters recognize as side effects of the physiologically active drug

- (B) subjects who believe they are receiving the drug being tested often display improvements in their conditions regardless of whether what is administered to them is physiologically active or not
- (C) in general, when the trial is intended to establish the experimental drug's safety rather than its effectiveness, all of the subjects are healthy volunteers
- (D) when a trial runs a long time, few of the experimenters will work on it from inception to conclusion
- (E) the people who are subjects for clinical trials must, by law, be volunteers and must be informed of the possibility that they will receive a placebo