

There is no reason why the work of scientists has to be officially confirmed before being published. There is a system in place for the confirmation or disconfirmation of scientific finding, namely, the replication of results by other scientists. Poor scientific work on the part of any one scientist, which can include anything from careless reporting practices to fraud, is not harmful. It will be exposed and rendered harmless when other scientists conduct the experiments and obtain disconfirmatory results.

**1. Which one of the following, if true, would weaken the argument?**

- (A) Scientific experiments can go unchallenged for many years before they are replicated.
- (B) Most scientists work in universities, where their work is submitted to peer review before publication.
- (C) Most scientists are under no pressure to make their work accessible to the scrutiny of replication.
- (D) In scientific experiments, careless reporting is more common than fraud.
- (E) Most scientists work as part of a team rather than alone.

Salmonella is a food-borne microorganism that can cause intestinal illness. The illness is sometimes fatal, especially if not identified quickly and treated. Conventional Salmonella tests on food samples are slow and can miss unusual strains of the microorganism. A new test identifies the presence or absence of Salmonella by the one piece of genetic material common to all strains. Clearly, public health officials would be well advised to replace the previous Salmonella tests with the new test.

**2. Which one of the following, if true, most strengthens the argument?**

- (A) The level of skill required for laboratory technicians to perform the new test is higher than that required to perform previous tests for Salmonella.
- (B) The new test returns results very soon after food samples are submitted for testing.
- (C) A proposed new treatment for Salmonella poisoning would take effect faster than the old treatment.
- (D) Salmonella poisoning is becoming less frequent in the general population.
- (E) Some remedies for Salmonella poisoning also cure intestinal disorders caused by other microorganism

Until now, this painting was believed to be a self portrait of the artist, but it probably is not. True, the heavy gold chain worn by the gentleman in the picture is similar to one presented to the artist by the Queen of England after he had painted her portrait. But the sword hanging at the gentleman's hip suggests that he was a knight, a rank higher than any the artist ever attained.

**3. Which one of the following, if true, would most strengthen the author's argument?**

- (A) Historians cannot determine whether the artist was ever knighted.
- (B) The artist painted only one self-portrait in his entire life.
- (C) Several gentlemen of the artist's day wore heavy gold chains like the one in the painting.
- (D) The gentleman in the painting resembles portraits of the artist painted by other artists.
- (E) The artist was the only gentleman of his day who received a heavy gold chain from the Queen of England.

The mayor boasts that the average ambulance turnaround time, the time from summons to delivery of the patient, has been reduced this year for top-priority emergencies. This is a serious misrepresentation. This “reduction” was produced simply by redefining “top priority.” Such emergencies used to include gunshot wounds and electrocutions, the most time-consuming cases. Now they are limited strictly to heart attacks and strokes.

**4. Which one of the following would strengthen the author’s conclusion that it was the redefinition of “top priority” that produced the reduction in turnaround time?**

- (A) The number of heart attacks and strokes declined this year.
- (B) The mayor redefined the city’s financial priorities this year.
- (C) Experts disagree with the mayor’s definition of “top-priority emergency.”
- (D) Other cities include gunshot wound cases in their category of top-priority emergencies.
- (E) One half of all of last year’s top-priority emergencies were gunshot wounds and electrocution cases.