Unit 1 – Introduction to Biology

Lesson 003 Quiz: The Scientific Method

Question 1

What is the first step that often begins scientific inquiry?

A. Forming a hypothesis

B. Conducting an experiment

C. Making careful observations

D. Publishing results

E. Revising conclusions

Question 2

A scientific question must be:

A. Interesting to everyone

B. Answerable with evidence

C. Based on personal beliefs

D. Impossible to test

E. Already answered

Question 3

What is a hypothesis?

A. A proven scientific fact

B. A random guess without evidence

C. A proposed explanation consistent with existing evidence

D. The final conclusion of an experiment

E. A collection of observations

Question 4

Why are predictions important in science?

A. They replace experiments.

B. They connect hypotheses to evidence.

C. They guarantee correct results.

D. They prevent further research.

E. They eliminate uncertainty.

Question 5

Which of the following is NOT mentioned as a method scientists use to gather evidence?

A. Laboratory experiments

B. Field observations

C. Comparative studies

D. Computer models

E. Astrology

Question 6

According to the lesson, the research method should:

A. Always be a laboratory experiment.

B. Match the scientific question being asked.

C. Be the fastest available method.

D. Be the least expensive method.

E. Always involve animals.

Question 7

Why do scientists communicate their methods and results?

A. To increase competition between scientists

B. To prevent others from repeating the work

C. So others can evaluate the evidence and test the findings

D. To keep discoveries secret

E. To avoid peer review

Question 8

Which process helps identify errors and determine whether scientific findings are dependable?

A. Advertising

B. Guessing

C. Peer review and replication

D. Personal opinion

E. Voting

Question 9

Why is science described as self-correcting?

A. Scientists never make mistakes.

B. Scientific ideas never change.

C. Scientists revise explanations when new evidence appears.

D. Experiments always produce the same results.

E. Scientific conclusions are absolutely certain.

Question 10

Which sequence best represents the scientific inquiry process described in the lesson?

A. Observation → Question → Explanation → Prediction → Evidence → Communication → Revision

B. Experiment → Observation → Conclusion → Hypothesis → Revision

C. Prediction → Observation → Communication → Evidence → Question

D. Conclusion → Experiment → Observation → Question

E. Communication → Revision → Observation → Experiment

Correct Answers

1. C 2. B 3. C 4. B 5. E 6. B 7. C 8. C 9. C 10. A

Did you get all the answers correct?

If not, don't worry—just watch Lesson 3 again and try the quiz one more time.