2023-2024 Gr7 Science Benchmark Unit 3

Answer Key

Question 1. A – 1 Point | B – 1 Point | C – 1 Point | D – 0 Point | E – 0 Point

Standards

MS-LS1-4
Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

Question 2.

Response 1: O – 2 Points

Response 2: O – 2 Points

Standards

MS-LS1-4
Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

Question 3. B – 1 Point

Standards

MS-LS1-5
Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

Question 4.

Response 1: O – 2 Points

Response 2: O – 2 Points

Standards

MS-LS3-2
Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.

Question 5. D – 1 Point

Standards

MS-LS1-5
Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

Question 6. A – 1 Point

Standards

MS-LS3-2
Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.

Question 7. D – 1 Point

Standards

MS-LS1-4
Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

Question 8. C – 1 Point

Standards

MS-LS3-2
Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.

Question 9. O – 3 Points

Standards

MS-LS3-2
Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.

Question 10. C – 1 Point

Standards

MS-LS1-5
Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

Question 11. A – 1 Point

Standards

MS-LS1-8
Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

Question 12. C – 1 Point

Standards

MS-LS1-8
Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

Question 13. A – 1 Point

Standards

MS-LS3-2
Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.

Question 14. A – 1 Point

Standards

MS-LS1-4
Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

Question 15. A – 1 Point

Standards

MS-LS1-5
Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

Question 16. B – 1 Point

Standards

MS-LS1-4
Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

Question 17. D – 1 Point

Standards

MS-LS1-8
Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

Question 18. D – 1 Point

Standards

MS-LS1-8
Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

Question 19. A – 1 Point

Standards

MS-PS1-4
Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.

Question 20. B – 1 Point

Standards

MS-PS1-4
Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.