

Biology

2015 Released Test Questions

TEST ADMINISTRATOR INSTRUCTIONS

Question 1

Grade	EOC	Subject	Biology	Question	1
Reporting Category 2		Mechanisms of Genetics: The student will demonstrate an understanding of the mechanisms of genetics.			
Knowledge and Skill Statement Biology 6		The student knows the mechanisms of genetics, including the role of nucleic acids and the principles of Mendelian Genetics.			
Essence Statement		Recognizes that the structure of DNA determines the inherited traits in organisms.			
Prerequisite Skill		investigate and record some of the unique stages that insects undergo during their life cycle (2)			

Question 2

Grade	EOC	Subject	Biology	Question	2
Reporting Category 2		Mechanisms of Genetics: The student will demonstrate an understanding of the mechanisms of genetics.			
Knowledge and Skill Statement Biology 6		The student knows the mechanisms of genetics, including the role of nucleic acids and the principles of Mendelian Genetics.			
Essence Statement		Recognizes that the structure of DNA determines the inherited traits in organisms.			
Prerequisite Skill		investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs, and lady bugs (3)			

Question 3

Grade	EOC	Subject	Biology	Question	3
Reporting Category 2		Mechanisms of Genetics: The student will demonstrate an understanding of the mechanisms of genetics.			
Knowledge and Skill Statement Biology 6		The student knows the mechanisms of genetics, including the role of nucleic acids and the principles of Mendelian Genetics.			
Essence Statement		Recognizes that the structure of DNA determines the inherited traits in organisms.			
Prerequisite Skill		explore, illustrate, and compare life cycles in living organisms such as butterflies, beetles, radishes, or lima beans (4)			

Question 4

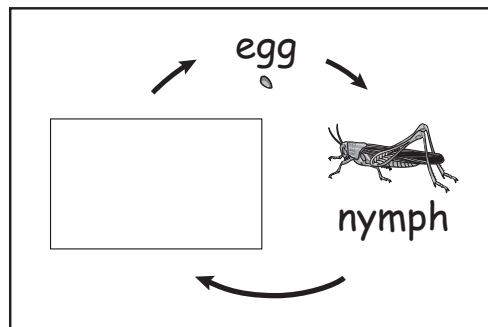
Grade	EOC	Subject	Biology	Question	4
Reporting Category 2		Mechanisms of Genetics: The student will demonstrate an understanding of the mechanisms of genetics.			
Knowledge and Skill Statement Biology 6		The student knows the mechanisms of genetics, including the role of nucleic acids and the principles of Mendelian Genetics.			
Essence Statement		Recognizes that the structure of DNA determines the inherited traits in organisms.			
Prerequisite Skill		describe the differences between complete and incomplete metamorphosis of insects (5)			

Presentation Instructions for Question 2

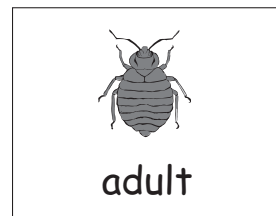
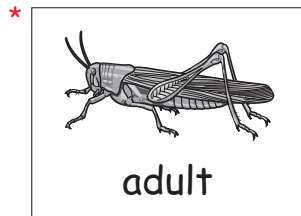
- Present Stimulus 2a and 2b.
- Direct the student to Stimulus 2a. Communicate: **Here is the life cycle of a grasshopper.**
- Direct the student to the empty box in Stimulus 2a. Communicate: **A stage in the life cycle is missing.**
- Direct the student to each answer choice in Stimulus 2b. Communicate the text in each answer choice.
- Communicate: **Find the stage that is missing from the life cycle.**

Stimulus 2a

Life Cycle of a Grasshopper



Stimulus 2b



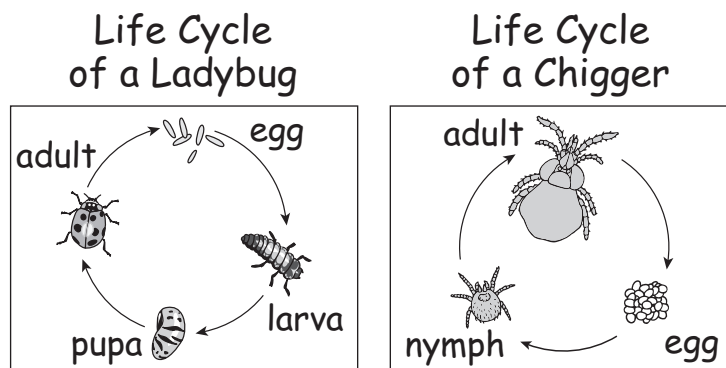
Scoring Instructions

Student Action	→	Test Administrator Action
If the student finds the adult grasshopper in Stimulus 2b,	→	mark A for question 2 and move to question 3.
If the student does not find the adult grasshopper in Stimulus 2b,	→	<ul style="list-style-type: none"> • model the desired student action by finding the adult grasshopper in Stimulus 2b and <i>communicate</i> “This is the adult stage that is missing from the life cycle of the grasshopper”; and • replicate the initial presentation instructions.
After teacher modeling, if the student finds the adult grasshopper in Stimulus 2b,	→	mark B for question 2 and move to question 3.
After teacher modeling, if the student does not find the adult grasshopper in Stimulus 2b,	→	mark C for question 2 and move to question 3.

Presentation Instructions for Question 3

- Present Stimulus 3a and 3b.
- Direct the student to the life cycles in Stimulus 3a. *Communicate:* **Here are life cycles of two different organisms.**
- Direct the student to the life cycle of the ladybug. *Communicate:* **This is the life cycle of a ladybug: egg, larva, pupa, adult.**
- Direct the student to the life cycle of the chigger. *Communicate:* **This is the life cycle of a chigger: egg, nymph, adult.**
- Direct the student to each answer choice in Stimulus 3b. *Communicate* the text in each answer choice.
- *Communicate:* **Find the sentence that tells what is the same about both life cycles.**

Stimulus 3a



Stimulus 3b

- They both have a nymph stage.
- They both have a larva stage.
- * They both have an egg stage.

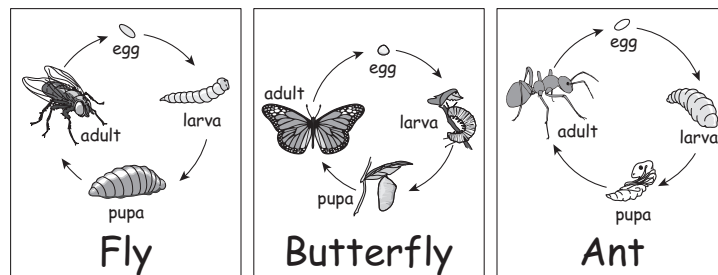
Scoring Instructions

Student Action		Test Administrator Action
If the student finds the sentence "They both have an egg stage,"	➡	mark A for question 3 and move to question 4.
If the student does not find the sentence "They both have an egg stage,"	➡	provide one of these allowable teacher assists to the student: <ul style="list-style-type: none"> • Highlight the stages that are the same in both life cycles. OR • Have the student tell about each stage for both life cycles. Replicate the initial presentation instructions.
After the selected teacher assistance, if the student finds the sentence "They both have an egg stage,"	➡	mark B for question 3 and move to question 4.
After the selected teacher assistance, if the student does not find the sentence "They both have an egg stage,"	➡	mark C for question 3 and move to question 4.

Presentation Instructions for Question 4

- Present Stimulus 4a and 4b.
- Direct the student to Stimulus 4a. *Communicate*: **Here are life cycles that show complete stages of metamorphosis.**
- *Communicate* the stages for each life cycle.
- Direct the student to each answer choice in Stimulus 4b. *Communicate* the text in each answer choice.
- *Communicate*: **Find the sentence that describes complete metamorphosis.**

Stimulus 4a



Stimulus 4b

* Each life cycle has three stages.

The adult stage looks different from the other stages.

Each stage of the life cycle looks the same.

Scoring Instructions

Student Action		Test Administrator Action
If the student finds the sentence "The adult stage looks different from the other stages,"	➡	mark A for question 4.
If the student does not find the sentence "The adult stage looks different from the other stages,"	➡	replicate the initial presentation instructions.
After the teacher repeats the instructions, if the student finds the sentence "The adult stage looks different from the other stages,"	➡	mark B for question 4.
After the teacher repeats the instructions, if the student does not find the sentence "The adult stage looks different from the other stages,"	➡	mark C for question 4.