

# Biology

2015 Released Test Questions

## TEST ADMINISTRATOR INSTRUCTIONS

### Question 1

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

### Question 2

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

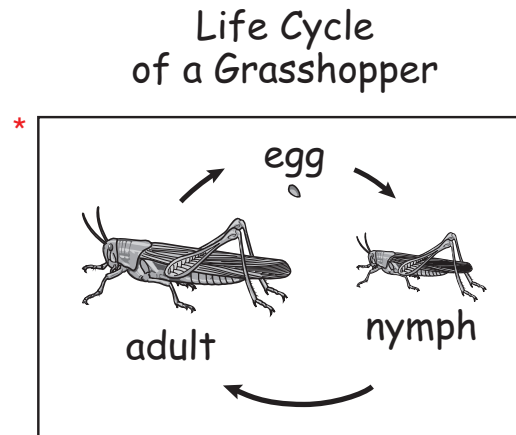
## Question 4

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

## Presentation Instructions for Question 1

- Present Stimulus 1.
- Direct the student to Stimulus 1. *Communicate:* **This diagram shows the life cycle of a grasshopper.**
- *Communicate* the text in the life cycle.
- *Communicate:* **Find the life cycle of the grasshopper.**

### Stimulus 1



### Scoring Instructions

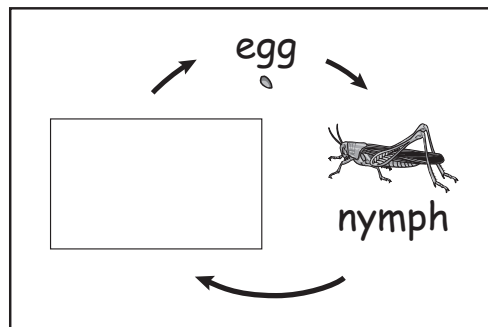
Student Action		Test Administrator Action
If the student finds the life cycle of the grasshopper,	➡	mark <b>A</b> for question 1 and move to question 2.
If the student does not find the life cycle of the grasshopper,	➡	<ul style="list-style-type: none"> <li>• remove the stimulus;</li> <li>• wait at least five seconds; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After the five-second wait time, if the student finds the life cycle of the grasshopper,	➡	mark <b>B</b> for question 1 and move to question 2.
After the five-second wait time, if the student does not find the life cycle of the grasshopper,	➡	mark <b>C</b> for question 1 and move to question 2.

## Presentation Instructions for Question 2

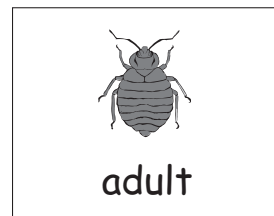
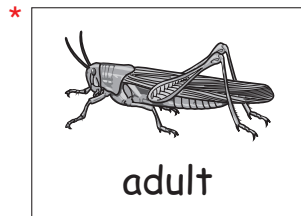
- Present Stimulus 2a and 2b.
- Direct the student to Stimulus 2a. Communicate: **Here is the life cycle of a grasshopper.**
- Direct the student to the empty box in Stimulus 2a. Communicate: **A stage in the life cycle is missing.**
- Direct the student to each answer choice in Stimulus 2b. Communicate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



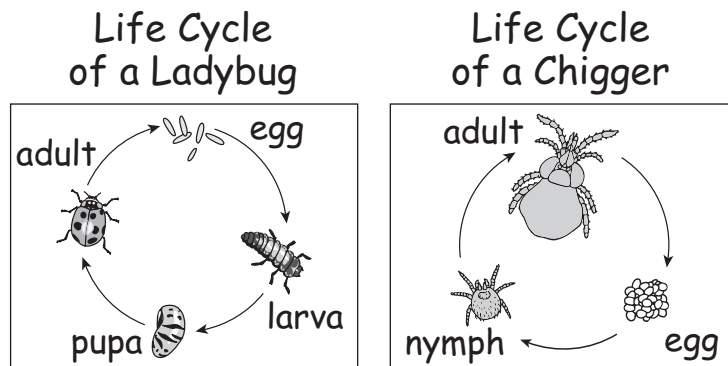
## Scoring Instructions

Student Action	→	Test Administrator Action
If the student finds the adult grasshopper in Stimulus 2b,	→	mark <b>A</b> 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"> <li>• model the desired student action by finding the adult grasshopper in Stimulus 2b and <i>communicate</i> <b>“This is the adult stage that is missing from the life cycle of the grasshopper”</b>; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After teacher modeling, if the student finds the adult grasshopper in Stimulus 2b,	→	mark <b>B</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 <b>C</b> 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

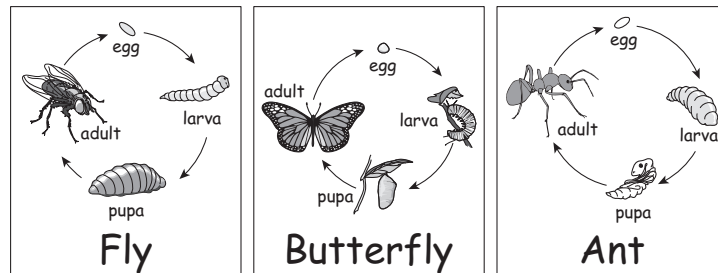
Student Action		Test Administrator Action
If the student finds the sentence "They both have an egg stage,"	➡	mark <b>A</b> for question 3 and move to question 4.
If the student does not find the sentence "They both have an egg stage,"	➡	provide <b>one</b> of these allowable teacher assists to the student: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