



# Crystal Springs Live!





Thank you for choosing Crystal Springs LIVE!

Crystal Springs Preserve and WaterVentures Florida's Learning Lab are committed to bringing quality environmental education programs to teachers and parents. Our programs are aligned with NGSSS and SNF standards to align with topics taught in classrooms. Each program has been created with the student in mind and conveys important environmental topics in a fun and engaging manner. Additionally, supplemental activities, vocabulary lists, pre/post tests and more are offered to provide an all-encompassing program for students in and out of the classroom.

For those of you unfamiliar with Crystal Springs or WaterVentures, we invite you to explore our websites. ([www.crystalspringsfoundation.org](http://www.crystalspringsfoundation.org) and [www.waterventures.us](http://www.waterventures.us)). Crystal Springs Preserve is a 530-acre living laboratory that is dedicated to bringing directed learning opportunities to visitors through immersion into the pristine habitat of the preserve. WaterVentures was created to extend this learning throughout the state of Florida. As a high-tech mobile learning lab, WaterVentures brings those same fun and engaging environmental programs to schools free of charge. Both are devoted to inspiring guests to be responsible environmental stewards of Florida's precious natural resources.

We hope you enjoy our virtual programs and please do not forget to check out the offerings of Crystal Springs Preserve and WaterVentures!

Happy learning!

## Getting Buggy Part 2- Life Cycle Pre/Post Test

- 1) The life cycle of an insect is the 3 or 4 stage process an insect goes through beginning with an egg and ending with an adult.
  - a. True
  - b. False
  
- 2) What is the process of change called from an egg to an adult that an insect goes through with 3 or 4 stages?
  - a. Mega change
  - b. Metamorphosis
  - c. Morphobug
  
- 3) The second stage of complete metamorphosis where an insect just eats but looks nothing like an adult is called \_\_\_\_\_.
  - a. Nymph
  - b. Egg
  - c. Larva
  - d. None of the above
  
- 4) The larva stage of a moth or butterfly is called a caterpillar.
  - a. True
  - b. False
  
- 5) The third stage of complete metamorphosis where the complete 'change' is taking place is called \_\_\_\_\_.
  - a. Pupae
  - b. Egg
  - c. Adult
  
- 6) The three stage life cycle of an insect that includes the egg, nymph, and adult is known as \_\_\_\_\_.
  - a. Complete metamorphosis
  - b. Incomplete metamorphosis
  
- 7) The four stage life cycle of an insect that includes the egg, larva, pupae, and adult is known as \_\_\_\_\_.
  - a. Complete metamorphosis
  - b. Incomplete metamorphosis

- 8) Molting is the process of an insect \_\_\_\_\_.
- a. Melting
  - b. Shedding its skin to grow
  - c. Growing wings
- 9) The pupae stage of a butterfly is known as \_\_\_\_\_.
- a. Cocoon
  - b. Cobweb
  - c. Chrysalis
- 10) A cocoon is the pupae stage of a moth.
- a. True
  - b. False



## Getting Buggy Part 2- Life Cycle Pre/Post Test Answer Key

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

### PRE/POST EXHIBIT DATA SUBMISSION FORM

Date of Program	
School name	
Teacher name	
Number of students taking the Pre-test and Number taking Post-test	
Pre-test average percentage *	
Post-test average percentage *	

\*Scoring all tests, adding up all scores, and dividing by the number of students that took the test will obtain an average percentage.



## Getting Buggy Part 2- Life Cycle Vocabulary Words

Life Cycle - The 3 or 4 stage process an organism goes through beginning with an egg and ending with an adult form.

Metamorphosis - The process of transformation from an immature form to an adult form in two or more distinct stages. (Oxford dictionary)

Nymph - The second stage of incomplete metamorphosis when the insect almost looks like an adult but is missing wings.

Larva - The second stage of complete metamorphosis where the insect looks nothing like the adult.

Caterpillar - The larva stage of a moth or butterfly.

Pupae - The third stage of complete metamorphosis where a complete change is taking place.

Incomplete metamorphosis - The three stage life cycle of an insect that includes the egg, nymph and adult.

Complete metamorphosis - The four stage insect life cycle that includes an egg, larva, pupae and adult.

Molting - The process of an insect shedding its outer skin in order to grow.

Chrysalis - The pupae stage of a butterfly.

Cocoon - The pupae stage of a moth and various other insects.

# S Getting Buggy Part 2- Life Cycle Supplemental Activities

## Word Search

NAME \_\_\_\_\_  
Created with TheTeachersCorner.net Word Search Maker



### GETTING BUGGY INSECT LIFE CYCLE

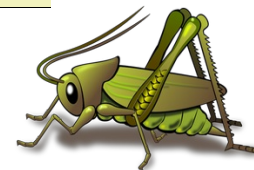
FIND AND CIRCLE ALL THE WORDS.



COCOON  
METAMORPHOSIS  
EGG  
NYMPH

CHRYSLIS  
LARVA  
ADULT

MOLTING  
PUPAE  
LIFE CYCLE



# Getting Buggy Part 2- Life Cycle Supplemental Activities- Answer Sheet

NAME \_\_\_\_\_  
Created with TheTeachersCorner.net Word Search Maker



## GETTING BUGGY INSECT LIFE CYCLE

FIND AND CIRCLE ALL THE WORDS.



COCOON  
METAMORPHOSIS  
EGG  
NYMPH

CHRYsalis  
LARVA  
ADULT

MOLTING  
PUPAE  
LIFE CYCLE





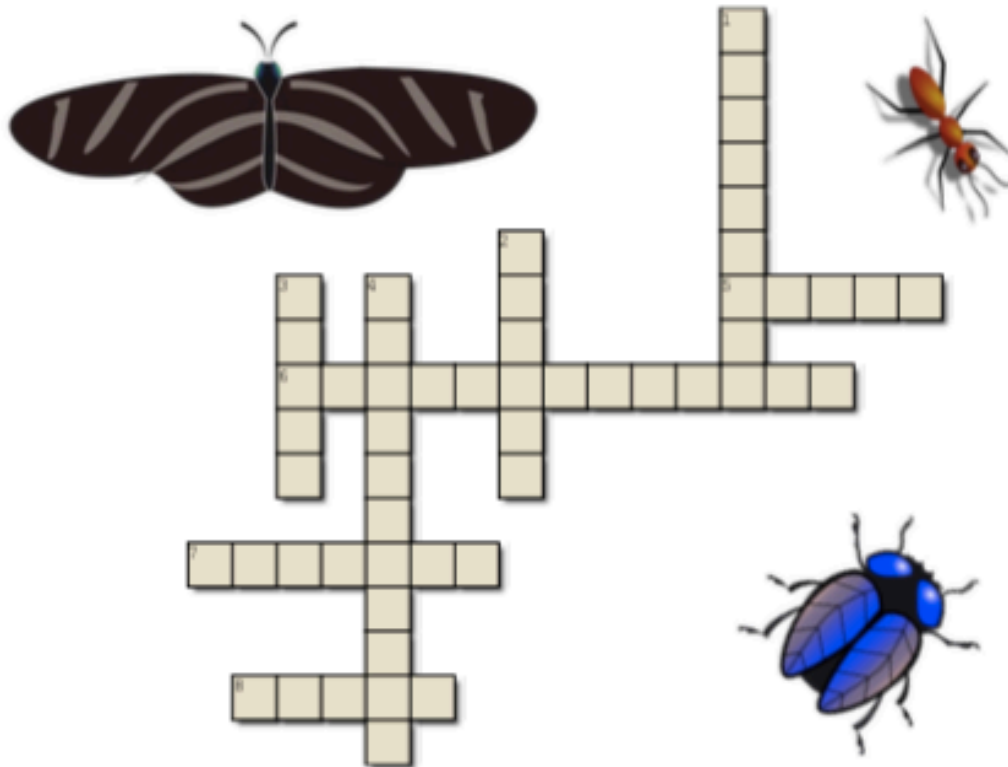
# Getting Buggy Part 2- Life Cycle Supplemental Activities

## Crossword

NAME \_\_\_\_\_

### GETTING BUGGY INSECT LIFE CYCLE

COMPLETE THE CROSSWORD PUZZLE BELOW



Created using the Crossword Maker on TheTeachersCorner.net

COCOON   CHRYSLIS   PUPAE   LARVA   MOLTING   METAMORPHOSIS   CATERPILLAR   NYMPH

**ACROSS**

- 5. THE SECOND STAGE OF COMPLETE METAMORPHOSIS WERE THE INSECT JUST EATS AND CRAWLS.
- 6. THE CHANGE AN INSECT GOES THRU WHERE THE LARVA LOOKS COMPLETELY DIFFERENT FROM THE ADULT.
- 7. WHEN AN INSECT SHEDS ITS SKIN TO GROW.
- 8. THE THIRD STAGE OF COMPLETE METAMORPHOSIS WHERE THE INSECT IS COMPLETELY CHANGING.

**DOWN**

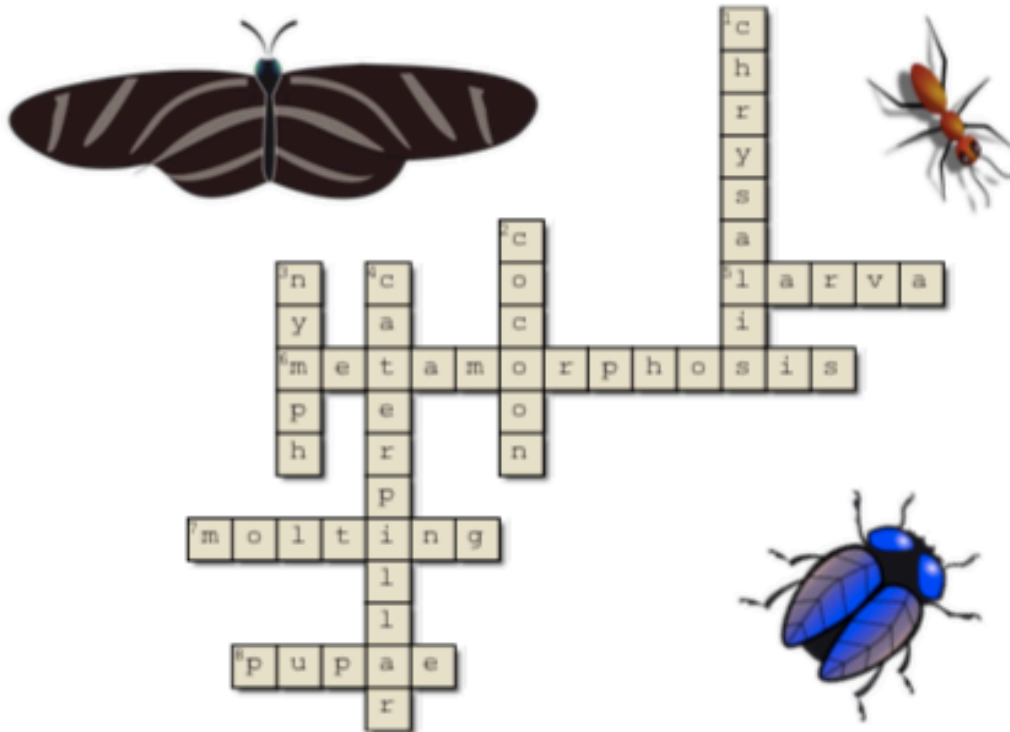
- 1. THE PUPAE STAGE OF A BUTTERFLY.
- 2. THE PUPAE STAGE OF A MOTH.
- 3. THE SECOND STAGE OF INCOMPLETE METAMORPHOSIS WHERE THE INSECT ALMOST LOOKS LIKE THE ADULT WITHOUT WINGS.
- 4. THE LARVA OF A BUTTERFLY IS CALLED THIS.

# Getting Buggy Part 2- Life Cycle Supplemental Activities Answer Sheet

NAME \_\_\_\_\_

## GETTING BUGGY INSECT LIFE CYCLE

COMPLETE THE CROSSWORD PUZZLE BELOW



Created using the Crossword Maker on TheTeachersCorner.net

**COCOON** **CHRYSALIS** **PUPAE** **LARVA** **MOLTING** **METAMORPHOSIS** **CATERPILLAR** **NYMPH**

### ACROSS

- THE SECOND STAGE OF COMPLETE METAMORPHOSIS WERE THE INSECT JUST EATS AND CRAWLS. **LARVA**
- THE CHANGE AN INSECT GOES THRU WHERE THE LARVA LOOKS COMPLETELY DIFFERENT FROM THE ADULT. **METAMORPHOSIS**
- WHEN AN INSECT SHEDS ITS SKIN TO GROW. **MOLTING**
- THE THIRD STAGE OF COMPLETE METAMORPHOSIS WHERE THE INSECT IS COMPLETELY CHANGING. **PUPAE**

### DOWN

- THE PUPAE STAGE OF A BUTTERFLY. **CHRYSALIS**
- THE PUPAE STAGE OF A MOTH. **COCOON**
- THE SECOND STAGE OF INCOMPLETE METAMORPHOSIS WHERE THE INSECT ALMOST LOOKS LIKE THE ADULT WITHOUT WINGS. **NYMPH**
- THE LARVA OF A BUTTERFLY IS CALLED THIS. **CATERPILLAR**

## Getting Buggy Part 2- Life Cycle Supplemental Websites/Videos

National Geographic, 2010

“Butterfly: a Life”

<https://www.youtube.com/watch?v=kVm5k99PnBk>

National Geographic Kids, 2020

“The Butterfly Life Cycle”

<https://www.natgeokids.com/za/discover/animals/insects/butterfly-life-cycle/>

National Geographic, 2020

“The Very Hungry Caterpillar and It’s Life Cycle”

<https://www.nationalgeographic.org/activity/the-very-hungry-caterpillar-and-the-butterfly-life-cycle/>

National Geographic Kids, 2020

“25 Cool Things About Bugs”

<https://www.natgeokids.com/za/discover/animals/insects/15-facts-about-bugs/>

National Geographic Kids, 2020

“The Big Bug Memory Game”

<https://www.natgeokids.com/za/play-and-win/games/bug-memory-game/>

National Geographic Kids, 2020

“10 Cool Facts About Ants”

<https://www.natgeokids.com/za/discover/animals/insects/ant-facts/>

FreeSchool, 2017

“All About Insects for Children; Bees, Butterflies, Ladybugs, Ants, and Flies for Kids”

<https://www.youtube.com/watch?v=rKQfJFAHW8Q&list=PLQInTIdJs0ZQRpoi26VO9Yf5ONiG1iuHN&index=2>