



# 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!

## River Biodiversity Exploration Pre/Post Test

- 1) What is biodiversity?
  - a. Different life
  - b. Same group of animals
  - c. A group of critters that like to learn about biology
  - d. None of the above
  
- 2) What do damselflies like to eat?
  - a. Insects
  - b. Small crustaceans
  - c. Fish
  - d. All of the above
  
- 3) Is a water scorpion a primary or secondary consumer?
  - a. Primary
  - b. Secondary
  
- 4) How many tails does a mayfly have?
  - a. 8
  - b. 6
  - c. 3
  - d. 1
  
- 5) How many levels are on the Ecosystem Pyramid?
  - a. 1
  - b. 2
  - c. 3
  - d. 4
  
- 6) When are catfish most active?
  - a. During the day
  - b. At night
  - c. They are never active
  - d. None of the above
  
- 7) Do crayfish swim forwards or backwards?
  - a. Forwards
  - b. Backwards

- 8) Male Molly's have an enlarged dorsal fin.
- a. True
  - b. False
- 9) Mosquito fish like to eat mosquito larvae.
- a. True
  - b. False
- 10) What shape is the Shiner's tail?
- a. U shape
  - b. O shape
  - c. V shape
  - d. X shape



## River Biodiversity Exploration Pre/Post Test Answer Key

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

## 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.



## River Biodiversity Exploration Vocabulary Words

Aquatic- living in or near the water

Bio- the study of life

Biologist- a person that researches or studies living organisms

Diversity- variations of different characteristics

Ecosystem Pyramid- represents the primary, secondary, and tertiary consumers

Food Chain- describes the hierarchical role each organism plays in the ecosystem. Organisms are dependent on the next as a source of food.

Indicator Species- a type of species that can be used to conclude if a particular habitat is healthy

Invertebrate- an animal that does not have a backbone

Macro- a word used to describe something that is large or long.

Primary Consumers- organisms that feed on primary producers

Producers- organisms that make their own food. Plants self-feed through photosynthesis. They are the first energy source for primary consumers.

Secondary Consumers- an organism that eats another organism. Either omnivores or carnivores.

Tertiary- also known as apex predators. They are at the top of the food chain.



## River Biodiversity Exploration Standards

SC.1.L.17.1

SC.2.L.17.1

SC.2.L.17.2

SC.3.L.15.1

SC.4.E.6.1

SC.4.E.6.6

SC.4.L.17.4

SC.5.L.17.1

# River Biodiversity Exploration Supplemental Activities- Word Search



Name: \_\_\_\_\_  
Created with TheTeachersCorner.net Word Search Maker

## River Biodiversity Exploration!

Circle the Words!

A Q Y V J L V C M R L V Y G W G S O N W  
 Z S D J C H R O T A C I D N I V R U T R  
 E K X U T Q M C Y O G C J T A T I B A H  
 R D O C U I S W P A E W C A Q U W E X Z  
 R F T A O O S R E C U D O R P F E Q J P  
 R L E C C J V L R I E X A Z C P B A N J  
 I L O O H Q R I R Z U O C A S G P J S L  
 N Q F S K N G X R Y J L Y S Z O M N B K  
 V R M C X J H P V C L V E A M I W S I I  
 E X T V N R K H L C G M K P L A B L O H  
 R W B B I O D I V E R S I T Y P G S L W  
 T G Z C I T A U Q A W S C I U E D J O C  
 E D B Y A P O Q D R B N I B J C U S G B  
 B A O F G O U C O N S U M E R S E A I S  
 R D G Q R B C X R S J U H Y T I H Q S G  
 A G D S Q Q Q N S A C F M Q C Z R O T O  
 T H M X F I R V B X J I R E N L J X Z S  
 E E C O S Y S T E M T N P Q C G H M B F  
 Z W C Y S V I C E P R S L V K F D J Q D  
 R V K I J F G D I H U T Z B T D K V G K

BIODIVERSITY  
AQUATIC  
CONSUMERS  
HABITAT

INVERTEBRATE  
SPECIES  
PRODUCERS

BIOLOGIST  
INDICATOR  
ECOSYSTEM





# River Biodiversity Exploration Supplemental Activities- Word Search Answer Sheet



Name: \_\_\_\_\_

Created with TheTeachersCorner.net Word Search Maker

## River Biodiversity Exploration!

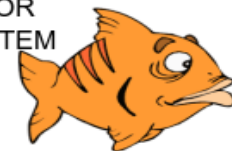
Circle the Words!

A	Q	Y	V	J	L	V	C	M	R	L	V	Y	G	W	G	S	O	N	W
Z	S	D	J	C	H	R	O	T	A	C	I	D	N	I	V	R	U	T	R
E	K	X	U	T	Q	M	C	Y	O	G	C	J	T	A	T	I	B	A	H
R	D	O	C	U	I	S	W	P	A	E	W	C	A	Q	U	W	E	X	Z
R	F	T	A	O	O	S	R	E	C	U	D	O	R	P	F	E	Q	J	P
R	L	E	C	C	J	V	L	R	I	E	X	A	Z	C	P	B	A	N	J
I	L	O	O	H	Q	R	I	R	Z	U	O	C	A	S	G	P	J	S	L
N	Q	F	S	K	N	G	X	R	Y	J	L	Y	S	Z	O	M	N	B	K
V	R	M	C	X	J	H	P	V	C	L	V	E	A	M	I	W	S	I	I
E	X	T	V	N	R	K	H	L	C	G	M	K	P	L	A	B	L	O	H
R	W	B	B	I	O	D	I	V	E	R	S	I	T	Y	P	G	S	L	W
T	G	Z	C	I	T	A	U	Q	A	W	S	C	I	U	E	D	J	O	C
E	D	B	Y	A	P	O	Q	D	R	B	N	I	B	J	C	U	S	G	B
B	A	O	F	G	O	U	C	O	N	S	U	M	E	R	S	E	A	I	S
R	D	G	Q	R	B	C	X	R	S	J	U	H	Y	T	I	H	Q	S	G
A	G	D	S	Q	Q	Q	N	S	A	C	F	M	Q	C	Z	R	O	T	O
T	H	M	X	F	I	R	V	B	X	J	I	R	E	N	L	J	X	Z	S
E	E	C	O	S	Y	S	T	E	M	T	N	P	Q	C	G	H	M	B	F
Z	W	C	Y	S	V	I	C	E	P	R	S	L	V	K	F	D	J	Q	D
R	V	K	I	J	F	G	D	I	H	U	T	Z	B	T	D	K	V	G	K

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# River Biodiversity Exploration Supplemental Activities- Word Scramble



Name: \_\_\_\_\_

## River Biodiversity Exploration!

Please unscramble the words below

Created on TheTeachersCorner.net Scramble Maker

- |                       |  |                                                                     |
|-----------------------|--|---------------------------------------------------------------------|
| 1. tiaabHt            |  | natural home of an animal                                           |
| 2. ceEymtsos          |  | biological community of organisms that interact                     |
| 3. yBiroisvtied       |  | a variety of different life in a habitat or ecosystem               |
| 4. silotiBog          |  | an expert that studies or researches living organisms               |
| 5. tauqiac            |  | living in or near water                                             |
| 6. ofod nicha         |  | a series of organisms each dependent on the next as its food source |
| 7. ecessoymt mdaiyrrp |  | represents the primary, secondary, and tertiary consumers           |
| 8. odrriactn cpissee  |  | a type of species that can determine if a habitat is healthy        |
| 9. rervbaient         |  | an animal lacking a backbone                                        |
| 10. uroCmSesn         |  | belongs within the food chain of an ecosystem                       |

# River Biodiversity Exploration Supplemental Activities- Word Scramble Answer Sheet



## River Biodiversity Exploration!

Please unscramble the words below

Name: \_\_\_\_\_

Created on TheTeachersCorner.net Scramble Maker

1. tiaabHt	Habitat	natural home of an animal
2. ceEymtsos	Ecosystem	biological community of organisms that interact
3. yBiroisvtied	Biodiversity	a variety of different life in a habitat or ecosystem
4. silotiBog	Biologist	an expert that studies or researches living organisms
5. tauqiac	aquatic	living in or near water
6. ofod nicha	food chain	a series of organisms each dependent on the next as its food source
7. ecessoymt mdaiyrp	ecosystem pyramid	represents the primary, secondary, and tertiary consumers
8. odriiactn cpisse	indicator species	a type of species that can determine if a habitat is healthy
9. rervbaient	invertebrate	an animal lacking a backbone
10. uroCmseSn	consumers	belongs within the food chain of an ecosystem

## River Biodiversity Exploration Supplemental Websites/Videos

WWF Wild Classroom, 2020

“Teaching Tools About Biodiversity”

[http://assets.worldwildlife.org/educators\\_toolkit\\_files/96/toolkit\\_files/original/Educators Tool Kit BIODIVERSITY.pdf?1561140250](http://assets.worldwildlife.org/educators_toolkit_files/96/toolkit_files/original/Educators_ToolKit_BIODIVERSITY.pdf?1561140250)

National Geographic, 2020

“Schoolyard Bioblitz”

[https://www.nationalgeographic.org/media/schoolyard-bioblitz/?utm\\_source=BiblioRCM\\_Row](https://www.nationalgeographic.org/media/schoolyard-bioblitz/?utm_source=BiblioRCM_Row)

National Geographic, 2020

“Biodiversity Kahoot!”

<https://www.nationalgeographic.org/interactive/biodiversity-kahoot/>

Jess, V., 2016

Film by Bill Nye the Science Guy

“<https://www.youtube.com/watch?v=-Sybgof-X2k&t=195s>”

Brennan, B., 2011

“Billy B sings Biodiversity with facts from the World Wildlife Fund”

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