

Cahaba Kids

Saving the Day!

**Making an
Impact:**

Everything you
need to know
to become a
hero!

**Exclusive
Mission:**

**Protect our
Planet**

**Spread the
word!**

Join the fun!



About the Cahaba River

Stretching 194 miles, the Cahaba River free-flowing river in Alabama. It runs through central Alabama and provides water for the Birmingham metro area. Not only does it keep the city's citizens hydrated, but it is also one of the most biodiverse rivers in the United States with 135 species of fish, mussels, and snails. The Cahaba is one of the most important waterways in Alabama's ecosystem.

Algae—a simple, nonflowering, and typically aquatic plant of a large group that includes the seaweeds and many single-celled forms

Boundary Layer—a layer of more or less stationary fluid (such as water or air) immediately surrounding an immersed object in relative motion with the fluid

Complete Metamorphosis—growth of an animal through four different stages: egg, larva, pupa, and adult

Decomposer—an organism, especially a soil bacterium, fungus, or invertebrate, that decomposes organic material

Ecology—the study of interrelationships (two or more things that are related to each other) of living things to one another and their environment

Erosion — geological process in which earthen materials are worn away and transported by natural forces such as wind or water

Filter Collectors—use specialized mouth parts to collect FPOM suspended in the water

Gather Collectors—eat FPOM that is no longer suspended in the water and is on the rocks or other surfaces under the water

Food Web—a system of food chains within a biological community

Functional Feeding Groups—a classification approach that is based on behavioral mechanisms of food acquisition rather than taxonomic group

Incomplete Metamorphosis—a type of metamorphosis in which an insect hatches from an egg and then goes through several nymphal stages

Nutrients—chemicals (primarily nitrogen and phosphorous) necessary for organisms to live

Organic Matter—chemical compounds made with carbon, produced by plants and animals

Photosynthesis—the process by which plants convert sunlight into living tissue by using carbon dioxide, water and nutrients

Plant Zonation—recognizable groupings of plant communities in certain environments

Pollution—natural concentration as a result of human activity that produces a detrimental effect on the environment

Predator—an organism that feeds on other organisms

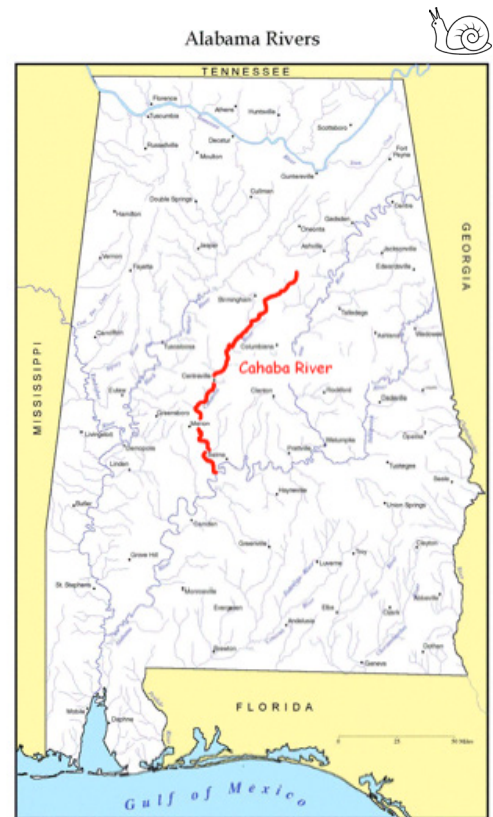
Runoff—water that collects on land and runs into waterways after rainfall

Sediment — particles which accumulate on the bottom of the waterway

Submerged Aquatic Vegetation—rooted vegetation which grows beneath the water's surface

Tributaries—streams that supply a larger body of water

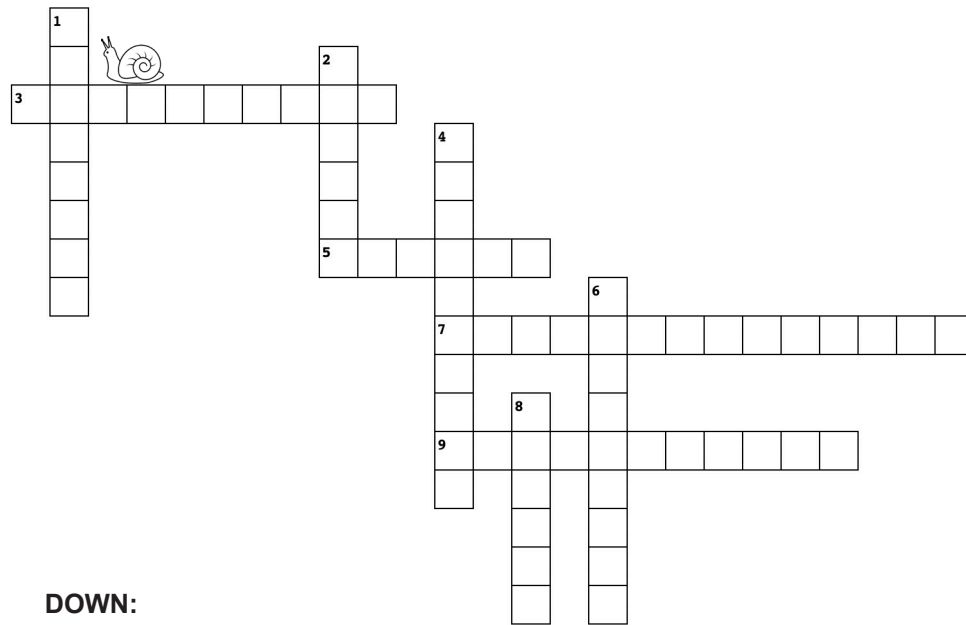
Wetland—any area that is occasionally or permanently covered with water



Use the vocabulary list to complete the word search

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

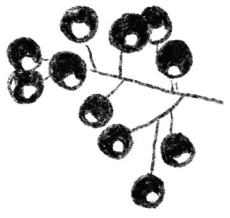
ALGAE
 DECOMPOSER
 ECOLOGY
 EROSION
 FOOD WEB
 COMPLETE METAMORPHOSIS
 NUTRIENTS
 ORGANIC MATTER
 PREDATOR
 WETLAND
 SEDIMENT



DOWN:

Across:

1. this layer is the layer of water closest to the rocks and rubble on the river bottom.
2. collectors are any aquatic organism that feeds on small pieces of organic matter collected from submerged surfaces
3. feeding groups are a way of categorizing organisms according to what they eat and how they obtain food.
4. Metamorphosis is the life cycle of certain insects that involves three stages: egg, nymph, and adult.
5. water that collects on land and runs into waterways after rainfall
6. the addition of a substance to an environment in greater than natural concentration as a result of human activity.
7. the process by which plants convert sunlight into living tissue using carbon dioxide, water, and nutrients.
8. any aquatic animal that feeds by removing small organic particles from the water
9. streams and rivers that supply a large body of water



How to Start A NATURE JOURNAL



YOU WILL NEED:

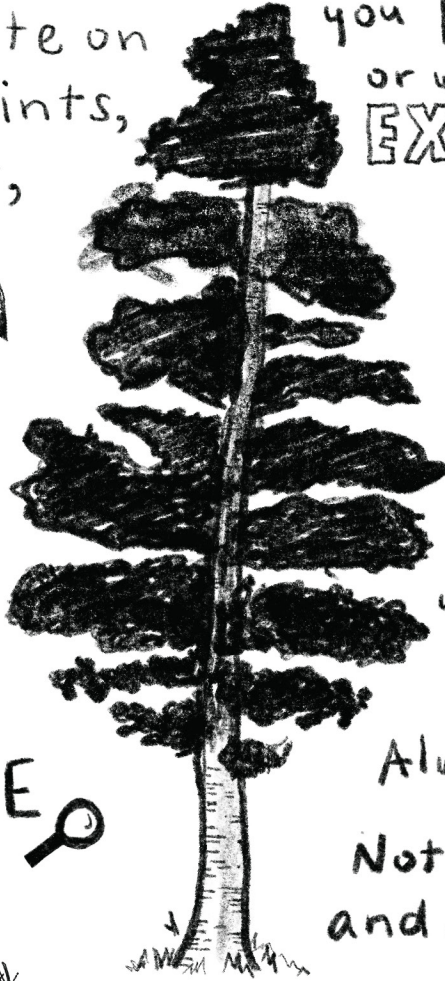
- something to write on
- pens, pencils, paints, crayons, markers, etc...
- glue or tape
- your 5 senses
- **IMAGINATION!**




Go to a spot in nature that you **LOVE** or want to **EXPLORE**

Record the **DATE, TIME** and **LOCATION** of your journal session

Create a dialogue with your environment. Talk to it.

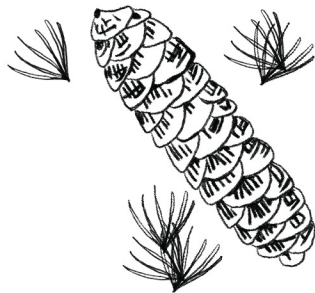


Don't be afraid to **MAKE MISTAKES**

Look UP CLOSE and far away 

Always be **LÖÖKING** Notice **PATTERNS** and make **CONNECTIONS**

Make **OBSERVATIONS** and ask **QUESTIONS**



Trace things back to their origins



 by Olivia Hall



Cahaba River Society



BODIES OF WATER IDENTIFICATION
PAGE

WORD BANK

POND
OCEAN
SWAMP
LAKE
PUDDLE
STREAM













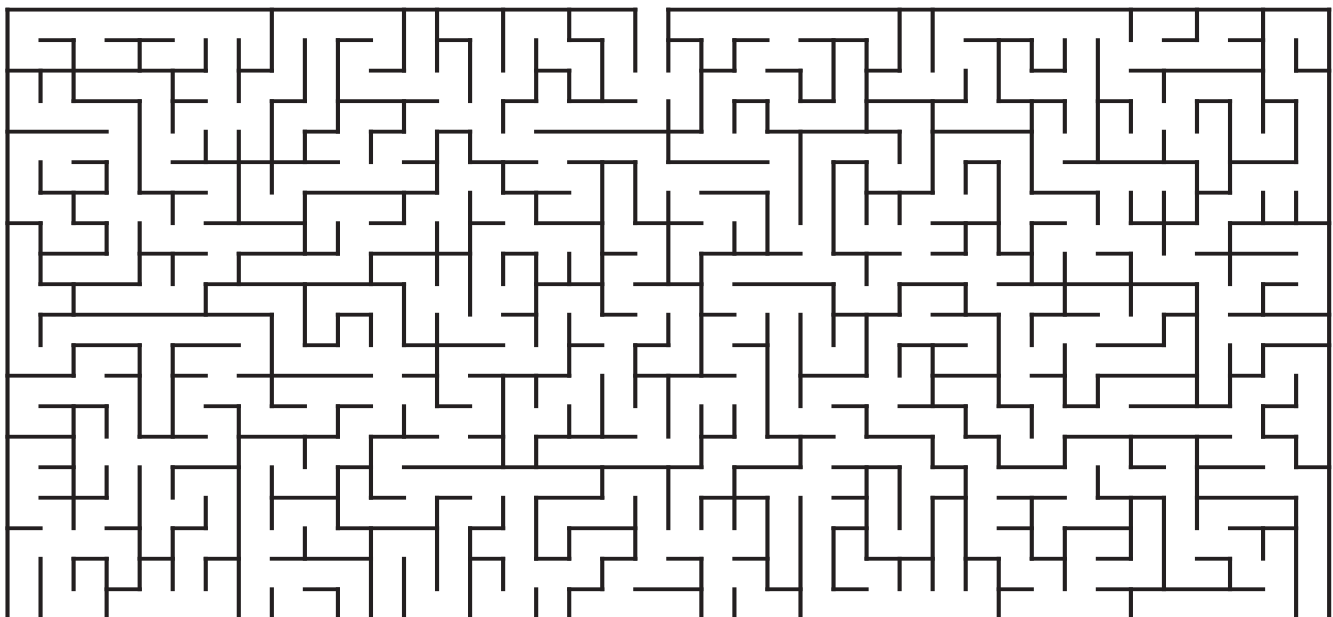
DID YOU KNOW?

The Cahaba River ends at the former town of Cahaba, which is now known as Old Cahawba. "Alabama's most famous ghost town"

Seek and Find



There are 35 snail species in the Cahaba River. Can you find 10 snails hidden in this activity workbook?



The Story of Water

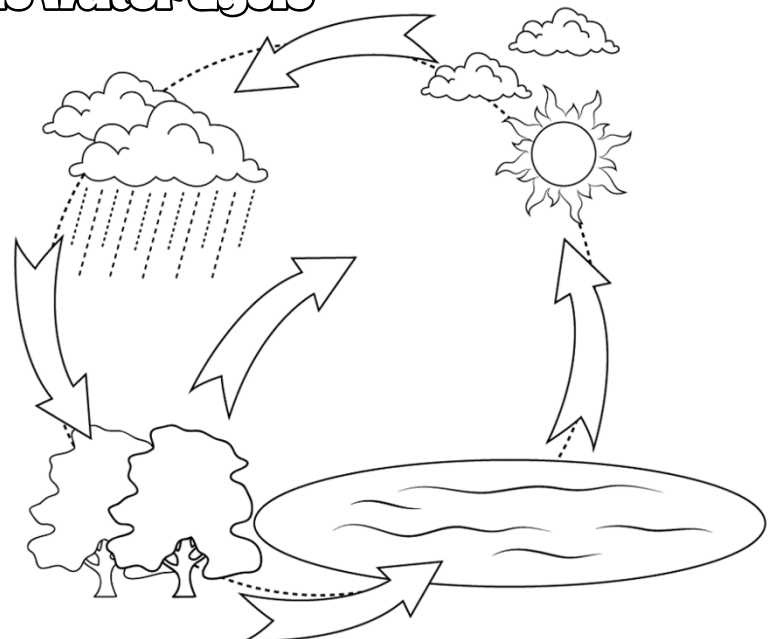


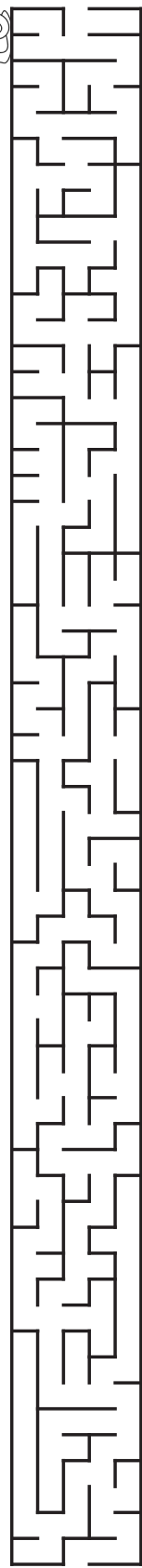
Imagine you are a drop of water in the Cahaba River. Write a story about your journey downstream. How did you fall in the Cahaba?
Did pollution affect your journey?

Word Bank:

- Evaporation
- Condensation
- Precipitation
- Collection
- Transpiration


The Water Cycle





Help Save the Cahaba

There are multiple ways to get involved in helping the Cahaba River such as spreading the word about the river, recycling, actively discovering ways to conserve water, and keeping our water source clean!

Recycling: Reduce, Reuse, and Recycle. You can help the Cahaba River by reducing your use of water by turning the water off while brushing our teeth and reducing our time in the shower. We can get reuseable water bottles and grocery bags to help our environment. We can also create new things out of our old things by recycling! 

Litter Walk: We can get involved by cleaning the area around us! Walk around your neighborhood or local park and use gloves to pick up and throw away any litter that you see! How much can you get?

River Defender Pledge

As a River Defender, I pledge to protect my water source by celebrating the Cahaba River. I will work with others to save water and help to restore the river to its original state. Through communication, I will educate my friends and family about the river to make a difference!

About Shane Hulsey

Shane Harper Hulsey served as Education Director for Cahaba River Society, leading the CLEAN Environmental Education Program and guiding over 10,000 children and adults into the Cahaba for hands-on lessons about the environment. Children and teachers frequently called to say that Shane's canoe trips had been their best field trip ever, and even biologists and scientists would report that they'd learned on their excursions with him.

Cahaba River Socceity Mission Statement

Our mission is to protect and restore the Cahaba River watershed and its rich biodiversity by building an impact, uniting the community, inspiring river stewardship, and ensuring all people have accessibility to clean water and the benefits of nature. Through the ideas of celebration, collaboration, education, communication, and recreation, we work towards protecting and restoring the Cahaba River Watershed and the people it benefits.

Credits

This workbook has been produced for the Cahaba River Society in partnership with a UAB class under the leadership of La'Tanya Scott and Halley Cotton. Special thanks to our students whose creativity, skill, and talent brought this project to life:

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Harnoor Sandhu
Thomas Vanek
Desiree Willis

Additional Resources

gaspgroup.org/
energyalabama.org/
alabamarivers.org/
ruffnermountain.org/
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www.sierraclub.org/
fishwildlife.org/projectwild
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www.aces.edu/blog/category/counties/jefferson/