

# Westcave Story 1st-3rd Teacher Resources

**Program Summary:** In this overview program, students will learn about plants, animals, hydrology, and geology of the Texas Hill Country with Westcave Preserve as the backdrop and focal point. On the guided hike to Westcave's Grotto, students will observe two different habitats, Live Oak -Ashe Juniper Savanna and the Riparian Woodland. In the grotto students will learn about Westcave's cultural history and come to understand the importance of environmental conservation by hearing the story of damage Westcave suffered from overuse in the 1960's and 1970's. They will also learn about the recovery that is ongoing today.

**Age Range Recommended:** All Ages (Lower E 1<sup>st</sup>-3<sup>rd</sup>, Upper 4<sup>th</sup>-5<sup>th</sup>)

**Program Length:** 3 hours

## Learning Objectives:

Learn about the 4 basic requirements an animal needs to survive in a habitat (food, water, cover, and a place to raise their young).

Learn about the past geologic and hydrologic history of Westcave Preserve and the surrounding area, including fossil evidence of past environments.

Learn about two of the endangered species that call Westcave home and the difference between native, invasive, and endangered species. Examples of each will be provided.

Observe Westcave's lush plant life and understand the importance of water in different habitats (Canyon and Savanna).

Gain a better understanding of the interaction of water and geology on plant and animal communities. (Canyon Tour).

Experience the sounds of nature without urban background noises (Canyon Tour).

Understand the importance of conservation at Westcave and their own communities, especially water conservation (Canyon Tour)

Gain an awareness of the historical use of Westcave Preserve in and the surrounding area by people (Canyon Tour).

(Optional): Learn about the cycling of matter and flow of energy through food chains and food webs in an interactive game.



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[www.westcave.org](http://www.westcave.org)

## Lower Elementary (1<sup>st</sup>-3<sup>rd</sup>) Westcave Story Key Terms:

Cactus

Flower

Bird

Fossil

Live Oak Tree

Flint Rock

Fern

Poison Ivy

Stalactite

Stalagmite

Bald Cypress

Fish

Snake

Preserve

Park

Littering

**Cactus:** A dry area or desert adapted plant with fleshy stems and a waxy coating that prevents water loss. Most have spines.

**Flower:** A showy part of a plant usually with colorful petals that attracts animals like butterflies to pollinate it, producing seeds.

**Bird:** A warm-blooded (typically) flying animal that lays eggs, has a spine, beak, feathers, and wings.

**Fossil:** Remains or impression of a prehistoric organism preserved in a petrified form.

**Live Oak Tree:** One of the most common trees on Westcave's savanna that has small green leaves.

**Flint Rock:** Indigenous people used this rock to make fire and arrowheads.

**Fern:** A non-flowering plant found in the canyon that requires moisture.

**Poison Ivy:** A plant you should avoid that has three leaves and can give you a red, itchy rash.

**Stalagmites:** A type of cave formation that grows on the floor.

**Stalactites:** A type of cave formation that grows on the ceiling.

**Bald Cypress:** The tallest tree in the canyon. It's deciduous, or it loses its needle-like leaves every fall.

**Fish:** A vertebrate (an organism with a spine) that swims in the water. They breathe using special organs called gills.

**Snake:** A reptile that slithers around on the ground using its long, limbless, slender body.

**Preserve:** An area of land managed to protect its flora, fauna, and landscape.

**Park:** A recreational area of land for people to explore and get outside.

**Littering:** Leaving behind trash anywhere on purpose, instead of throwing it away or recycling it.

# Westcave Story

## Word Search

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

### Word Bank

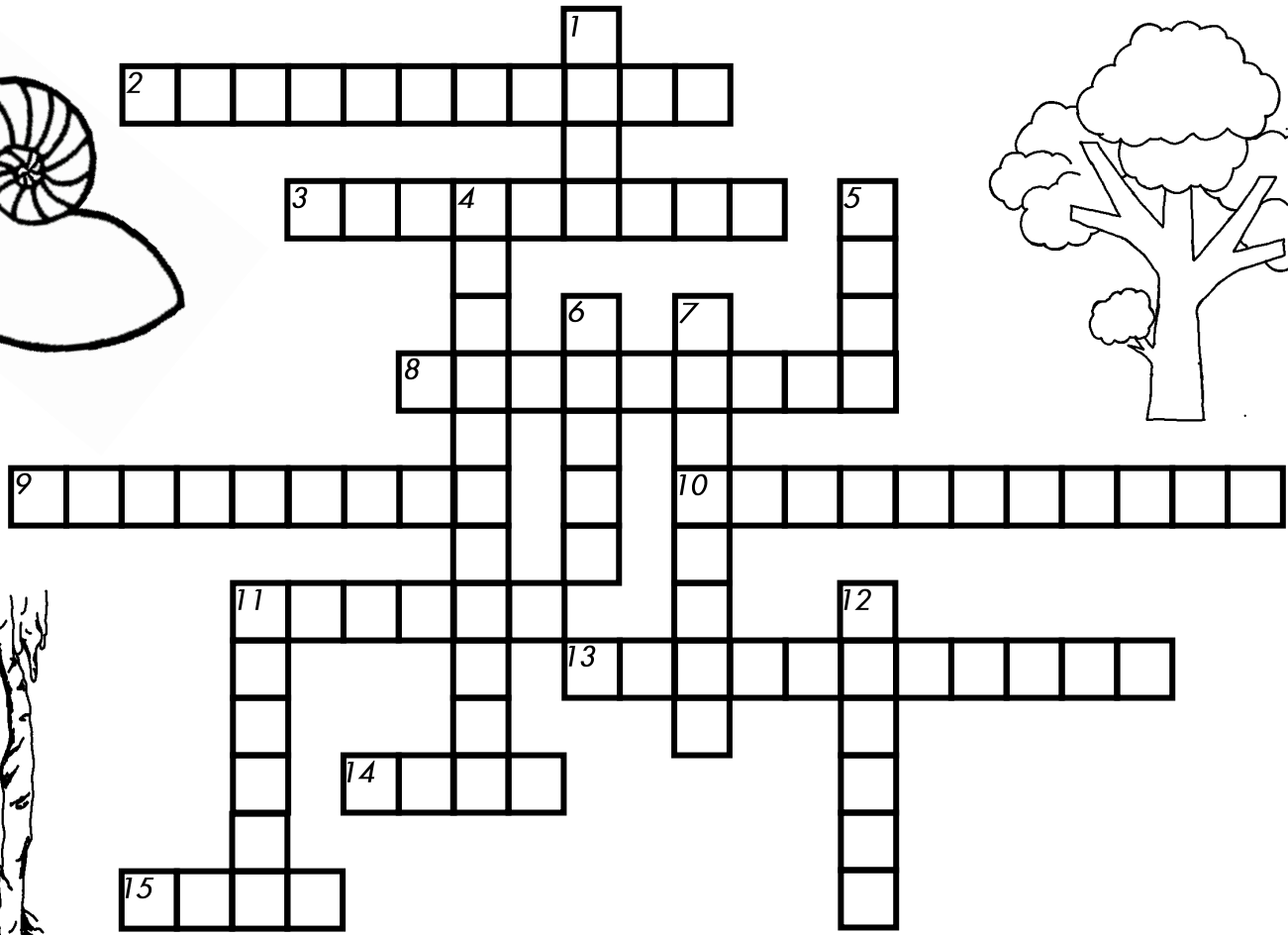
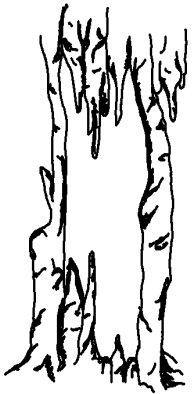
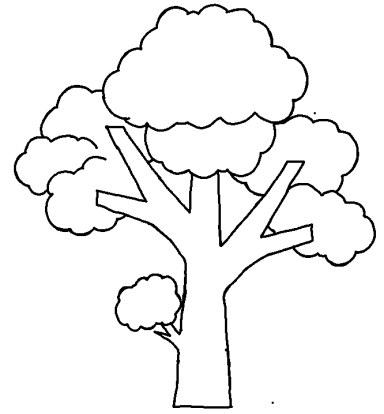
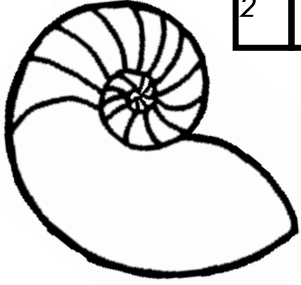
Bald Cypress  
Bird  
Cactus  
Fern  
Fish  
Flint Rock

Flower  
Fossil  
Littering  
Live Oak Tree  
Park  
Poison Ivy

Preserve  
Snake  
Stalactite  
Stalagmite



# Westcave Story: Crossword Puzzle



Down

Across

1. A non-flowering plant found in the canyon that requires moisture .

2. The tallest tree in the canyon, it is deciduous, meaning it loses its needle-like leaves every fall.

4. A type of cave formation that grows on the floor.

3. A plant you should avoid that has three leaves and can give you a red, itchy rash.

5. A recreational area of land for people to explore and get outside.

8. Indigenous people used this rock to make fire and arrowheads.

6. A reptile that slithers around on the ground using its long, limbless, slender body.

9. Leaving behind trash anywhere on purpose, instead of throwing it away or recycling it.

7. An area of land managed to protect its flora, fauna, and landscape.

10. A type of cave formation that grows on the ceiling.

11. A showy part of a plant usually with colorful petals that attracts animals like butterflies to pollinate it, producing seeds.

11. Remains or impression of a prehistoric organism preserved in a petrified form.

13. \_\_\_\_\_ / Ashe Juniper Savanna is the first habitat you walked through at Westcave

# Westcave Story: Answer Key

## Word Search

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

### Word Bank

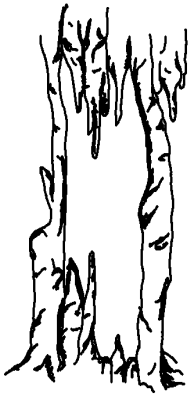
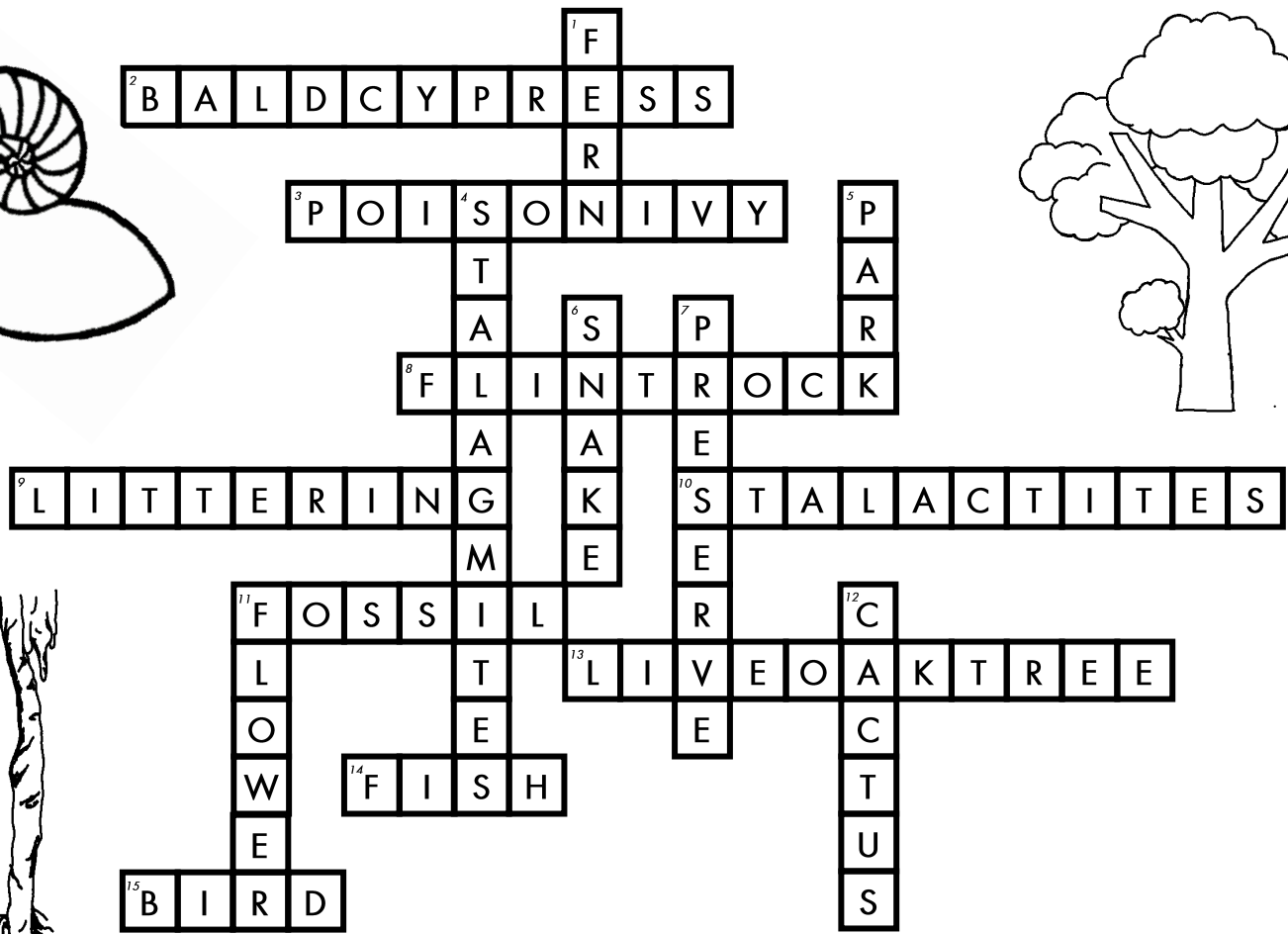
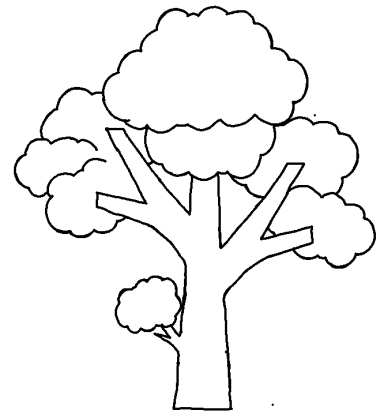
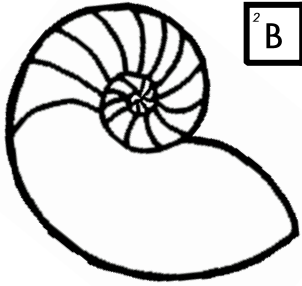
Bald Cypress  
 Bird  
 Cactus  
 Fern  
 Fish  
 Flint Rock

Flower  
 Fossil  
 Littering  
 Live Oak Tree  
 Park  
 Poison Ivy

Preserve  
 Snake  
 Stalactite  
 Stalagmite



# Westcave Story: ANSWER KEY



## Down

## Across

1. A non-flowering plant found in the canyon that requires moisture .

2. The tallest tree in the canyon, it is deciduous, meaning it loses its needle-like leaves every fall.

4. A type of cave formation that grows on the floor.

3. A plant you should avoid that has three leaves and can give you a red, itchy rash.

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11. Remains or impression of a prehistoric organism preserved in a petrified form.

13. \_\_\_\_\_ / Ashe Juniper Savanna is the first habitat you walked through at Westcave Preserve. It is home to