

When Is a Desert Not a Desert? The Varying Landscapes of Arizona

When people think of Arizona, they often think of a hot, dry desert that is covered with giant saguaro cacti and snakes. This is not a true picture of all the varying landscapes that make up Arizona.

There are three major regions found in this state. The southern and western area is the *desert* region. The central area is *mountains* region, and the northeastern part of the state is the *plateau* region. Each of the regions has different types of landscapes and plants.

Biomes are geographical areas that have a certain climate, plant life, and animals. Arizona has six major *biomes*. They are desert, grassland, chaparral, woodland, forest, and tundra biomes.

In the DESERT REGION:

There are large areas of ***desert biome*** in Arizona. They are the Sonoran Desert that covers most of southern Arizona and the Mojave Desert that is near the California/Arizona border. The Chihuahuan Desert is in the southeastern corner of Arizona. However, the desert region also contains ***grassland and chaparral biomes***. Even in the desert region, there are ***forest and woodland biomes***. These small areas of forest and woodland biomes are in the Coronado National Forest in the southeastern corner of the state.

In the MOUNTAIN REGION:

The ***chaparral biome*** is located between the desert and the mountain regions. The ***woodland biome*** is found along the northern and southern borders of the mountain region. The mountain region contains three of the six national ***forests*** found in Arizona. They are the Prescott, Tonto, and some of the Apache-Sitgreaves National Forests.

In the PLATEAU REGION:

A plateau is a high flat land. The Colorado Plateau in Arizona begins at the Mogollon Rim. The rim is the southern border of the plateau region. The plateau region contains the only ***tundra biome*** in Arizona. The tundra biome is on the top of the San Francisco Peaks in Flagstaff. The plateau region also contains ***desert, forest, woodland, and grassland biomes***. The Coconino, Kaibab, and some of the Apache-Sitgreaves National Forests are in the plateau region.

Desert Region

Deserts of Arizona	Elevation	Climate	Plant Life
Sonoran	100–3,000 ft	Hot summers-, warm winters, Very little rain	<p>Small leaf desert trees: paloverde, ironwood, desert-olive, mesquite, cottonwood, and willow</p> <p>Bushes: creosote, sage, brittlebush, saltbush, and ocotillo</p> <p>Cactus: saguaro, organ pipe, barrel, cholla, prickly pear, hedgehog, and pincushion</p>
Mojave	500–3,000 ft	Hot summers- warm winters, Very little rain	<p>Bushes: creosote, blackbush, saltbush, bladder-sage, Joshua tree, Mohave yucca, and catclaw, some mesquite and desert willow</p> <p>Cactus: cholla, prickly pear, beaver tail cactus, hedgehog, barrel, and pincushion, and some saguaro</p>
Chihuahuan	1,000-3,500 ft	Hot summers- warm winters, Very little rain	<p>Bushes: creosote, tarbush, whitethorn, sandpaper, desert sumac, ocotillo, and mesquite</p> <p>Cactus: cholla, prickly pear, barrel, and pincushion</p> <p>Grassland: short grasses</p>

Chaparral Region

Chaparral of Arizona	Elevation	Climate	Plant Life
Chaparral	4,000–6,000 ft	Some rain, warm to cool temperatures	<p>Bushes: scrub oak, manzanita</p>

Grassland Region

Grasslands of Arizona	Elevation	Climate	Plant Life
Desert	3,500 ft – 5,000 ft.	Hot summers-warm winters, Very little rain	Grasses: yucca, obaso, ring, and plains
Plateau	5,000 ft. – 7,000 ft.	Warm summers-cold winters, Some rain	Grasses: grama, muhly, needle, dropseed, spangletop, fescu, wheat, brome, and galleta
Mountain	9,000 ft	Warm summers-cold winters, Some rain to a lot of rain	Grasses: mountain timothy, Arizona fescue, Kentucky blue, mountain muhly, needle, mountain brome, pine dropseed, and black dropseed

Woodland Region

Woodlands of Arizona	Elevation	Climate	Plant Life
Oak	4,000 – 6,500 ft	Warm summers-cold winters, Some rain to a lot of rain	Trees: Emory oak, Mexican blue oak, juniper, one seed juniper, some Mexican pinyon
Mexican Oak - Pine	4,000 – 6,500 ft	Warm summers-cold winters, Some rain to a lot of rain	Trees: Chihuahua pine, Apache pine, Mexican pinyon and alligator juniper, silver leaf oak, Arizona oak, and Emory oak
Juniper – Pinyon	5,500– 7,000 ft	Warm summers-cold winters, Some rain to a lot of rain	Trees: Colorado pinyon, Utah juniper, one-seed juniper
Deciduous	Varies in elevation	Warm summers-cold winters, Some rain to a lot of rain	Trees: cottonwood, sycamore, alder, willow, walnut, Texas mulberry, Arizona alder, southwestern chock cherry, boxelder, Rocky Mountain maple, and Scouler willow

Forest Region

Forests of Arizona	Elevation	Climate	Plant Life
Ponderosa Pine	6,000–9,000 ft	Cool summers-cold winters, Some rain to a lot of rain and snow in winters	Trees: ponderosa pine, silver leaf oak, net leaf oak, madrone, Gamble oak, bigtooth maple, aspen and mulberry
Douglas Fir	7,500–9,500 ft	Cool summers-cold winters, Some rain to a lot of rain and snow in winters	Trees: Douglas fir, white fir, alpine fir, limber pine, white pine, Gambel oak, box elder, water birch, blueberry elder, Rocky Mountain maple, and aspen
Spruce – alpine fir	8,500–11,500 ft	Cool summers-cold winters, Some rain to a lot of rain and snow in winters	Trees: Engelmann spruce, blue spruce, alpine fir, limber pine, bristlecone pine, Rocky Mountain maple, bitter cherry, Bebb willow, Scouler willow, thin leaf alder, and aspen

Tundra Region

Tundra of Arizona	Elevation	Climate	Plant Life
Alpine tundra	11,500 ft. 12,670 ft.	Cold summers-very cold winters, Lots of rain and snow in winters	Very small herbs, grasses, sedges, lichens, and mosses

Name _____

Arizona Biomes Map Work

On the map **Landform Regions of Arizona map**, locate and label the following deserts with a red colored pencil. Be sure to spell the words correctly.

1. Sonoran Desert
2. Mojave Desert
3. Chihuahuan Desert

On the map **Landform Regions of Arizona map**, locate and label the following national forests with a green colored pencil. Be sure to spell the words correctly.

1. Apache-Sitgreaves National Forest
2. Coconino National Forest
3. Coronado National Forest
4. Kaibab National Forest
5. Prescott National Forest
6. Tonto National Forest

On the **Biomes Map of Arizona**, lightly color the six biomes. Be sure to identify the colors in the Color Keys.

On the **Biomes Map of Arizona**, draw pictures/symbols for the following plants. Be sure to identify the plants using the Picture Keys.

1. saguaros
2. Joshua trees
3. pinyon pines
4. junipers
5. ponderosa pines

Biomes Summary of Arizona

Biomes of Arizona	Climate	Elevation	Plant Life
Desert	Very little rain, warm to hot temperatures	100–3,500 ft	<p>Small leaf desert trees: palo verde, ironwood, desert-olive, mesquite, cottonwood, and willow</p> <p>Bushes: creosote, ocotillo, Joshua trees, and mesquite</p> <p>Cactus: cholla, prickly pear, barrel, and saguaro</p> <p>Grasses: short grasses</p>
Grassland	Some rain, warm to cool temperatures	3,300–7,000 ft	<p>Bushes: yucca, agave,</p> <p>Grasses: short and tall grasses</p>
Chaparral	Some rain, warm to cool temperatures	4,000– 6,000 ft	Bushes: scrub oak, manzanita
Woodland	Some rain, warm to cool temperatures	5,000–7,000 ft	Trees: oaks, pines, juniper, cottonwood, sycamore, and alder
Forest	Some rain to a lot of rain, cold to warm temperatures	6,900–10,500 ft	Trees: Ponderosa and other pines, Douglas fir, spruce, maple, and aspen
Tundra	Lot of rain, cold	11,000–11,500 ft	no trees , only short grasses and mosses

Arizona Biomes Assessment

Name _____

1. Which of the following is not a landform region in Arizona? (Circle your answer)

- A. Chaparral
- B. Mountain
- C. Plateau
- D. Desert

2. Biomes are geographical areas that have a certain climate, plant life, and animals. How many biomes does Arizona have? _____

What are their names?

3. According to the Biomes Summary of Arizona Chart, in what biome would you find the following?

Example: saguaro	desert
mesquite	
Ponderosa pine	
paloverde	
manzanita	
spruce	
mosses	
tall grass	
sycamore	

4. Estimate how much of AZ is covered with desert. _____% With forests? _____%

Which is larger? _____

Arizona Biomes Assessment **Answer Key**

- Which of the following is not a landform region in Arizona?
 - Chaparral**
 - Mountain
 - Plateau
 - Desert
- Biomes are geographical areas that have a certain climate, plant life, and animals.
 - How many biomes does Arizona have? **Six**
 - What are their names? **desert, grassland, chaparral, woodland, forest, and tundra.**
- According to the Biomes Summary of Arizona Chart, in what biome would you find the following?

Example: saguaro	desert
mesquite	desert
Ponderosa pine	forest
paloverde	desert
manzanita	chaparral
spruce	forest
mosses	tundra
tall grass	grassland
sycamore	woodland

- Looking at your Landform Regions of Arizona map, about how much of AZ is covered with desert? 40% With forests? 20%
Which covers the greater area? desert

Scoring Guide for Map Work

Name _____

Criteria	Points Possible	Points Earned
The three deserts are located and labeled correctly	6	
The six national forests are located and labeled correctly	12	
The six biomes are correctly located, and the Color Keys are correct.	12	
The five plant pictures/symbols are correctly located, and the Picture Keys are correct.	10	
Words are correctly spelled.	10	
Total	50	

Comments:

Scoring Guide for Map Work

Name _____

Criteria	Points Possible	Points Earned
The three deserts are located and labeled correctly	6	
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The six biomes are correctly located, and the Color Keys are correct.	12	
The five plant pictures/symbols are correctly located, and the Picture Keys are correct.	10	
Words are correctly spelled.	10	
Total	50	

Comments: