

# Animal Skyscrapers

Giraffes are big animals. They weigh between 1,800 and 3,000 pounds (816 and 1,360 kilograms) and are the tallest living land animals in the world. The average height of female giraffes is 14 to 16 feet (4.27 to 5 meters). Males average 16 to 18 feet (5 to 5.5 m). At those heights, you could say that giraffes are the skyscrapers of the animal world.

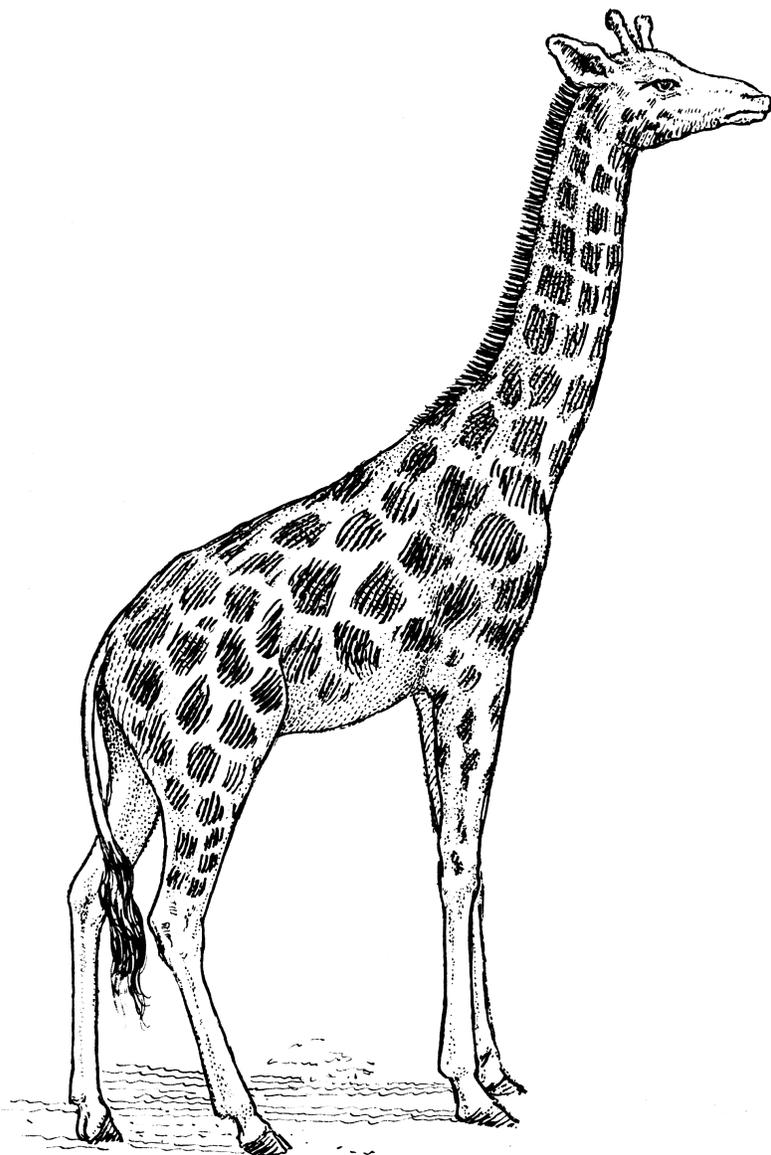
The legs of a giraffe are twice as long as its body. The front legs are longer than the hind legs, making the back of the giraffe slope downward from its shoulders. With such extraordinary legs, giraffes can walk up to 10 miles (16 kilometers) an hour. When a giraffe is in a hurry, it can gallop up to 35 miles (56 km) an hour.

As the giraffe walks or runs, its head and neck shift forward and back, helping the tall

animal stay balanced and move more quickly.

A giraffe's neck has a lot to do with its height. The necks of these peaceful giants are 6 to 8 feet (2 to 2.5 m) long. A special joint connecting the head and neck allows the giraffe to hold them in a straight line. Pointing straight up, the head adds about 2 feet (61 centimeters) to the giraffe's height. Although a giraffe's neck is longer than any other animal's, it has only seven vertebrae, or neck bones, which is the same number of vertebrae that humans have.

To pump blood all the way up its long neck to its brain, a giraffe's heart has to



work very hard. That hardworking heart is about 2 feet (61 cm) long and weighs about 24 pounds (11 kg). Blood vessels in the brain and special valves in the arteries of the neck control the flow of blood so it doesn't rush to the giraffe's head when the animal lowers its neck.

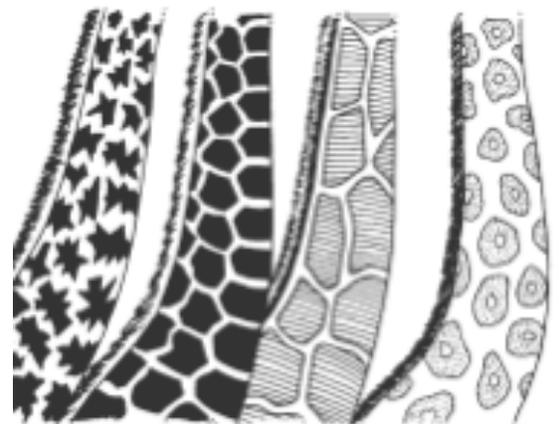
Giraffes are known to have very good eyesight. They can see something moving over a mile (km) away. Other grazing animals come to a watering place when giraffes are drinking because they know that their tall neighbors can spot trouble coming a long way off. Sometimes, one giraffe keeps watch while the others lower their heads to drink.

Giraffes, like cattle, are ruminants. A ruminant is a cud-chewing animal with a stomach that has four sections. When giraffes eat, they first swallow their food whole. Then they bring undigested food back up to chew it and swallow it again. The food is digested when it reaches the fourth section of the stomach.

Acacia leaves are a giraffe's favorite food. Because these leaves are about three-quarters water, they also provide moisture when there are no watering places nearby. A giraffe's height makes it easy to reach the tops of acacia trees and pull off the tender leaves. The sharp thorns that surround acacia leaves don't bother giraffes. A giraffe can reach around the thorns with its very long tongue. Any thorns the giraffe might accidentally swallow will be coated with thick, sticky saliva from the giraffe's mouth.

The tongue of a giraffe is about 18 inches (46 cm) long. The giraffe uses its tongue not only for eating, but also to keep clean. Giraffes do not bathe. They lick their bodies clean. A giraffe even cleans its nose and ears with its long tongue! Oxpecker birds usually help giraffes with their grooming. The birds walk up and down a giraffe's back, eating insects and getting rid of dry skin and loose hair.

Giraffes' bodies have spotted coats. Each species has its own unique color and pattern of spots. Colors



range from yellowish red to dark brown on a cream or tan background. Some giraffes have large, straight-edged spots that are close together. Others have irregular spots with either jagged or rounded edges.

A female giraffe usually has only one baby at a time, and the baby, or calf, is born tall! The height of a newborn calf is about 6.5 feet (2 m), and its neck is very long compared to its body. A mother giraffe guards her calf carefully to protect it from attacks by leopards, lions, hyenas, and wild dogs. Not many of these animals will attack a young giraffe with its mother nearby. If a mother giraffe strikes an attacker with her strong hooves, she can injure the animal so badly that it is no longer able to harm her baby.



Before a mother giraffe goes off to eat, she hides her newborn in tall grass to protect it. After the calf is about a month old, however, all of the young giraffes in a herd are left together in a sheltered area while their mothers search for food. The young giraffes gallop around and play games with each other while they're waiting for their mothers to return. Sometimes, a "baby-sitter" stays with them.

Today, giraffes face a number of threats. With the human population growing in central Africa, where most giraffes are found, people are taking over more and more of the land that

giraffes have been living on. Those people also need food, and giraffes can provide large quantities of meat. Already, too many giraffes have been killed for their meat, hides, and tail hair. Droughts and diseases have also reduced the number of giraffes.

Some factors, however, favor the future of giraffes. Farmers and ranchers have learned that giraffes don't eat the crops people grow or the same grasses cattle eat. Sometimes, in fact, giraffes are seen eating tree leaves while the cattle graze around them. People are also recognizing the value of giraffes to Africa's economy. Tourists come from all over the world to see these amazing animals. Their need for food and places to stay creates jobs for the local citizens, and the money tourists spend helps African businesses.

Laws have been created to protect giraffes, and areas of land have been set aside for them. But if these gentle giants are to survive outside of zoos, people must find even more ways to protect them and to preserve their habitats.

## Questions About Animal Skyscrapers

1. What characteristics do giraffes have that help to protect them?
2. List four facts from the story that contain specific measurements.
3. Why do other animals come to a watering place where they see giraffes drinking?
4. How do oxpeckers help giraffes? How do the giraffes help the oxpeckers?
5. How does the growing human population in central Africa affect giraffes?
6. How are tourists helping to save giraffes?

## Vocabulary

A. Record the word that matches each definition.

digest	arteries	ruminants	droughts	irregular	shift
preserve	cud	joint	unique	valves	sheltered

1. covered or hidden for protection
2. long periods of time without much or any rain
3. to change positions
4. very unusual; one of a kind
5. cud-chewing animals with four-chamber stomachs
6. not having a uniform shape, size, or pattern
7. swallowed food brought back up for chewing
8. a place where two bones come together
9. to break down food so it can nourish the body
10. to keep from being damaged or destroyed
11. devices that control the flow of fluids in a pipe or a tube
12. tubes that carry blood from the heart to all other parts of the body

B. Find the correct word in the story to answer each question below.

1. What noun describes people who travel far away from home to visit different places?
2. What verb describes the way many large, four-footed animals run?
3. What noun describes people who raise cattle and other grazing animals?
4. What term is used as a synonym for liquid?

## Prepositions

*A preposition is a word at the beginning of a phrase that shows the relationship of a noun or a pronoun to another word in the same sentence. A phrase that begins with a preposition is called a prepositional phrase.*

**Example:** *Kai needed a box for her mother's gift.*

*The word for is a preposition. It begins the prepositional phrase for her mother's gift, which shows the relationship between the words box and gift.*

*The words listed below are some common prepositions.*

<b>about</b>	<b>above</b>	<b>across</b>	<b>after</b>	<b>around</b>	<b>at</b>
<b>before</b>	<b>behind</b>	<b>below</b>	<b>beneath</b>	<b>between</b>	<b>from</b>
<b>off</b>	<b>by</b>	<b>in</b>	<b>on</b>	<b>down</b>	<b>into</b>
<b>onto</b>	<b>during</b>	<b>near</b>	<b>over</b>	<b>for</b>	<b>of</b>
<b>through</b>	<b>to</b>	<b>under</b>	<b>until</b>	<b>with</b>	<b>without</b>

A. Write the prepositional phrase in each sentence below.

1. A giraffe is a big animal with a long neck.
2. A special joint connects a giraffe's head to its neck.
3. Giraffes can reach the top leaves of acacia trees.
4. A giraffe brings swallowed food back up into its mouth to chew it.

5. Tourists from many countries visit Africa to see giraffes.

*B. Find five phrases in the story that each begin with a different preposition. Write the phrases on the lines below and circle the preposition in each phrase.*

1.

2.

3.

4.

5.

### **Topic Sentences and Supporting Details**

*Each of the sentences in the outline below states the main topic of a paragraph in the story. Find each paragraph. Then list supporting details from the paragraph on the lines under the topic sentence. Use as few words as possible. You do not have to write complete sentences.*

I. Giraffes have good eyesight.

A.

B.

II. Each kind of giraffe has a unique pattern of spots.

A.

B.

C.

D.

III. Giraffes, like cattle, are ruminants.

A.

B.

C.

D.

*Read the supporting details and write a topic sentence.*

IV.

A. licks its body clean

B. can clean its ears and nose with its long tongue

C. Oxpeckers help with grooming.