African Plains

Africa is a land of varied climates.

Vegetation on the African Plains is mostly grass.

Some drought resistant trees do grow there.

What happens during a drought?

Af • ri • can • Plains

Af•ri•can•Plains

African Plains

Augrabies Desert

The Augrabies Desert is a semi-arid savannah.

This land has very little rainfall.

Plant roots take what water they can from the soil.

How do plants adapt to the desert?

Au • gra • bies • De • sert

Au • g r a • b ie s • D e • s er t

Augrabies Desert

Highveld Grasslands

Grasses flourish on the Highveld grasslands.

Acacia trees are plentiful on the plateaus.

Africa has many freshwater and saltwater lakes.

Which phrase means "high, cool, open

grasslands"?

High • veld • Grass • lands

High • veld • Grass • lands

Highveld Grasslands

desert

This is the Kalahari Desert.

The arid desert is a harsh habitat.

Animals and people must adapt to the conditions.

Which word means "lacking moisture"?

de • sert

de • sert

desert

canyons

Canyons are carved by fast flowing rivers.

These steep walls are composed of lava rock.

The Orange River runs through the desert.

How does erosion create gorges and canyons?

can • yons

can • yons

canyons

mountain forest

The mountain forest has subtropical weather.

Water vapor condenses and falls as rain.

The cliffs are a habitat for many birds and

reptiles.

Describe a "misty mountain top".

moun • tain • for • est

m ou n • t ain • f or • e s t

mountain forest

picking

This baboon is picking fruit to eat.

He forages for fruit, nuts, leaves, and insects.

He is omnivorous, so he will eat almost anything.

What is an omnivore?

pick • ing

pick•ing

picking

kicking

The baby elephant is kicking up dirt as she trots.

She hurries to the waterhole for a mud bath.

A newborn elephant weighs about 265 pounds.

What is a pachyderm?

kick • ing

kick • ing

kicking

taking off

The bateleur bird is taking off.

He is a jet black raptor, a bird of prey.

His wingspan is six feet wide.

Measure six feet. Reach the distance with your arms.

tak • ing • off t a k • i ng • o ff taking off

charging

The two Cape buffalo are charging each other.

This aggressive behavior is called "rutting".

A broadside stance shows dominance.

Which buffalo is more dominant this mating

season?

char • ging

ch ar • g i ng

charging

yawning

The lion cub is yawning.

She rests twenty of the twenty-four hours in a day.

The other hours are spent hunting.

How many hours a day do humans sleep?

yawn • ing

y aw n • i ng

yawning

drinking

The mother and her daughters are drinking water.

The bond between them is lifelong.

It lasts from 50 to 60 years.

Is it possible for elephants to have caring feelings?

drink • ing

drink•ing

drinking

sleeping

The gazelle fawn is sleeping.

It may be left in a "nursery" with other fawns.

Its mother watches from a distance.

A father is a buck, a mother is a _ _ _?

sleep • ing

sleep•ing

sleeping

attending

The male gazelle is attending to his surroundings.

He relies on his ability to see and hear predators.

If alarmed, he will sprint away.

If he doesn't pay attention, what may happen?

at • tend • ing

at•tend•ing

attending

eating

The hartebeest is herbivorous.

It is eating the leaves, stems, and bark of the plant.

It grinds the plants with its large flat teeth.

What is an herbivore?

eat • ing

eat•ing

eating

stuffing

The rock hyrax is stuffing his cheeks with grass.

If he senses danger, he will let out a squeak.

It is an alarm for all nearby animals.

Do animals communicate?

stuff • ing

stuff•ing

stuffing

jumping

The impala is jumping over the rock and brush. An alarmed impala can broad jump 36 feet. He can "pronk" 10 feet straight up in the air. Use your hands to demonstrate "pronking". jump • ing

j u m p • i ng jumping

panting

The lionesses are resting and panting in the shade.

It is common for these cats to hunt and rest together.

Daytime temperatures can be over 100 degrees. What is the daytime temperature today? Compare. pant • ing

panting

sits

The meerkat sits and suns his underbelly.

He does this for about an hour every morning.

He will eat, play, rest, then eat again.

Meerkats stay in the burrows on rainy days. Why?

sits

sits

sits

crawls

crawls

The millipede crawls across the road.

This "myriopod" is named for its many legs.

"Milli" means thousand, and "pede" means foot.

What would centipede mean?

crawls

c r aw l s

sniffing

The mongoose is sniffing for food.

It uses its long claws for digging.

It digs for eggs, millipedes, shellfish, and insects.

When a mongoose digs, its ears can close. Why? sniff • ing
s n i f f • i ng
sniffing

flying

The vulture is flying over a recent kill. This is a signal to many animals that food is nearby.

The vulture must wait its turn for the food.

Why would other animals notice a vulture flying?

fly • ing

flying

chewing

This waterbuck is chewing cud.

It is a "ruminant" animal.

It swallows food, regurgitates, and chews it again.

Explain the saying, "He ruminates over problems."

chew • ing

ch ew • i ng

building

chewing

The lesser masked weaver is building a nest.

This small nest is for one family.

It differs from the sociable weaver's huge nest.

Find the sociable weaver's nest. Compare the two. build • ing

build • ing

building

flapping

Elephants use their ears to cool their bodies.

There are many blood vessels close to the surface.

Flapping lowers the temperature by cooling blood.

How do other animals cool off?

flap • ping

flap•ping

flapping

homestead

This family's homestead is in the countryside.

Each family usually builds their own home.

Many people live in cities.

How are African homes alike/different?

home • stead

home • stead

homestead

village

An extended family lives in this farming village.

They grow corn and other crops.

Their homes are made of mud bricks.

How does cooperation affect the families' lives?

vil • lage

vil•lage

village

city

Pretoria is like other large cities in the world.

Many people live in apartments and houses.

They work in office buildings.

What is the name of your city?

ci • ty

ci • ty

city

hut

The thatched home is called a "behive hut".

This is a characteristic Zulu home.

The Zulu people live in the countryside.

How do you think the beehive hut got its name?

hut

hut

hut

fence

This fence is built to keep the predatory animals

out.

Domesticated animals are kept inside the fence.

The ostrich is a common domestic animal.

How are fences used in your area?

fence

fence

fence

girl

This little girl lives in Africa.

She lives with her mother, father, and sister.

Zebra walk past her home.

What familiar animal looks like a zebra?

girl

g ir l

girl

children

These children walk a long way to school.

They are dressed in their uniforms.

It is a privilege to go to school, not everyone can.

How would you feel if you couldn't go to school?

chil • dren

chil • dren

children

selling

The people are selling their home-grown produce.

They sell guavas, mangoes, and bananas.

One woman balances a heavy load on her head.

Define the word, "burden".

sell • ing

sell•ing

selling

thatching

The men are thatching the roof.

First, rafters are built and fastened.

Grass is then bundled and spread in layers on top.

How would you make a thatched roof watertight?

thatch • ing

th a tch • i ng

thatching

brickyard

Clay bricks are made in the brickyard.

The red soil gives the brick its red color.

Many houses are made of brick.

How is the kiln used in making bricks?

brick • yard

brick • yard

brickyard

nomadic

The San people travel from place to place.

They are nomadic.

This means they have no permanent home.

The San choose to be nomadic. Why do they

move?

no • ma • dic

no•ma•dic

nomadic

container

The San make jewelry to sell to tourists.

They use porcupine quills, wooden beads and

horns.

The container is a tortoise shell, a carapace.

What does the word, "resourceful" mean?

con • tain • er

con•tain•er

container

carves

The young man carves bowls out of wood.

He uses a homemade adz.

The adz has a wooden handle and metal blade.

How is an ax different from an adz?

carves

c ar ve s

carves

herds

The boy herds the cow.

He takes it from the grazing area to his home.

He walks barefoot on the dirt road.

What are calluses?

herds

h er d s

herds

tourists

Some tourists travel in buses to see the animals.

Many national parks have been established.

These wilderness areas protect the animal

habitats.

How does tourist money help protect the animals?

tour • ists

tour • ists

tourists

hot air balloon

A hot air balloon floats high above the savannah.

It would be easy to see animals below.

Large herds of animals cross the grasslands.

You are in the balloon. Describe your perspective.

hot • air • bal • loon

hot•air•bal•loon

hot air balloon

train

The train is an important mode of transportation.

Trains run between cities and countryside.

Many people use the train daily.

How are "locomotion" and "locomotive" related?

train

t r ai n

train

rider

This rider travels the desert by horse.

He must be sure to bring water along.

The waterholes may be far apart.

What does "hydrate" mean?

ri • der

ri•der

rider

walking

These people are walking to the marketplace.

There, they will sell their goods.

Some carry heavy packages for long distances.

Why would the people work so hard?

walk • ing

walk•ing

walking

canoe

The man carved the canoe from a log.

It took many weeks of hard work to make the

canoe.

He goes up and down the river.

Why does the canoe float?

ca • noe

ca•noe

canoe

habitat

A habitat is an area of land or water.

It has everything an animal needs to live.

The giraffe's habitat is the tree covered dry

savannah.

Why do you think the giraffe needs trees?

ha • bi • tat

ha•bi•tat

habitat

lake

The many lakes are home to migrating birds.

Some lakes are deep and some are shallow.

Shallow lakes evaporate in the dry season.

What happens to the animals when the lake is dry?

lake

la ke

lake

burrows

Small mammals dig holes in the ground.

Their burrows are deep.

The small animals must hide from predators.

Why would small animals need to hide?

bur • rows

b ur • r ow s

burrows

waterhole

The waterhole is a fresh water pond. It is critical to the survival of all African animals. The hippo is amphibious and herbivorous. Hippo hide is thin. Why does it need water? wa • ter • hole

w a • t er • h o le waterhole

tree

The leopard waits silently and rests in the tree. It may ambush its prey and attack from above. It will drag the kill back up to the tree to eat. How is the tree more advantageous than the ground?

tree

tree

tree

brush

Smaller animals hide close to the ground. The brush provides them with cover and shade. They may also find bugs among the leaves.

What is an insectivore?

brush

b r u sh

brush

mounds

Termites build great mounds of spit and mud. One colony has millions of termites.

A single large queen lays all the eggs.

Do you think termites have "jobs"?

mounds

m ou n d s

mounds

nest

About 200 sociable weavers live in this colony. One family lives in each chamber of the nest. On cold nights, many birds crowd into a chamber. Why are the nests so high off the ground? nest

nest

nest

giraffe

The giraffe is the world's tallest land mammal. It can reach and eat leaves from the tops of trees. Food is available that other animals cannot reach. How has the giraffe adapted to survive?

gir • affe g ir • a ffe giraffe

gazelle

A gazelle is a sociable animal that lives in herds. The baby stays with its mother for protection. All mother gazelles will protect others' offspring. Do humans protect other people's offspring? ga • zelle

g a • z e lle gazelle

elephant

Elephant herds never go far from water.
Each day an elephant takes a mud bath.
It provides protection from the sun and insects.
How could mud protect an elephant's hide?

el • e • phant el • e • ph a n t elephant

baboon

The baboon lives in troops of different sizes. Each troop has males, females, and the young. They groom one another for several hours each day.

How does grooming form social bonds?

ba • boon

ba•boon

baboon

cheetah

A cheetah frequents the water hole in the evening. Other animals disappear when it is around.

The cheetah is a carnivore.

What do carnivores eat?

chee • tah

ch ee • t ah

cheetah

oryx

The long, curved horns are sickle-shaped. Oryx have brown necks and white coats. The horned oryx is extinct in the wild. Their habitat was the desert edge. What happened?

or • yx

or • y x

oryx

lions

A "pride" of lions has one or two dominant males. There are four or more females and about six cubs.

A large pride may have up to 40 members. Why are some prides larger than others?

li • ons

li • on s

lions

meerkats

Meerkats are very social animals.

They often cuddle making soft murmuring sounds.

They live in burrows and eat insects, fruit, and roots.

Why would meerkats need to cooperate with others?

meer • kats

meer•kats

meerkats

warthogs

Warthogs live in a family group called a

"sounder".

The sounders are sisters and their young piglets.

One male attends to and defends the sounder.

Do you think warthogs are swine?

wart • hogs

wart•hogs

warthogs

wildebeest

The wildebeest travels in large herds for safety.

The herds move from one place to another.

This is called "migration".

Why is it necessary to migrate?

wil • de • beest

wil • de • beest

wildebeest

gorilla

The gorilla eats fruits, leaves, and stems.

It rarely drinks water.

It gets most of the moisture it needs from leaves.

Would the gorilla need to eat much? Why?

gor • il • la

 $g \text{ or } \bullet \text{ i } 1 \bullet 1 \text{ a}$

gorilla

okapi

The okapi is part of the giraffe family.

It has a prehensile tongue.

This means that the tongue can grasp small objects.

Why is it important to hold and grasp?

o • ka • pi o • k a • p i okapi

hartebeest

The male hartebeest has strong, ringed horns.

He uses the horns to dig and plow the soil.

This is called, "soil-horning".

How do you think a hartebeest marks its territory?

har • te • beest

har • te • beest

hartebeest

warthogs

Warthogs have very short necks.

They must get down on their knees to eat grass.

They wallow in mud to keep cool.

Why might warthogs have calluses on their knees?

wart • hogs

wart • hogs warthogs

vervet monkey

The vervet monkey has silky yellow-brown fur. It weighs about 12 pounds and is 2-3 feet long. It is often seen eating grass, herbs, seeds, and fruit.

Describe the monkey's face and eyebrows.

ver \bullet vet \bullet mon \bullet key v er \bullet v e t \bullet m o n \bullet k ey

vervet monkey

secretary bird

The secretary bird is exclusive to Africa.

It was named long ago for its black-tipped

feathers.

Secretaries used to keep quill pens in their wigs.

Describe the color, size and shape of this bird.

sec • re • tar • y • bird

 $sec \bullet re \bullet tar \bullet y \bullet bir d$

secretary bird

agama lizards

Camouflage is the way an animal disguises itself. Can you find both agama lizards on this tree?

One has an enormous blue head and swollen

cheeks.

Compare the colors and patterns of the lizards.

a • ga • ma • li • zards

a • g a • m a • l i • z ar d s

agama lizards

giraffe

The spotted pattern on the giraffe is for survival.

It helps to break up their outline on the horizon.

Each giraffe has a different pattern of spots.

Why would a giraffe need spots?

gir • affe

g ir • a ffe

giraffe

cheetah

The cheetah is a predatory animal.

The spots and coloring help disguise the cheetah.

It can hide in the grass without being seen by prey.

Is it necessary to have predators and prey?

chee • tah

ch ee • t ah

cheetah

gazelle

The gazelle is cinnamon-colored with bold stripes. Her eyes are on the side of her face.

This allows 360 degree vision.

Where are predator's eyes located? Why?

ga • zelle

ga•zelle

gazelle

Cape buffalo

The Cape buffalo is a massive animal.

Its heavy horns curve out, down, then up to a point. The ridge of bone above the eyes is for protection.

Is the Cape buffalo a bovine?

Cape • buf • fa • lo

Cape • buf • fa • lo

Cape buffalo

white rhinoceros

The horn may grow to be over four feet long. Poachers kill the rhinoceros in order to sell the horn.

The white rhino is endangered and nearly extinct. Does extinction of one species really affect

humans?

white • rhi • no • cer • os

white • rhi • no • cer • os

white rhinoceros

leopard tortoise

The leopard tortoise has a hard, spotted shell.

Protection is important.

It can tuck in its soft head and limbs.

Would very many animals be able to open the shell?

leo • pard • tor • toise

leo • p ar d • t or • t oi se

leopard tortoise

wildebeest

The wildebeest has a beard and a black face. Its smooth, curved horns are used for defense.

It grazes on the grasses of the savannah.

Why do you think it has a black tail and black face?

wil • de • beest

wil • de • beest

wildebeest

zebra

Zebra are uniquely striped in black and white.

Predators only see in black and white.

As a zebra is chased through grass, the stripes blur.

We can easily see zebra. Why can't lions?

ze • bra

ze • bra

zebra

Nile crocodile

The Nile crocodile is a strong-jawed reptile.

Animals that come to the water to drink, beware! It drags the animal underwater and drowns it.

A crocodile has teeth, but cannot chew. Why?

Nile • cro • co • dile

Nile • cro • co • dile

Nile crocodile

cheetah

The cheetah is a carnivore.

It stalks Thompson's gazelle.

This fastest of land animals can sprint at 70 mph.

Why does an animal stalk first, then chase?

chee • tah

ch ee • t ah

cheetah

lioness

The lioness hunts for food at dusk.

She hunts and kills only when she is hungry.

When hunting alone, she is about 18% successful.

What would make it easier/harder to hunt?

li • on • ess

li•on•ess

lioness

zebra herd

The stallion herds his family through the grasses.

Zebra are built for speed and endurance.

They are a favorite prey of lions and hyenas.

Why have zebra developed the trait of endurance?

ze • bra • herd

ze • bra• herd

zebra herd

jackal

The jackal waits his turn to scavenge lion kills.

He also hunts insects and grass rats.

 $Leopards\ hunt\ adult\ jackals;\ eagles\ prey\ upon$

pups.

Can a predator also be prey?

ja • ckal

ia • ck al

jackal

wild dog

The carnivorous wild dog hunts in packs.

They catch about 85% of the animals they chase.

They circle the prey and attack from all sides.

Are animals being cruel when they hunt for food?

wild • dog

wild • dog

wild dog

brown hyena

The brown hyena eats carrion.

Carrion is the remains of dead animals.

It will also hunt and kill small animals.

What other African animals eat carrion?

brown • hy • e • na

brown•hy•e•na

brown hyena

wildebeest calf

The wildebeest calf is hunted by lions and hyenas.

Three minutes after birth, calves can stand and

run.

Calves are born within three weeks of each other.

Why would all the calves be born at the same

time?

wil • de • beest • calf

wil • de • beest • calf

wildebeest calf

pale chanting goshawk

The pale chanting goshawk has pearl-gray

feathers.

When a bird sits on a tree branch, it is on a

"perch".

This perched goshawk looks for lizards.

Why is the goshawk perched in a bare tree?

pale • chan • ting • gos • hawk

pale • chant • ing • gos • haw k

pale chanting goshawk

squirrel

Squirrels are diurnal -- active during the daylight.

A squirrel forages for seeds, insects, and leaves.

It is eaten by many birds of prey.

What does nocturnal mean?

sauir • rel

s qu ir • r e l

squirrel

topi

Large carnivores and jackal prey on newborn topi. Adults, however, are not easy to catch.

This topi is marking his territory.

How do humans mark their territories?

to • pi t o • p i topi

yellow-billed stork

The yellow-billed stork has white plumage. Its long straight bill can probe for frogs and fish. It may keep its head under water for a long time. What does the word plumage refer to?

yel • low • billed • stork y e l • l ow • b i ll ed • s t or k yellow-billed stork

dragonfly

This colorful insect is on the menu of many birds. It is also eaten by tortoise and jackals.

The dragonfly pollinates flowers.

What habitat does the dragonfly need?

dra • gon • fly dra • gon • fly dragonfly

tawny eagle

The powerful tawny eagle rests atop dead trees. It's a hunter of mongooses, rodents, and lizards. The majestic bird even hunts flying termites. Hold your shoulders and head in the eagle position.

taw • ny • ea • gle t aw • n y • ea • g le tawny eagle crested hoopoe

The crested hoopoe has a long, thin bill. The feathers on top of his head are called a "crest".

The tufted rust-colored feathers are edged in black.

Describe the plumage of the crested hoopoe.

cres • ted • hoo • poe cres • ted • hoo • poe crested hoopoe

vellow-billed hornbill

A nesting female climbs into a hole in a tree. She seals the opening except for a tiny hole. The male hornbill brings her food for many weeks.

What is the purpose of the tiny hole? yel • low • billed • horn • bill y e l • l ow • b i ll ed • h or n • b i ll yellow-billed hornbill

eagle owl

The eagle owl does not build its own nest. It takes over another bird's large nest. This snake-eater nests atop a sociable weaver's nest.

How do the eagle owl and weaver help each other? ea • gle • owl ea • g le • ow l eagle owl

flamingos

Flamingos feed in salty soda lakes.

They eat the crustaceans that thrive in briny water.

The water can be very hot in these lakes.

Give an example of a crustacean.

fla • min • gos fla • min • gos flamingos

Hadada ibis

The Hadada ibis probes the mud. It looks for insects and small reptiles. It makes a loud haa, haa, haa, de dah call. How do you think this bird got its name?

Ha • da • da • i • bis H a • d a • d a • i • b i s Hadada ibis

red-necked spurfowl
Red-necked spurfowl are dirt-colored and
speckled.
This coloring helps them hide in the underbrush.
They eat tubers, berries, termites, and ticks.
How does this bird blend with the terrain?
red • necked • spur • fowl
r e d • n e ck ed • s p ur • f ow l
red-necked spurfowl

ground hornbill

The ground hornbill has a prominent red crop.

There are pebbles in the crop to help grind food.

Hornbills walk seven miles a day looking for food.

Can you think of another animal with a red crop?

ground • horn • bill

g r ou n d • h or n • b i ll

ground hornbill

ostrich

The ostrich is the world's largest bird.

Ostriches do not really "bury their heads in the sand."

They peck at the ground and eat roots and insects.

How do you think the old saying got started?

os • trich

os • trich

ostrich

oxpecker

The oxpecker sits on the backs of animals. The animals tolerate this because it eats the ticks. The animals could not reach the pests otherwise. This is a symbiotic relationship. Define symbiotic. ox \bullet pec \bullet ker o x \bullet p e c k \bullet er

o x • p e c k • e oxpecker