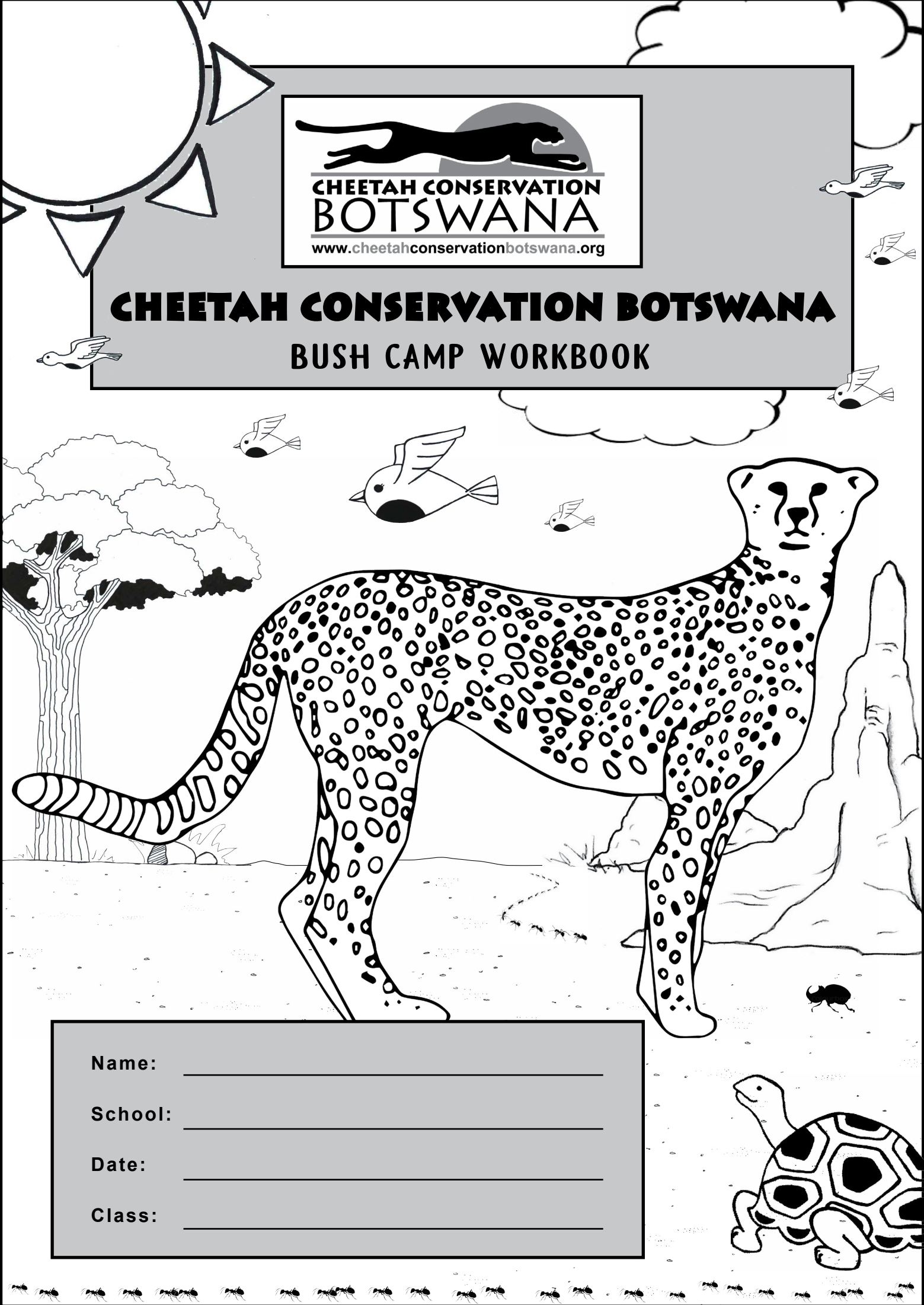




# CHEETAH CONSERVATION BOTSWANA

## BUSH CAMP WORKBOOK



Name: \_\_\_\_\_

School: \_\_\_\_\_

Date: \_\_\_\_\_

Class: \_\_\_\_\_





**“A healthy cheetah population nationwide for posterity”**

This workbook was developed by Cheetah Conservation Botswana (CCB) using the template kindly provided by our friends at Giraffe Conservation Foundation (GCF).

Giraffe Conservation Foundation’s original version was written and illustrated by Rachel du Raan and edited by Marie Mott-Adams. CCB’s alterations were written and designed by Jane Horgan.

**Contact Cheetah Conservation Botswana**

+267 350 0613

info@cheetahconservationbotswana.org

Private Bag BO284, Bontleng, Gaborone, Botswana

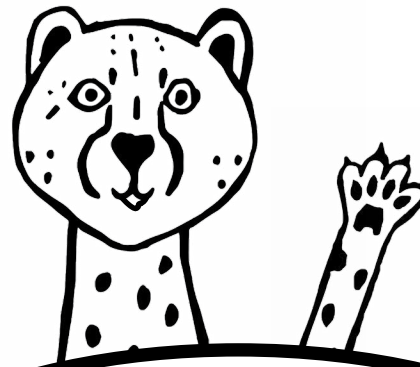
This programme is supported by



We would like to thank Botswana’s Ministry of Environment, Natural Resources, Conservation and Tourism and the Department of Wildlife and National Parks for their ongoing support

**HI! I'M CHEEKY!**

Welcome to the bush camp!

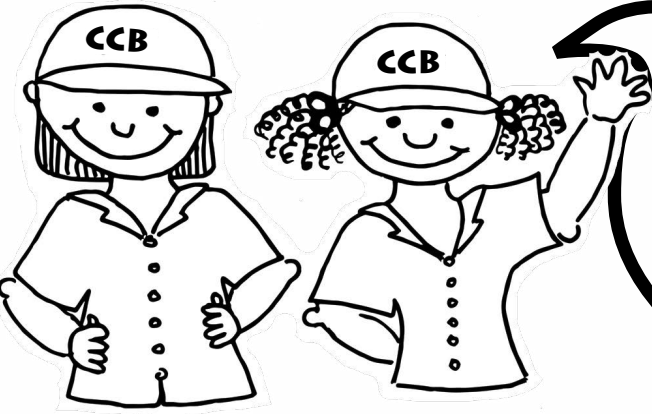


This is your own CCB workbook, and you can take it home with you. There are lots of drawings to colour in and fun activities for you to do.

If you are not sure what the underlined words mean, you can find their meanings in the glossary at the back of the workbook.

We will help you complete each task and guide you on your way. Have fun and please take care of your workbook.

Be sure to look for Cheeky — her spots, tracks or pictures are hiding on every page!



Tiisano Education Centre is home to many wonderful living and non-living things. Just like at home and at school there are a few rules we need to follow.

## BUSH CAMP RULES

### RESPECT YOURSELF

This means keeping yourself safe. Do not wander off by yourself, don't wander after dark and keep an eye out for dangerous animals at all times.

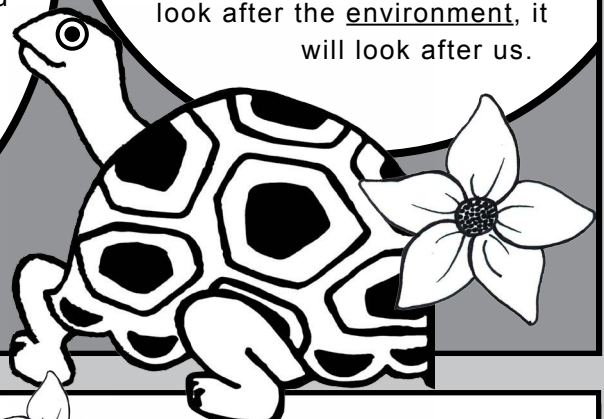
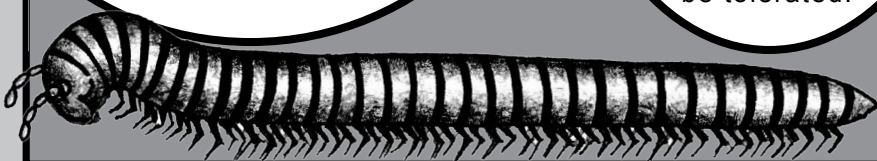
This includes checking your clothes, shoes, bed and bags for scorpions and snakes. If you or any of your friends get into trouble, call for a teacher immediately.

### RESPECT EACH OTHER

Respect your teachers by being on time, listening to and following instructions. Respect your fellow students and their ideas - even if you disagree. Be helpful, kind and supportive of each other. Bullying will not be tolerated.

### RESPECT THE ENVIRONMENT

The ecosystem is very fragile and everything in it plays an important role. Please do not pick or damage any plants and please do not harass or harm any animals at our camp. Do not waste water and place your litter in the bin. If we all look after the environment, it will look after us.



Respect yourself



Respect each other



Respect the environment

# ANIMAL DETECTIVE



USE  
YOUR FIELD GUIDE  
TO HELP YOU

## LEGEND



Moon & Stars means these animals are nocturnal.  
They are active at night.



Sun means these animals are diurnal.  
They are active during the day.



Rising/setting sun means these animals are crepuscular.  
They are active at dawn and dusk.

# SHhhhh!!!

Use your bush voice and keep your eyes and ears sharp! You might get to see the animal you are tracking.

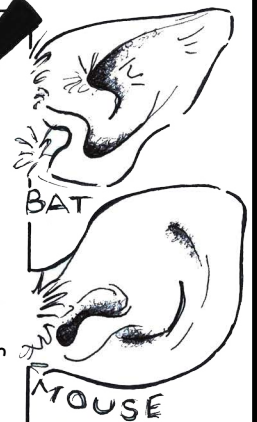
Do not just look, also SEE.

Take your time and search for any clues.  
Where are the tracks? Are they on the road or at the waterhole? Is the ground hard or soft? What other signs of activity can you see?



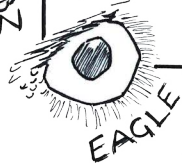
HYENA

BABOON

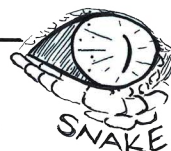


BAT

MOUSE



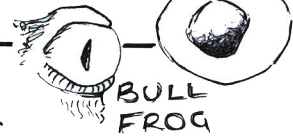
EAGLE



SNAKE



AFRICAN  
WILD CAT



BULL  
FROG

# ANIMAL DETECTIVE CHECKLIST



Using your Field Guide, find the following things...

Take your time and look carefully for all the clues. Tick the boxes for those that you find.



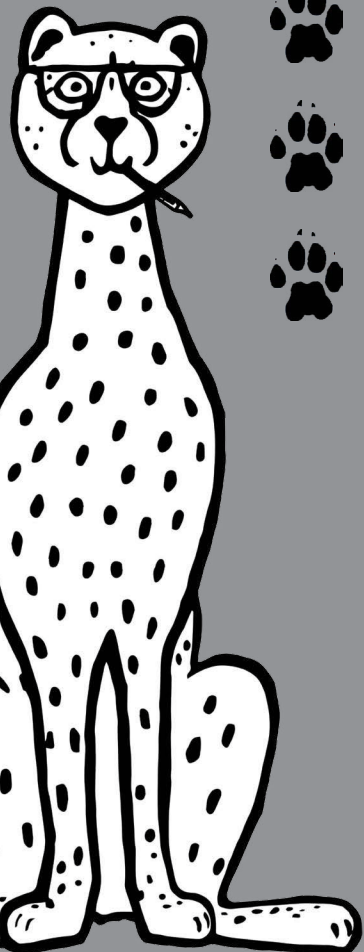
	<p><b>A HERBIVORE TRACK</b> Whose is it? _____</p> <p><u>Herbivores</u> are animals that only eat plants</p>	<input type="checkbox"/>
	<p><b>HERBIVORE POO</b> Whose is it? _____</p> <p>You can learn a lot about which animals are in the area by the footprints and the poo you find</p>	<input type="checkbox"/>
	<p><b>CARNIVORE SPOOR</b> Whose is it? _____</p> <p>Animals that only eat meat are called <u>carnivores</u>. Spoor is a footprint or a track.</p>	<input type="checkbox"/>
	<p><b>A VACHELLIA TREE</b> Which is it? _____</p> <p>Acacia trees (vachellia) are the most common tree in Africa</p>	<input type="checkbox"/>
	<p><b>A TERRITORY PATCH</b> Whose is it? _____</p> <p>Some animals mark their territory by going to the toilet in one place. This sends a strong and smelly message to others that this place is taken.</p>	<input type="checkbox"/>
	<p><b>A DUST BATH</b> Whose is it? _____</p> <p>Animals have dust baths to get rid of parasites that live on their skin. If you look closely, you might even find some of the animal's hair in the sand.</p>	<input type="checkbox"/>
	<p><b>AN INSECT TRAP</b> Whose is it? _____</p> <p>Look high and look low. Many insects build clever traps to catch their food. Insects that eat other insects are also called predators.</p>	<input type="checkbox"/>

# CONTENTS

## WHAT YOU'LL FIND IN THIS WORKBOOK



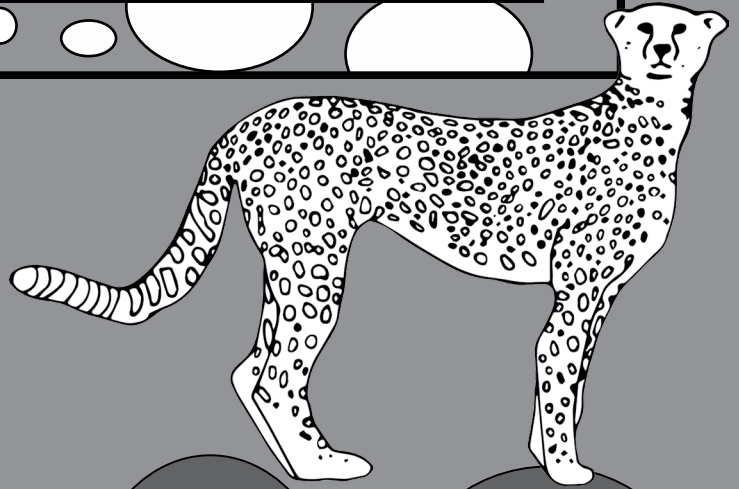
	Cheetahs	- 5
	Ecosystems	- 10
	Botswana	- 12
	Biodiversity	- 15
	Water conservation	- 16
	Environmental protection	- 19
	Habitats	- 25
	<b>FUN THINGS TO DO AT HOME</b>	<b>- 27</b>
	<b>FIELD GUIDE</b>	<b>- 39</b>
	<b>GLOSSARY</b>	<b>- 43</b>



# CHEETAH



**DRAW A LINE  
BETWEEN THE  
ADAPTATIONS AND  
THEIR PURPOSE**



FLEXIBLE  
SPINE

LONG  
HEAVY  
TAIL

BETTER  
GRIP FOR  
RUNNING

PUMP MORE  
BLOOD WHILE  
RUNNING

SMALL  
HEAD

SEMI-  
RETRACTABLE  
CLAWS

BETTER  
AERODYNAMICS  
FOR MORE SPEED

FOR  
LONGER  
STRIDES

SUNGLASSES  
TO PREVENT  
GLARE FROM  
THE SUN

BIG  
LUNGS

TEAR  
MARKS

SPOTS

PUMP MORE  
OXYGEN WHILE  
RUNNING

LONG  
LEGS

BIG  
HEART

CAMOUFLAGE

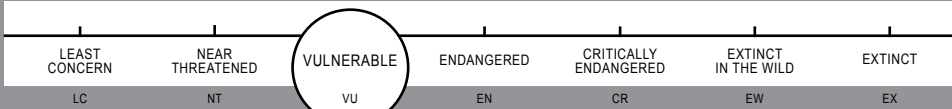
BALANCE  
AND  
TURNING

FOR  
LONGER  
STRIDES

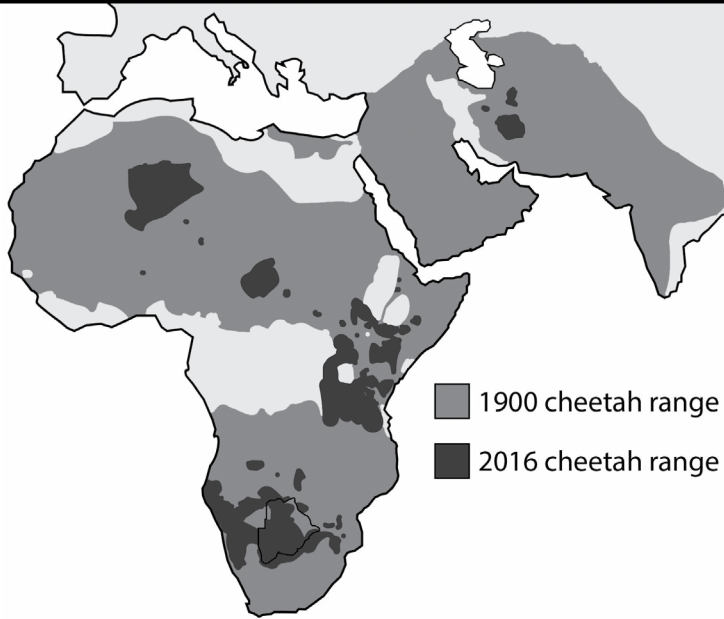
# ARE CHEETAHS ALWAYS HAPPY AND SAFE?



THERE IS A LIST (IUCN REDLIST) CLASSIFYING ANIMALS ALL AROUND THE WORLD THAT ARE IN TROUBLE. AFRICAN CHEETAHS ARE CLASSIFIED AS VULNERABLE ON THIS SCALE.



Many years ago, cheetahs lived all over Africa and Asia and there were more than 100,000 of them. Today there are fewer than 7,000 cheetahs in Africa and less than 100 are found in Iran. Their populations are declining.



## CHEETAHS' BIGGEST THREATS ARE:

### LOSING THEIR HOMES

Habitat loss is when wild places (the homes of wild animals) disappear because humans are there. Wild animals' homes can be overtaken by farms, towns or other human development.

### FIGHTING WITH FARMERS

When farmland and wild areas overlap, farmers come into conflict with carnivores because they are worried they will kill their goats, sheep or cattle. This is called human-wildlife conflict. This is the biggest threat to cheetahs.

### LOSING THEIR FOOD

Loss of prey means cheetahs don't have enough antelope or other food to eat. This can be made worse by drought and climate change.

### ILLEGAL WILDLIFE TRADE

Cheetahs get caught and sold as pets or killed for their skin to sell illegally





# HUMAN-WILDLIFE COEXISTENCE



WHEN HUMANS AND WILDLIFE SHARE LAND, THEY NEED TO WORK TOGETHER TO LIVE TOGETHER HAPPILY. THIS IS CALLED COEXISTENCE. THERE ARE A FEW THINGS PEOPLE CAN DO TO HELP COEXIST WITH CARNIVORES.

## KNOW YOUR PROBLEMS

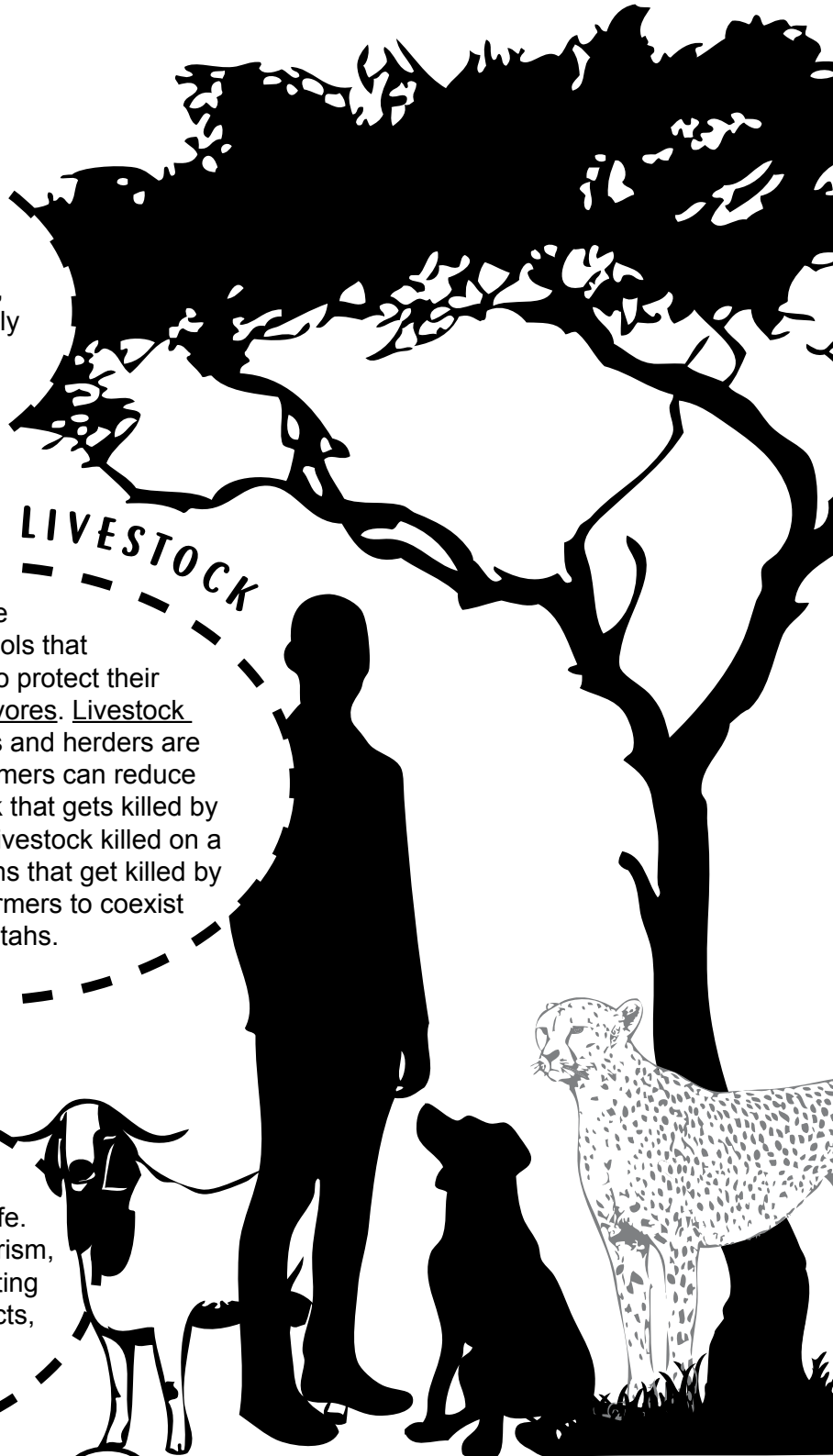
Cheetahs often get blamed for damage that has been caused by other things like disease, snakebite and stillbirths. By accurately identifying the cause of death of livestock, farmers are better able to fix their problems.

## PROTECT YOUR LIVESTOCK

There are many tools that farmers can use to protect their livestock from carnivores. Livestock guarding dogs, kraals and herders are some of the ways farmers can reduce the amount of livestock that gets killed by carnivores. The fewer livestock killed on a farm, the fewer cheetahs that get killed by farmers - helping farmers to coexist with cheetahs.

## BENEFIT FROM WILDLIFE

People are more likely to tolerate wildlife on their land if they get some kind of benefit from that wildlife. Benefits can include different types of tourism, including cultural, photographic and hunting tourism, game farming for animal products, or the benefits carnivores play in the ecosystem. Remember - cheetahs are important!





## Nocturnal

Leopards are mostly active at night

# SPOT THE LEOPARD

Leopards and cheetahs live in very similar areas. Although they look alike, they are very different in many ways.

### Proactive Protection Principles



Kraaling sick or injured animals protects them while they are vulnerable



Maintaining wild prey on your farm allows leopards to choose them instead of your livestock



Select for mothers who protect their calves

**Small Home Ranges**  
highly territorial



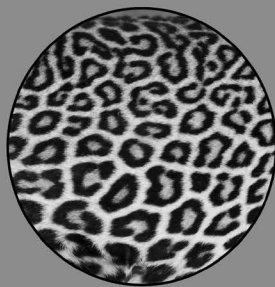
no tear marks

**WARNING**  
Will react aggressively if chased or hunted

Leopards are excellent climbers and can scale vertical tree trunks. Often they will stash their food in trees

**~70,000**  
left in Africa

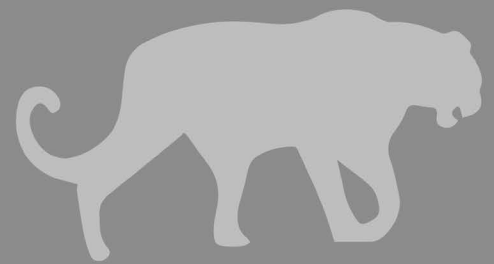
**VULNERABLE**



Spots are rosettes with brown in the middle



Round spoor - usually no claws



Body is stocky and muscular; short, thick legs; large head; strong neck - designed for strength

#### Contact Us

+267 350 0613

info@cheetahconservationbotswana.org

Private Bag BO284, Bontleng, Gaborone

#### Learn more at

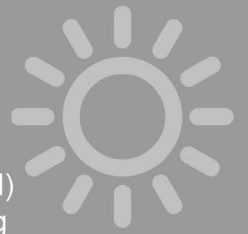
www.cheetahconservationbotswana.org

# DIFFERENCE CHEETAH

It is important to know how to tell them apart, for your own personal safety, your livestock's safety, and for knowing how to manage them on your farm.

## Diurnal

Cheetahs are mostly active in the day (diurnal) especially early morning and late afternoon (crepuscular)



tear marks

## Proactive Protection Principles



Livestock guarding dogs are highly effective against cheetahs



Herders can scare away carnivores when they approach the livestock



Kraaling young animals protects them until they are strong enough to defend themselves

## Large Home Ranges

less territorial



**RARELY** aggressive towards people but will defend themselves if cornered

World's fastest runner

**100**  
km/hr

**~7,000**  
left in Africa

**VULNERABLE**

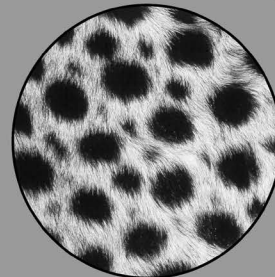
Cheetahs are excellent jumpers. They are likely to scale low-sloping branches to use as lookouts but will not climb vertical trunks. Males will also scent mark in trees



Body is tall and skinny; long, thin legs; small head; small neck - designed for speed



Oval-shaped spoor with claws visible



Solid spots



**CHEETAH CONSERVATION  
BOTSWANA**  
[www.cheetahconservationbotswana.org](http://www.cheetahconservationbotswana.org)

# ECOSYSTEMS

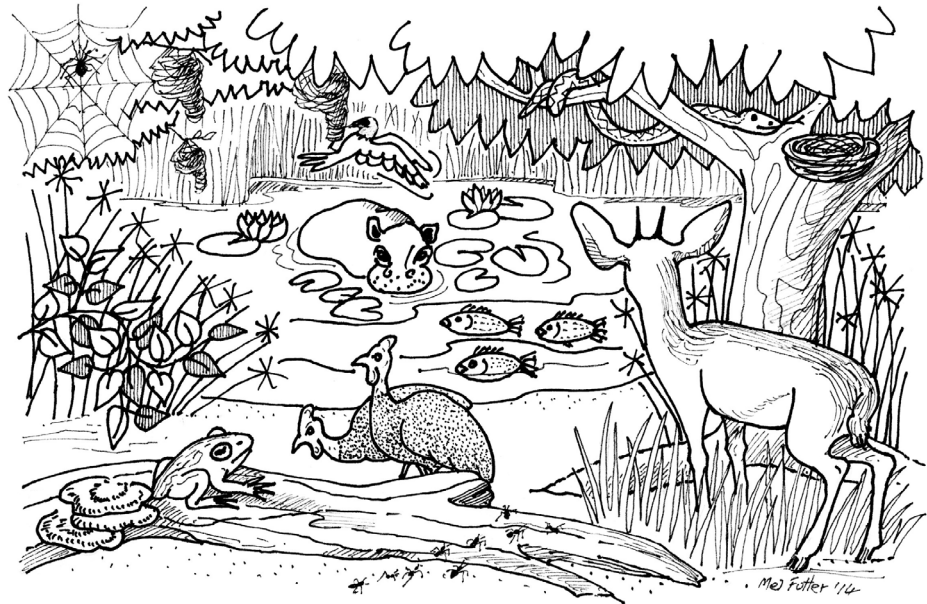
Have you ever wondered why plants and all the different kinds of creatures live where they do? To be able to survive, they all live where they have the right amount of food, water, shelter, space and clean air. These are the 5 basic things needed to make up a healthy habitat. For example, frogs have very thin skins which dry out very quickly, so they need a shelter that is close to water.

When a group of different living things live together with non-living things in an environment, this is known as an ecosystem. In a community, everything is connected because they all need each other to survive. An ecosystem works the same way as a community.

**REMEMBER, EVERYTHING IS IMPORTANT TO SOMETHING OR SOMEONE!**

In a healthy ecosystem, everything gets just enough of what is needed to live and be healthy and happy.

For example, trees grow in the soil, birds build nests in the trees, and snakes eat the birds' eggs in the nests



## KEEP OUR ECOSYSTEM HEALTHY!

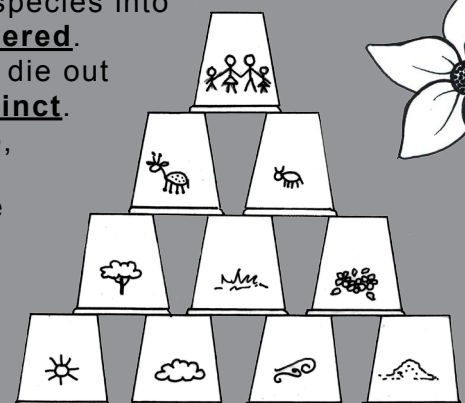
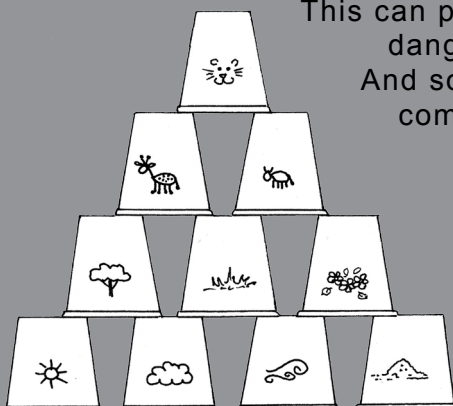
When humans disturb or take away or pollute one part of an ecosystem, it can disrupt the balance of the whole ecosystem. Remember when we built the eco-pyramid, it all collapsed when we took away one of the pots.

This can put the survival of certain species into danger - they become endangered.

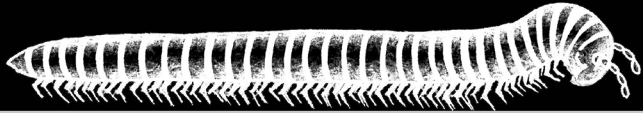
And sometimes, certain species die out completely - they become extinct.

Whatever we do to nature, we also do to ourselves.

For humans, this change of balance can lead to a shortage of our five basic needs, which can also make us sick.



# HEALTHY ecosystems need 5 BASIC THINGS



Tick the boxes of each one you see.

Write about what you have seen.

Draw what you have seen. You can do this in your free time.

## FOOD



---

---

---



## WATER



---

---

---



## SHELTER



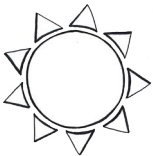
---

---

---



## SPACE



---

---

---



## AIR



---

---

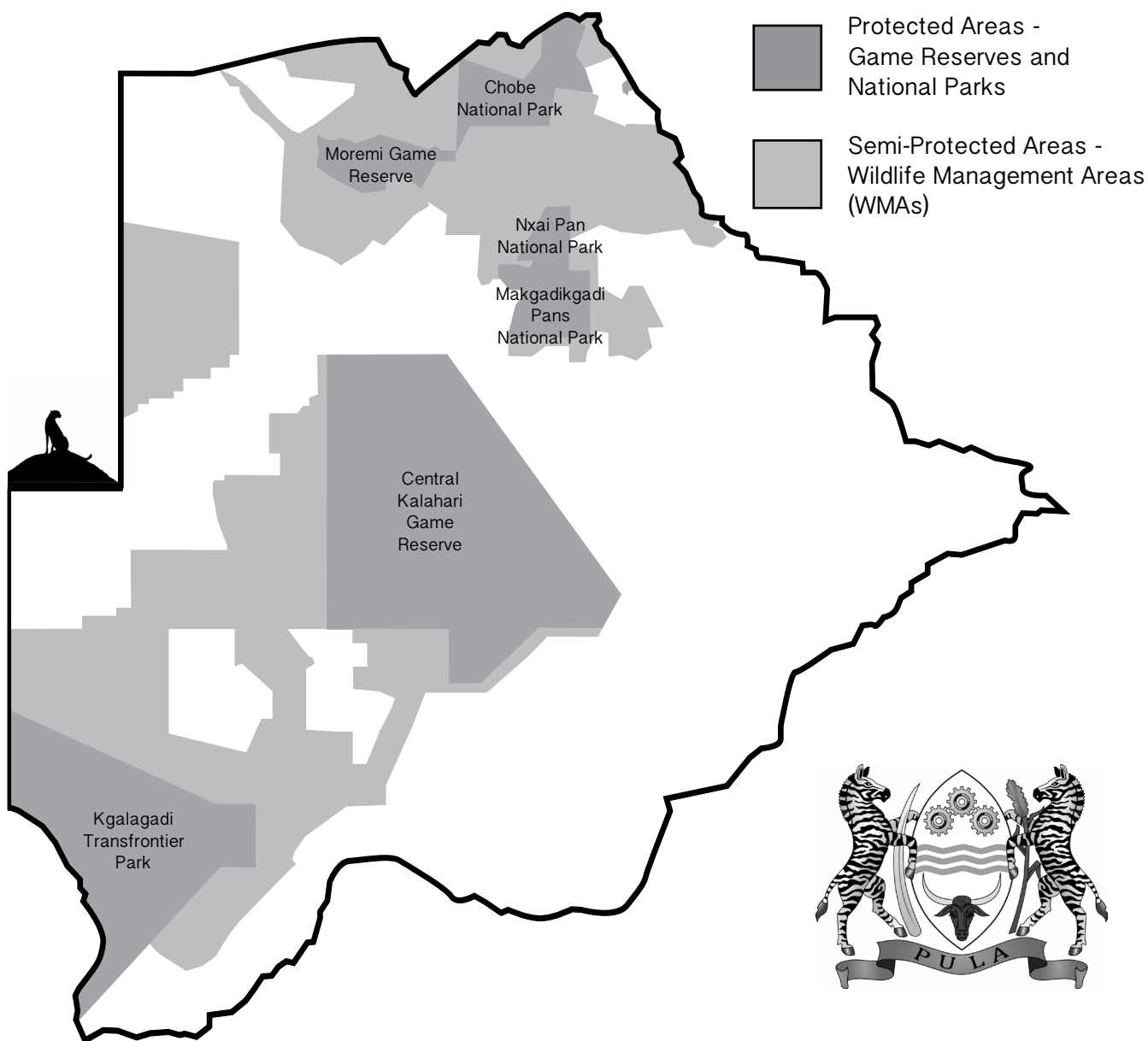
---

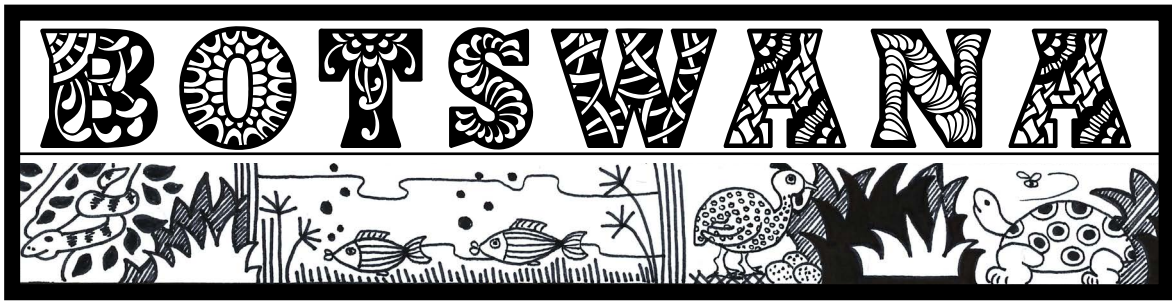


# BOTSWANA: A WILDLIFE EDEN



Botswana is unique because it has set aside large areas for wildlife. 39% of Botswana's land is either fully protected as reserves and national parks or semi-protected as wildlife management areas (WMAs). Because of this, many rare wild animals are in Botswana, like cheetahs and elephants – more so than anywhere else in the world! It is for this reason that so many tourists come to visit Botswana. It is also one of the last proper wild places on the planet – a source of pride for all Batswana!





## HISTORY

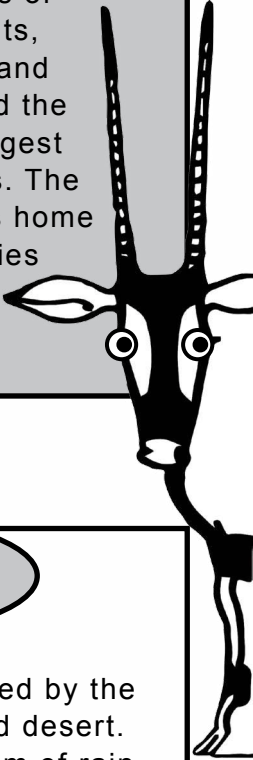
Botswana was the birthplace of modern humans some 200,000 years ago. A British Protectorate for many years, Botswana was named Bechuanaland until it gained independence in 1966. In 1967 diamonds were first discovered in Orapa, helping to fund the development of the nation. Botswana is now considered a peaceful, prosperous and democratic state.

## THE KALAHARI

The Kalahari is characterised by being very flat and sandy. Earthquakes caused the Kalahari basin to rise to around 1000m above sea level many thousands of years ago. Earthquakes and uprising of the land in the northern parts of Botswana caused the creation of the Okavango Delta. The Delta was formed when a large river from Angola and Namibia was interrupted by the rising tectonic plates, causing the river's waters to fan out over a large area. The Okavango Delta floods when waters from the Angolan highlands fill it between May and August each year. Being situated in the Kalahari Desert, the Okavango Delta is a reliable and plentiful water source for people and wildlife. Wildlife migrate from far away to get the water from the Delta. Because of its natural beauty, the number of wild animals and people it supports and its value to tourism, this area was declared a World Heritage Site in 2014. This means it will be protected as an important wild place and will remain wild for many years.

## FLORA AND FAUNA

Botswana is one of the world's last untouched wild places. It has the world's largest populations of cheetahs, elephants, African wild dogs and brown hyenas, and the world's second largest population of lions. The Okavango Delta is home to many wild species including many rare birds.



## CLIMATE

Botswana is dominated by the Kalahari - a semi-arid desert. It receives 300-600mm of rain each year. There is a very distinct wet and dry season with the summers being hot and wet and the winters being cold and dry. Climate change is causing the climate to shift, with higher temperatures, more unpredictable rainfall and more droughts.





# CULTURES OF BOTSWANA



Culture is a way to describe the practices and collective understandings of people who have lived in an area over a long period of time. Botswana has many tribes –each has different origins and native language. Batswana (generic) and Basarwa have notably different languages –not both being from Bantu roots. Setswana –which is common but different across the country –is the national language, while English is the official language of Botswana. 'Basarwa' refers to a wide variety of tribes stretched all over the Kalahari and each has their particular dialect. Basarwa are famous for their incredible knowledge of medicinal plants and wildlife (including knowing their tracks and behaviours) and for their ability to hunt antelope sustainably just by running them down (endurance hunting). A lot of this cultural heritage is disappearing as Basarwa assimilate to modern traditions.

## COOL FACT

There are more Setswana speakers in South Africa than in the whole of Botswana!

## COOL FACT

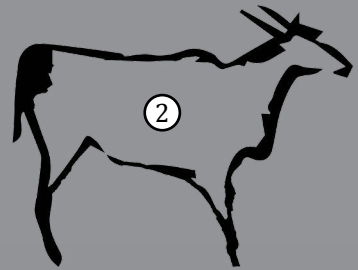
Scientists have traced the origins of humankind to the north of Botswana. Meaning it is the cradle of civilisation!

## Tsodilo Hills



This World Heritage Site is a sacred cultural area famed for its cave paintings which are around 6,000 years old!

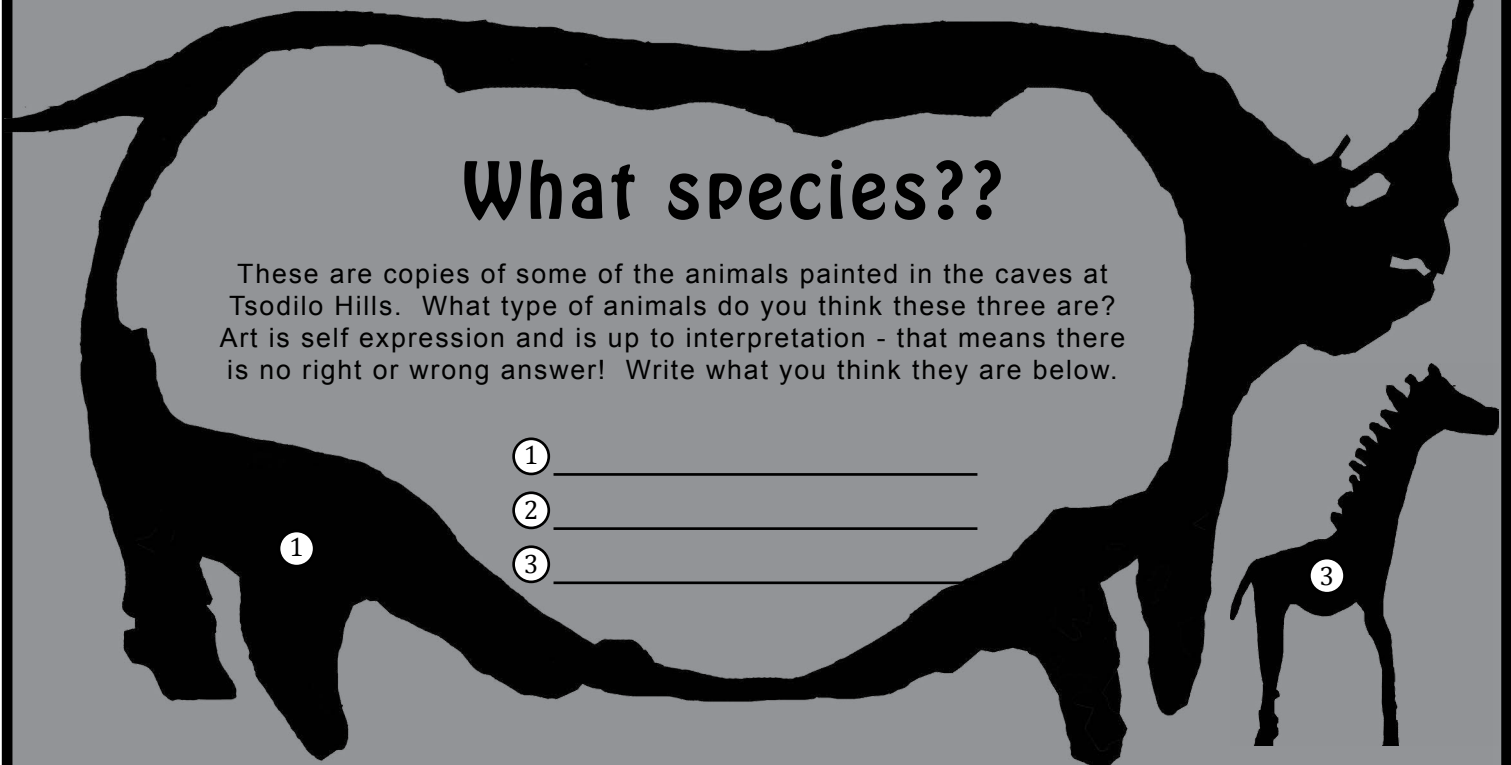
The paintings depict many different animals including rhino, elephant and various antelope and are thought to show how traditional Basarwa communities valued the wildlife around them.



## What species??

These are copies of some of the animals painted in the caves at Tsodilo Hills. What type of animals do you think these three are? Art is self expression and is up to interpretation - that means there is no right or wrong answer! Write what you think they are below.

- ① \_\_\_\_\_
- ② \_\_\_\_\_
- ③ \_\_\_\_\_







## WHAT IS BIODIVERSITY?

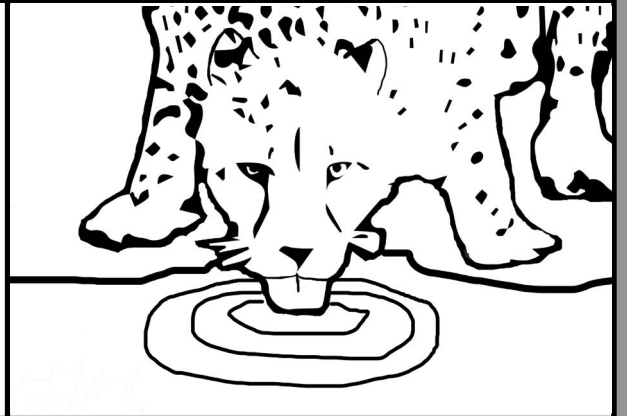
### Biodiversity

refers to the variety of life on earth. Everything that lives on earth from the people to the cheetahs to the beetles and bugs to the grass and the trees - it all has an important role to play in the ecosystem. Not only is there incredible diversity to life on earth but everything is also connected in the complex web of life. You cannot hurt one element in the ecosystem without it hurting other things as well, including ourselves. For example, the cheetahs eat the antelope which eat the grass. If cattle eat all the grass the antelope have nothing left to eat and they die and then the cheetahs have nothing to eat so they eat the cattle instead.

# WATER

## ALL LIVING THINGS NEED WATER TO LIVE

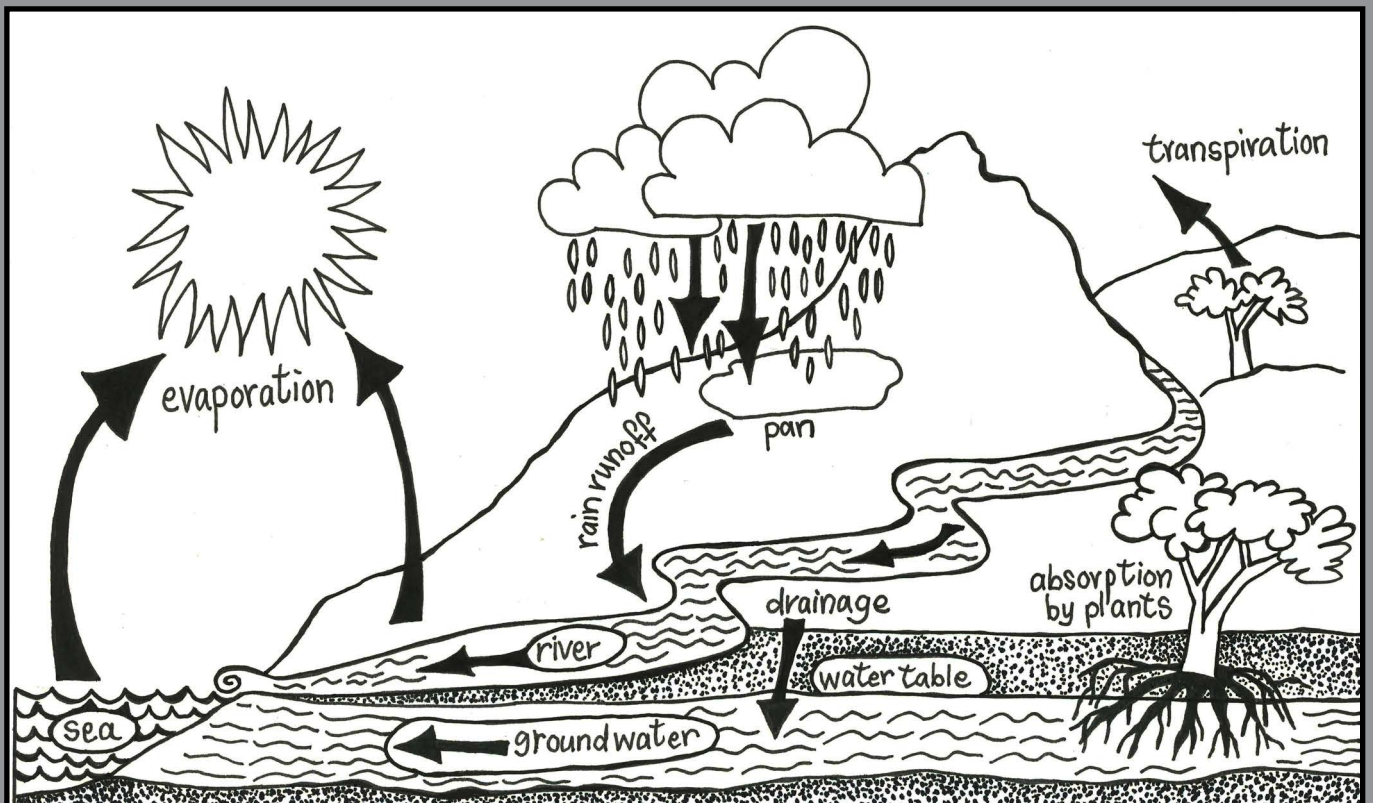
Cheetahs have adapted to living in hot and dry environments. If cheetahs get enough water from the food they eat, they can live without drinking. People are not like cheetahs, we can live several weeks without food, but only a few days without water.



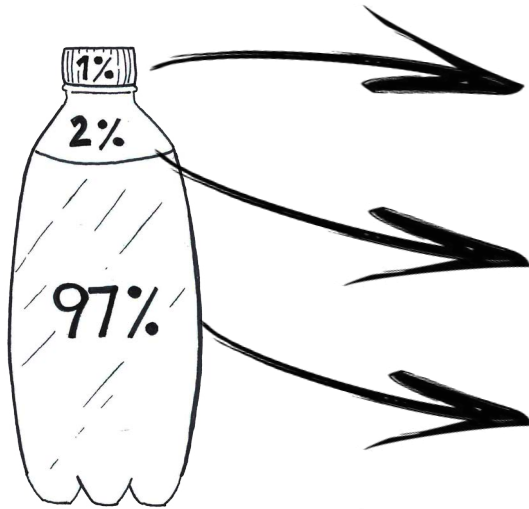

## WHERE DOES WATER COME FROM?

Like you, water is always moving and changing. The sun and wind work together to change water in the sea, rivers and dams into vapour - this is called evaporation. This vapour rises into the atmosphere and turns into clouds, and then falls back to Earth as rain. Our water is always there. There is no new water being made, it is just evaporation and rain that goes round and round in a cycle - The Water Cycle.

So imagine, you could be drinking the same water that dinosaurs drank!



# WATER



1% of the water on the planet is there for us to use, and we have to share it with all the other living creatures.  
Do you think this is enough water for all of us?

2% of the water on the planet is in the polar icecaps, where penguins and polar bears live.

97% of the water on the planet is in the oceans.  
Can we drink this water? No! Sea water is too salty!

## RAIN IN BOTSWANA

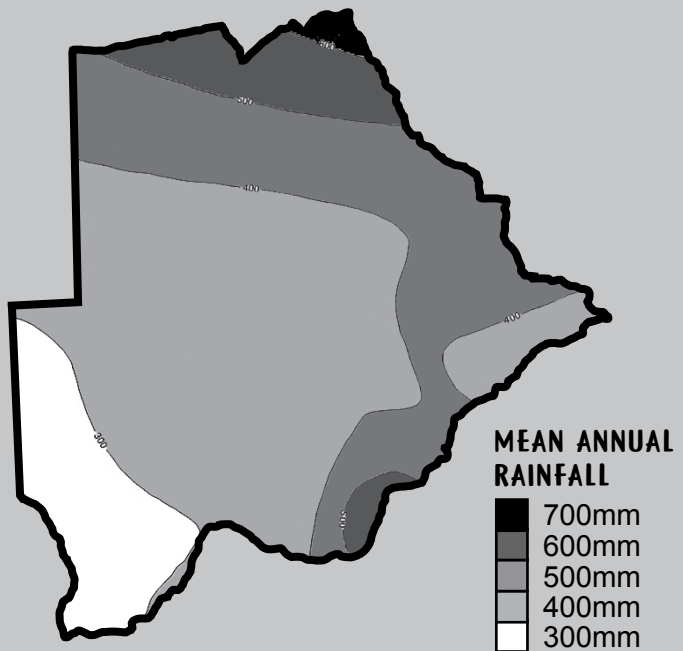
Some countries get more rain than others. Also, the rain inside one country does not always fall evenly. Think about Botswana — are some areas drier than others?

Which part of Botswana gets the most rain?

---

Which part of Botswana gets the least rain?

---



## SAVE OUR WATER!

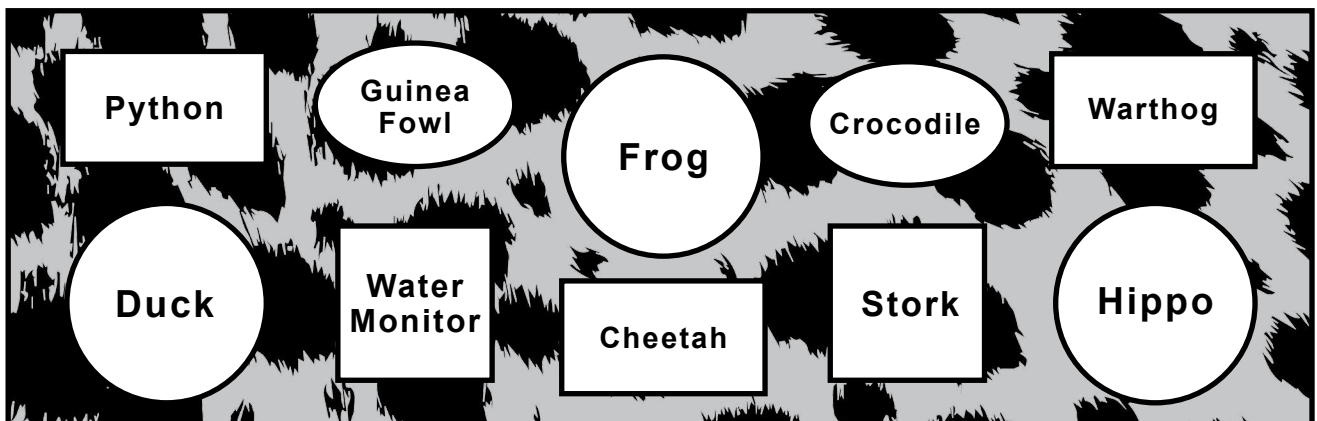
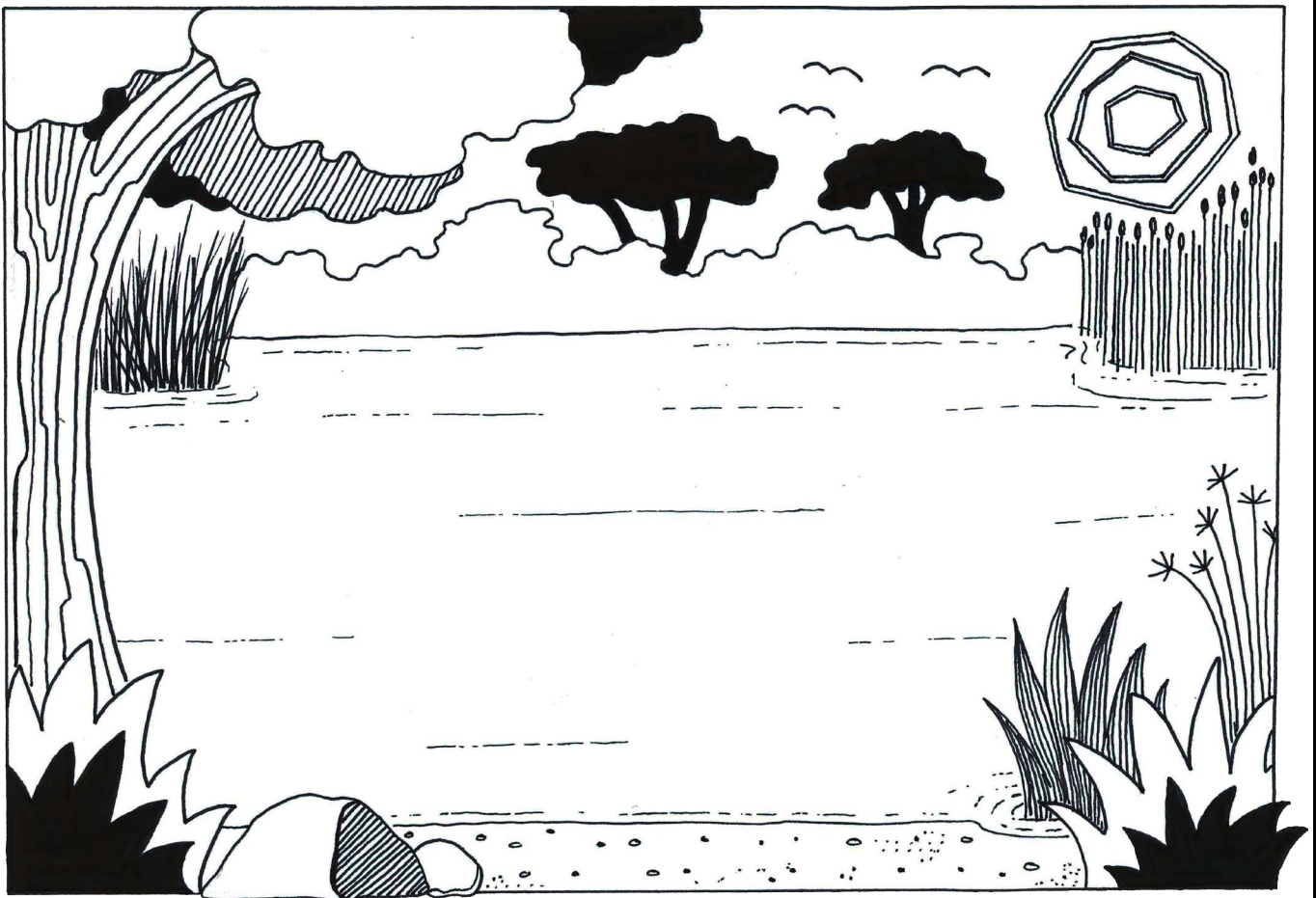
Turn off your taps properly and report burst pipes to the council.

# WATER-LIVING CREATURES

Many creatures live in water all the time, and others only some of the time.

For each animal that lives some or all of the time in water, draw an arrow from it to the bottom edge of the river.

If you want to, you can draw the animals in or on top of the water and colour the whole picture in.



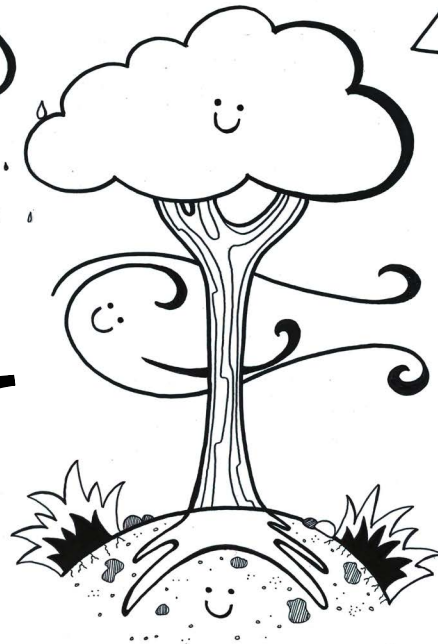
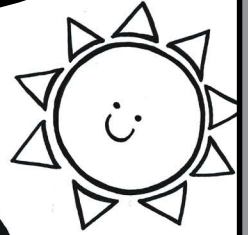
# PROTECTING THE ENVIRONMENT

## NON-LIVING THINGS

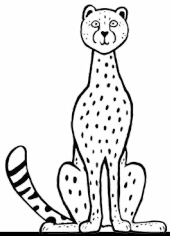
We find non-living things naturally in the environment, but they do not grow, they are not made of cells, they do not eat, they cannot make life (reproduce) and they do not need to adapt.

All living things need non-living things to survive.

Think of a tree.



Plants are a perfect example of how living things join together with the non-living things in their environment



## MAN-MADE THINGS



Man-made things are NOT found naturally in the environment. They are here because people make them



Some man-made things are good. They can help by keeping us and our environment healthy and safe. For example, machines that measure the weather help us to know when big storms are coming and houses give us a safe place to live.



Some man-made things can cause pollution and end up harming the environment and making us sick. We must all try to protect the environment.

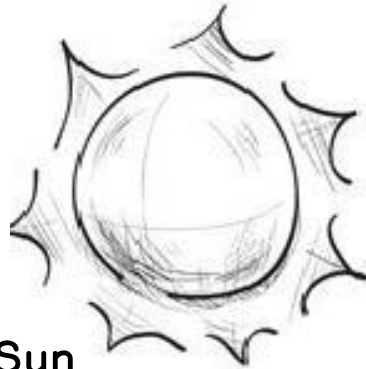
# WHAT IS WHAT?

Identify which of these pictures is **living, non-living or man-made**.  
Write your answer for each picture on the line underneath it.



Bee

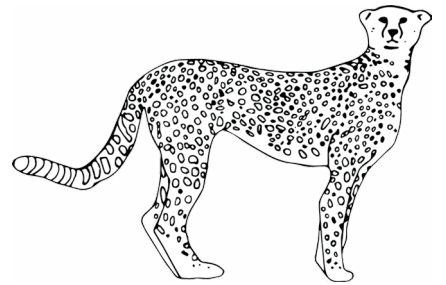
\_\_\_\_\_



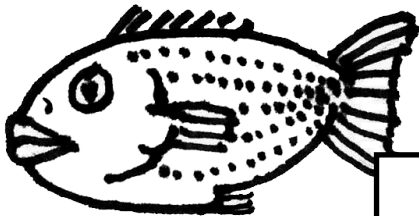
Sun

\_\_\_\_\_

Cheetah



\_\_\_\_\_



Fish

\_\_\_\_\_



Litter

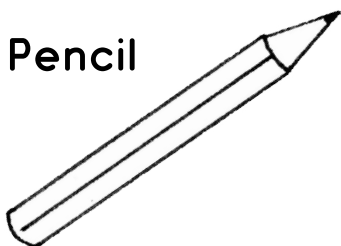
\_\_\_\_\_



Feather

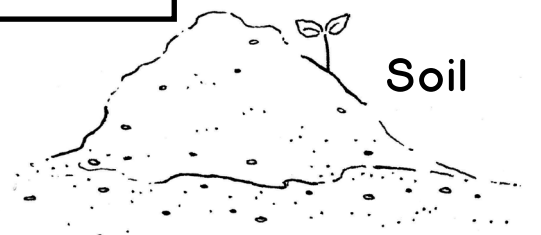
\_\_\_\_\_

Pencil



\_\_\_\_\_

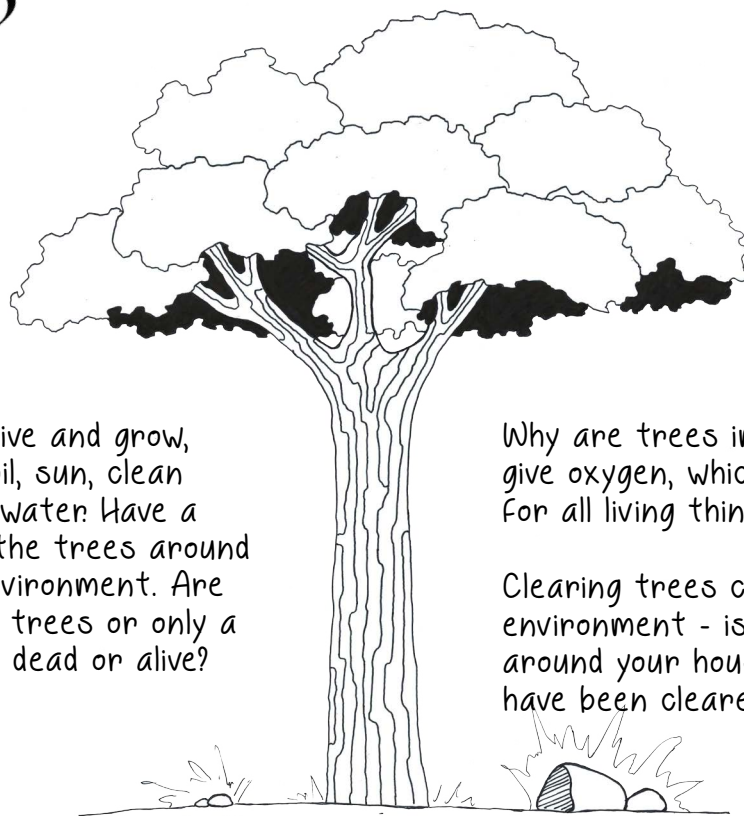
Soil



\_\_\_\_\_

# AIR

## TREES



To be able to live and grow, trees need soil, sun, clean air and clean water. Have a close look at the trees around you in your environment. Are there a lot of trees or only a few? Are they dead or alive?

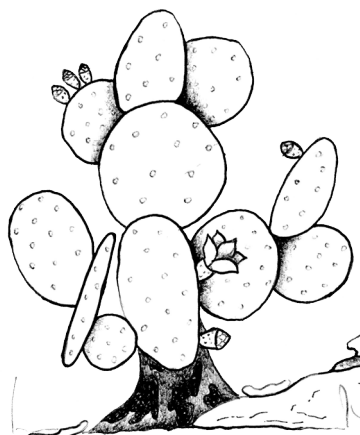
Why are trees important? Trees give oxygen, which is important for all living things to survive.

Clearing trees can be bad for the environment - is there anywhere around your house where trees have been cleared?

## ALIEN PLANTS

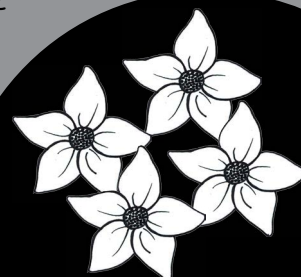
Many of the plants growing in our country do not belong here. They are called aliens because they have been brought here by people from other countries and continents. Plants that belong naturally in Botswana are called indigenous.

Imported trees and plants spread out in the natural environment where they take over growing space, water, food in the soil and sunlight from the indigenous plants. This makes it difficult for indigenous plants to grow in a healthy way.



Prickly pear is native to the Americas but is an alien plant in Africa.

If you want to grow more trees and plants at home or at school, choose plants that are indigenous! Also choose the indigenous trees and plants that have fruit in the summer to attract more birds and bees to the garden.





**LET US  
CELEBRATE  
CHEETAHS!**

**INTERNATIONAL CHEETAH DAY  
4TH DECEMBER**

Every year on **December 4th** the entire world celebrates International Cheetah Day. This is a day where we can celebrate cheetahs and make our best efforts to teach others about how they need our help to survive. It's everyone's job to protect the environment!

**ACTIVITIES YOU CAN DO  
WITH YOUR CLASS AT SCHOOL**

- Use this book to make cheetah masks
- Use this book to have a colouring competition
- Use this book to have a cheetah drawing competition
  - Short story competition
  - Essay competition about cheetahs
- Running races - who is as fast as a cheetah?



**HOW YOU CAN HELP CHEETAHS**



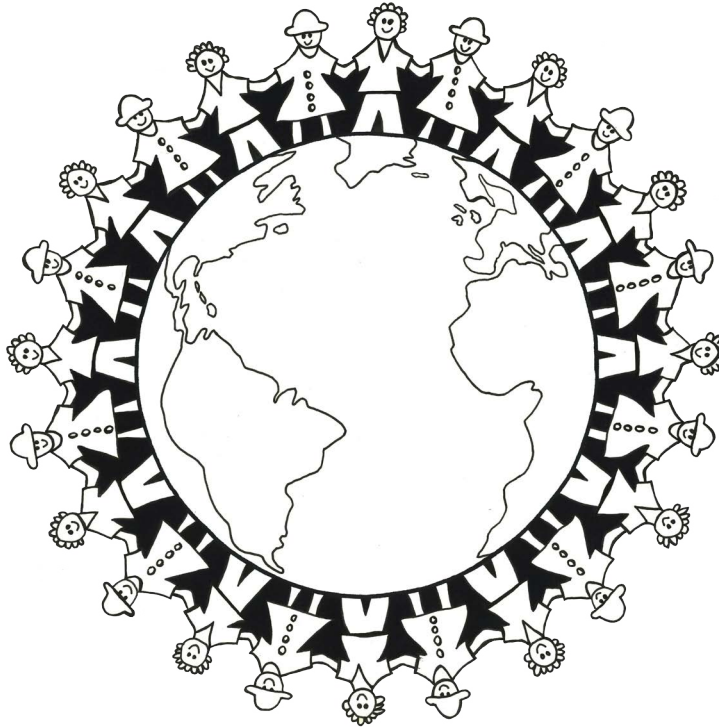
You can help cheetahs by

- **protecting your environment** (conserve water, don't litter, recycle)
- **tell your families and friends** how they can protect cheetahs (how to protect their livestock)
- **help others to understand about cheetahs** and how to look after the environment
  - **organise cheetah activities at your school**



# TIME TO ADAPT

THERE ARE 7,700,000,000 PEOPLE ON EARTH!



SO, HOW DO WE ALL GET WHAT WE NEED TO BE HAPPY AND HEALTHY? WE ADAPT!



## YOU CAN TEACH OTHERS

Remember, all living things change and adapt to their environment. Even though you are still in school, you can help people in your environment by teaching them all the important things you have learnt here today.

Write one or two things that you think are important to teach others about each of the following:

Cheetahs

Plants

Litter

Water

Your favourite thing that you have learnt about today

# LITTER

Litter is man-made rubbish that has been dumped or left in a place where it does not belong.

Like it is with people, not everything that animals eat is good for them. Sometimes, they accidentally eat litter that people have left behind in the environment.

Animals can also get stuck in plastic or metal containers, and get tangled up in plastic wrapping, plastic shopping bags and string. For example, when women are finished with the weaves in their hair, they are often discarded as litter. Wherever they land, animals can get tangled in them or can accidentally swallow them.

Other litter, like cigarette butts and old batteries, release chemicals which are poisonous for the soil as well as all the insects and beetles that live on or in the ground. These chemicals can also poison the water that humans and animals drink and can make us sick.



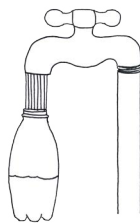
It is important to throw your rubbish in the bin, but you can also do the following to minimise your waste.



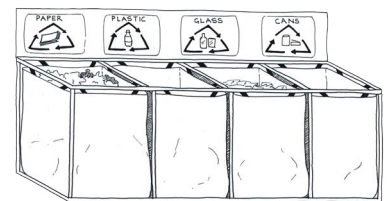
## REDUCE



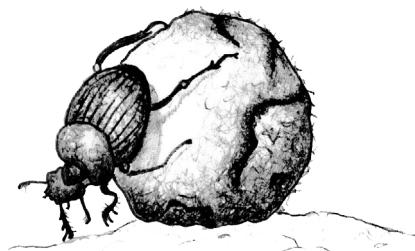
## REUSE



## RECYCLE



**NATURE IS FULL OF RE-USERS. CAN YOU THINK OF ANY OTHERS?**




---

---

---

---

---

---

---

---

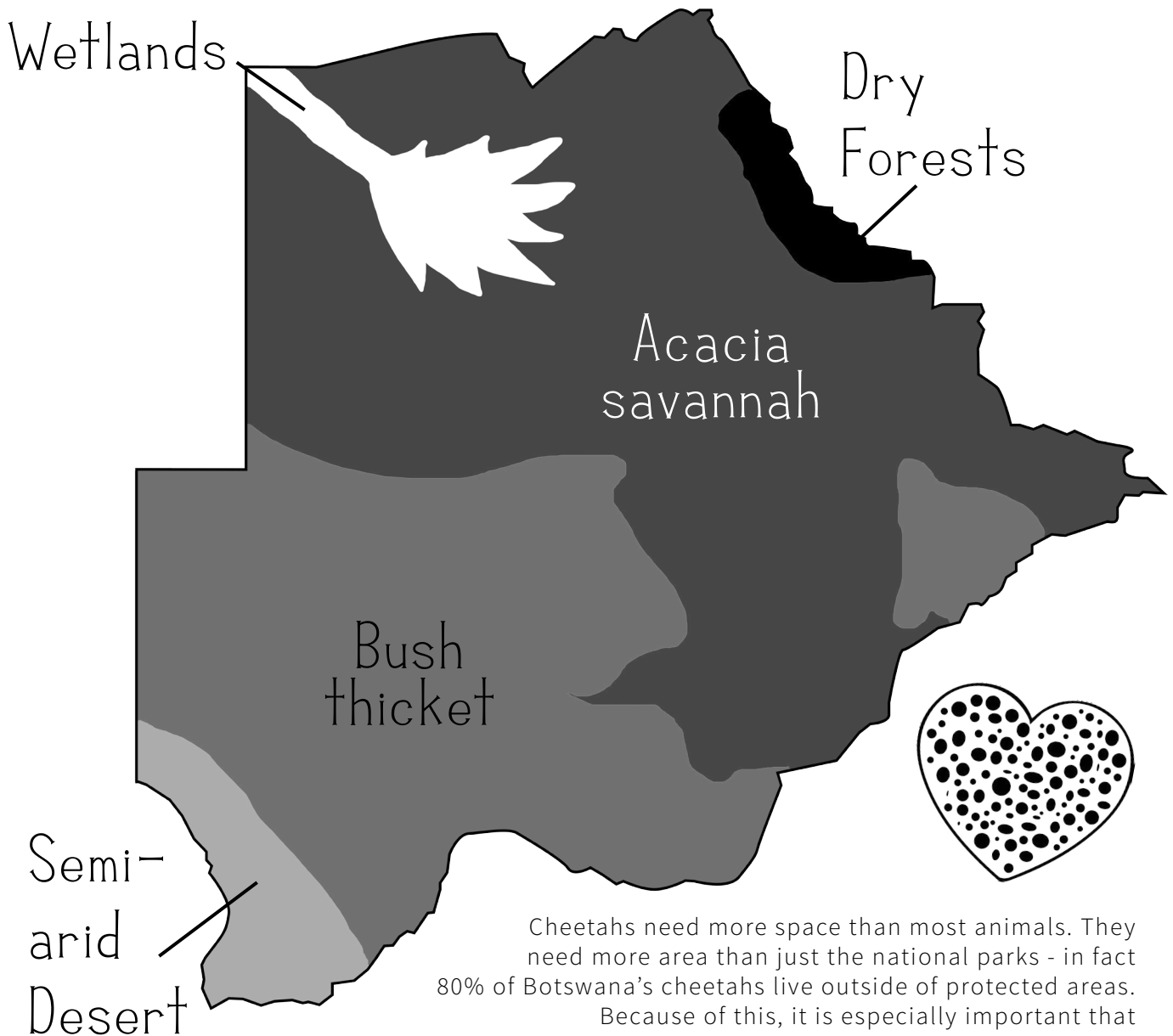
---

---



ALL LIVING CREATURES NEED SPACE TO LIVE. WHEN HUMANS SHARE THEIR SPACE WITH PLANTS AND ANIMALS, ALL OF US CAN LIVE TOGETHER - THIS IS CALLED COEXISTENCE

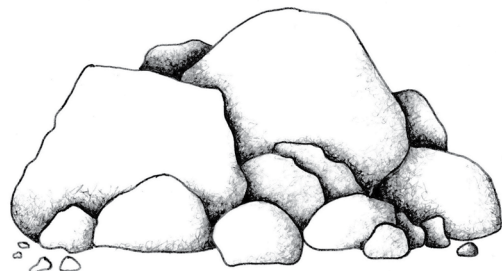
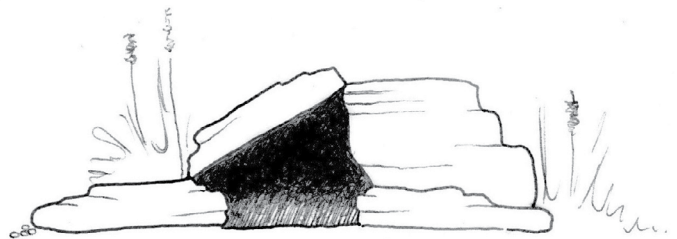
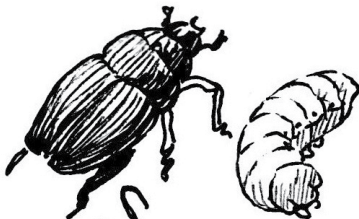
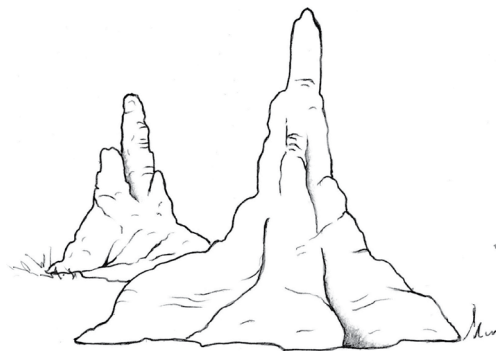
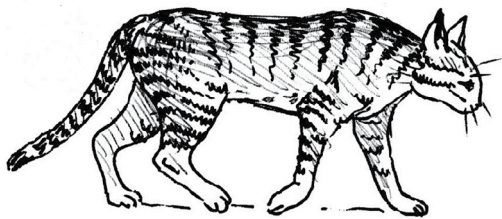
## KEY HABITAT TYPES IN BOTSWANA



# SHELTER



ALL LIVING CREATURES NEED A SHELTER TO KEEP THEM SAFE FROM WEATHER AND DANGERS.  
CONNECT EACH OF THEM TO THEIR SHELTER.



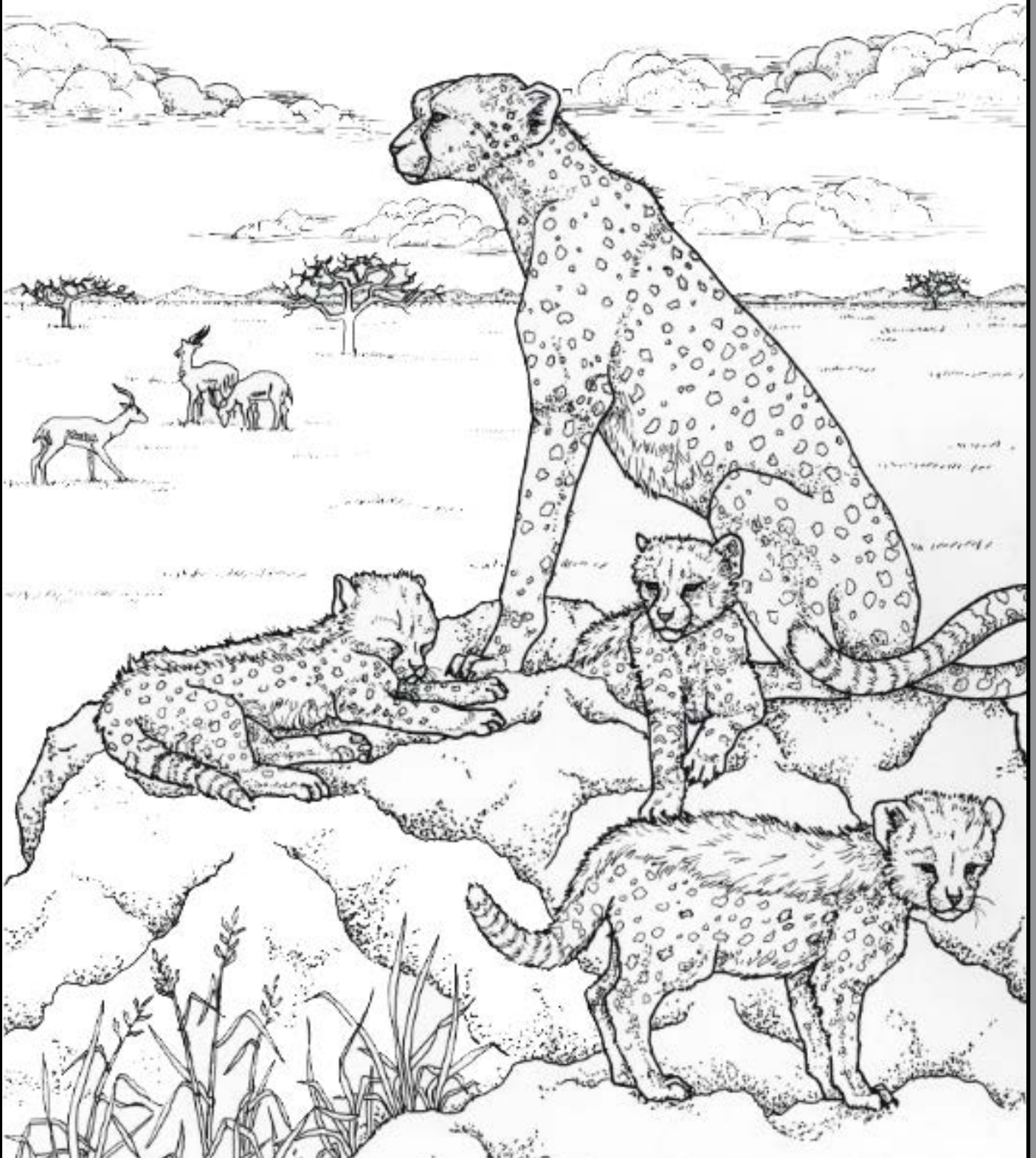
Answers: African wild cat + cave; Scorpion+rocks; Beetles and bugs + log; Termites+termite mound

# FUN THINGS

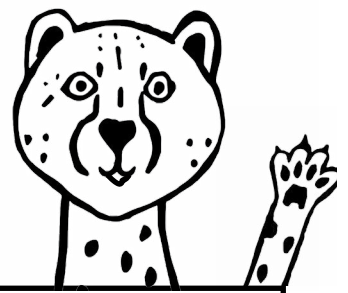
to do at  
home 



## COLOURING IN



# WASTE WATCH WORD SEARCH



ANIMALS  
BALLOONS  
BUBBLEGUM  
CAN  
CIGARETTE BUTT

ENVIRONMENT  
GLASS  
LITTER  
PAPER  
PLASTIC

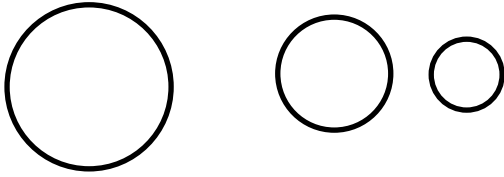
POISON  
POLLUTION  
RECYCLE  
REDUCE  
REUSE

RUBBISH  
SUSTAINABLE  
WILDLIFE



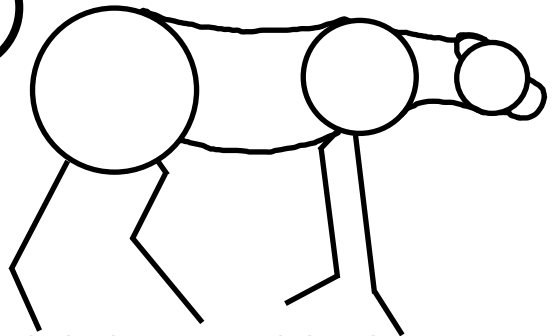
# LEARN HOW TO DRAW A CHEETAH!

1



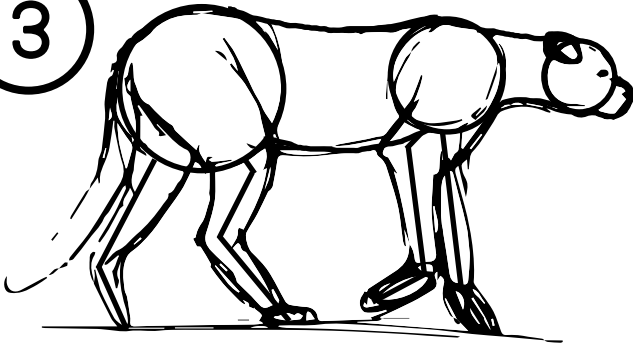
First, draw these basic shapes. Remember to do them softly in pencil so you can erase them later.

2



Now let's draw around the shapes to get the outline of a cheetah. Take your time - there is no need to rush!

3



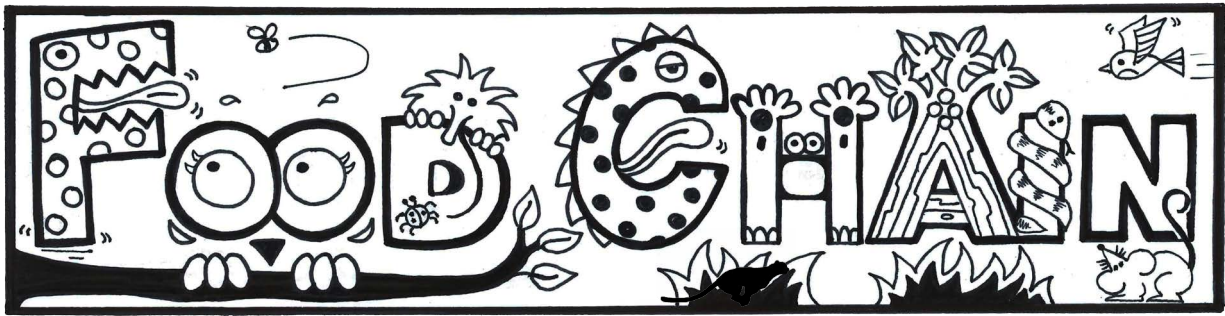
Let's fill in the details.

4



Don't forget the spots and tearmarks! Well done, you've drawn a cheetah!

Try it yourself here!



Where do you get energy from? In nature, it works the same way. A **food chain** is the order in which living things eat one another, and this keeps energy flowing in nature.

**Create this food chain by drawing arrows in the correct order that these creatures eat each other.**



**Build some food chains in the picture below. Write each food chain you find on the lines next to the drawing.**




---

---

---

---

---

---

---

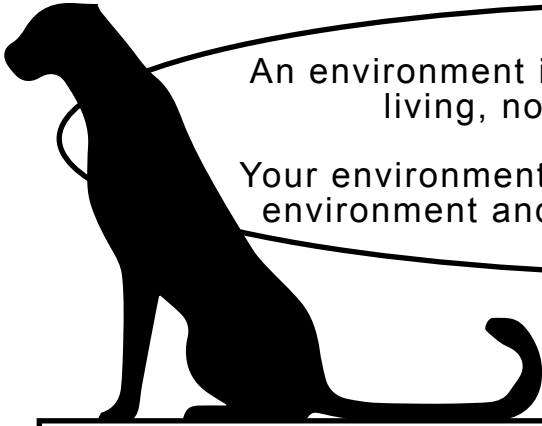
---

---

---



# DRAW YOUR ENVIRONMENT



An environment is everything around us. It includes all living, non-living and man-made things.

Your environment can be the school environment, home environment and, of course, the natural environment.

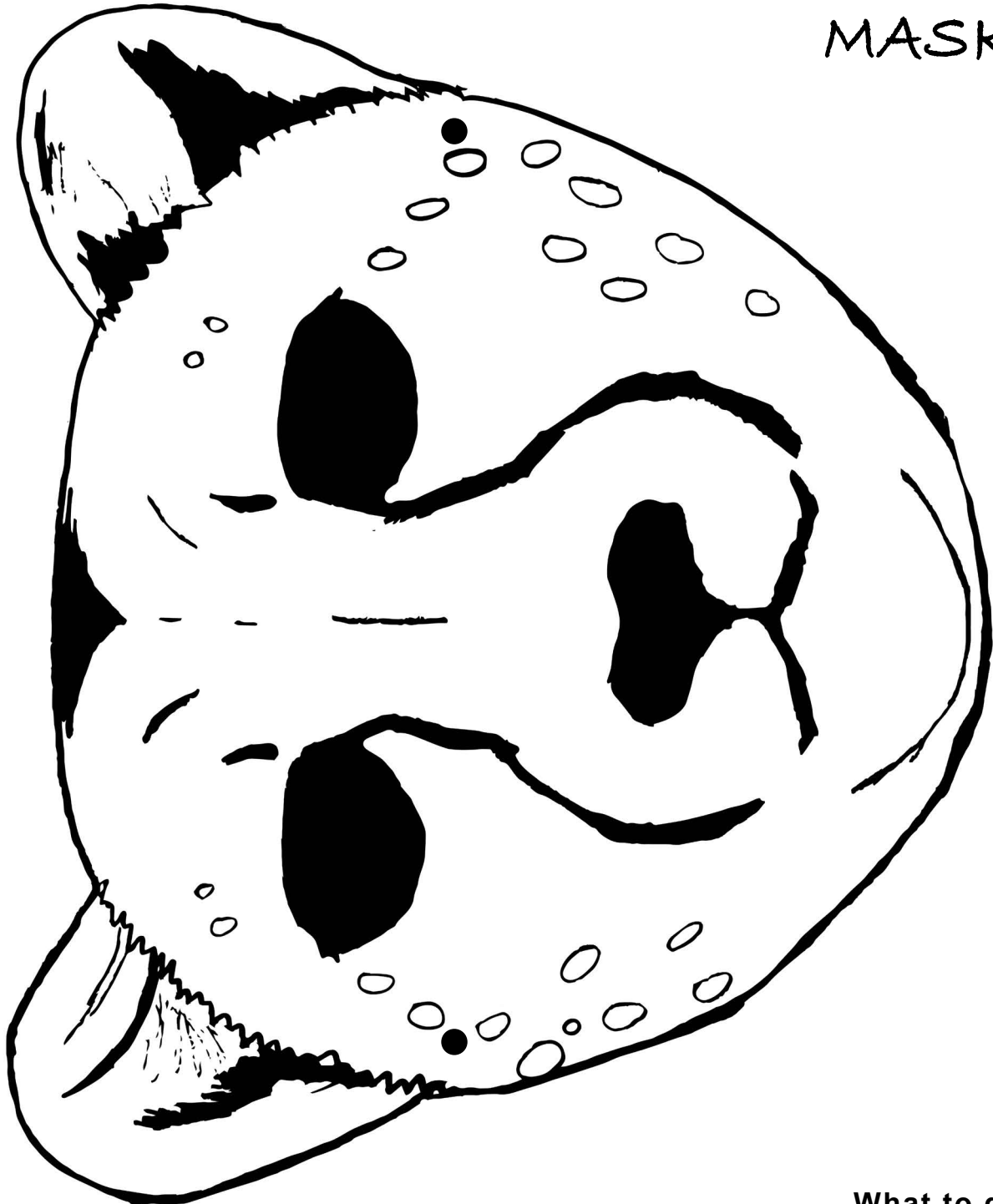
**Tip:**

Try to use all of your senses to notice what is around you.

A large, empty rectangular box with a black border, intended for drawing the student's environment. It occupies the majority of the lower half of the page.

# BE A CHEETAH FOR A DAY

## MAKE A CHEETAH MASK



### What you will need:

- a pair of scissors
- thin elastic or string
- crayons or colouring pens
- a grown up

### What to do:

- colour in the cheetah
- make holes through the small black circles in the cheeks. Do not forget to cut out the black parts for the eyes.
- Attach the elastic to the holes
- Put the mask on. Now you're a cheetah!

**Finish**



CHEETAHS  
CROSSING...  
MISS  
A TURN



YOU NIBBLED  
SOME POISON!  
MISS  
A TURN



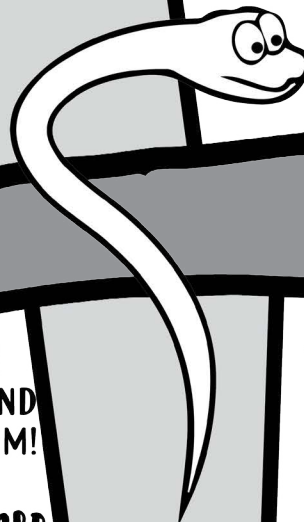
GO  
FORWARD  
2 SPACES

YOU SPOT  
A CHEETAH IN  
THE BUSHES  
ROLL AGAIN



THERE'S A  
DROUGHT  
AND YOU'RE  
THIRSTY  
MISS A  
TURN

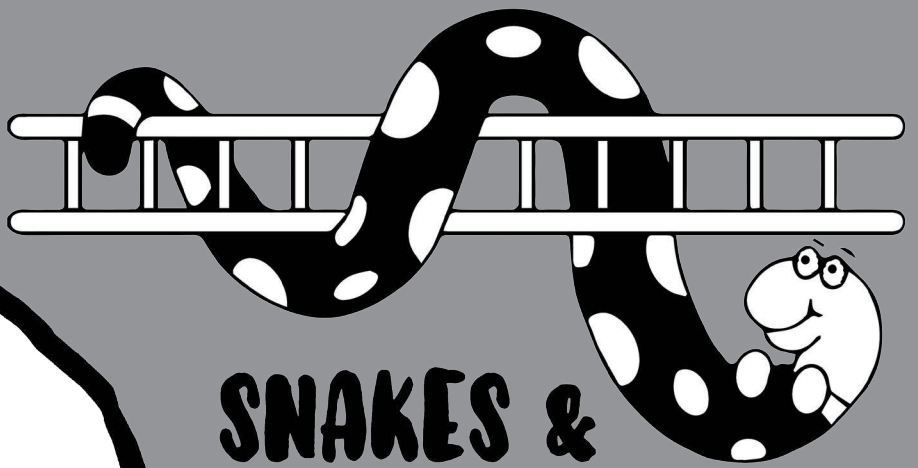
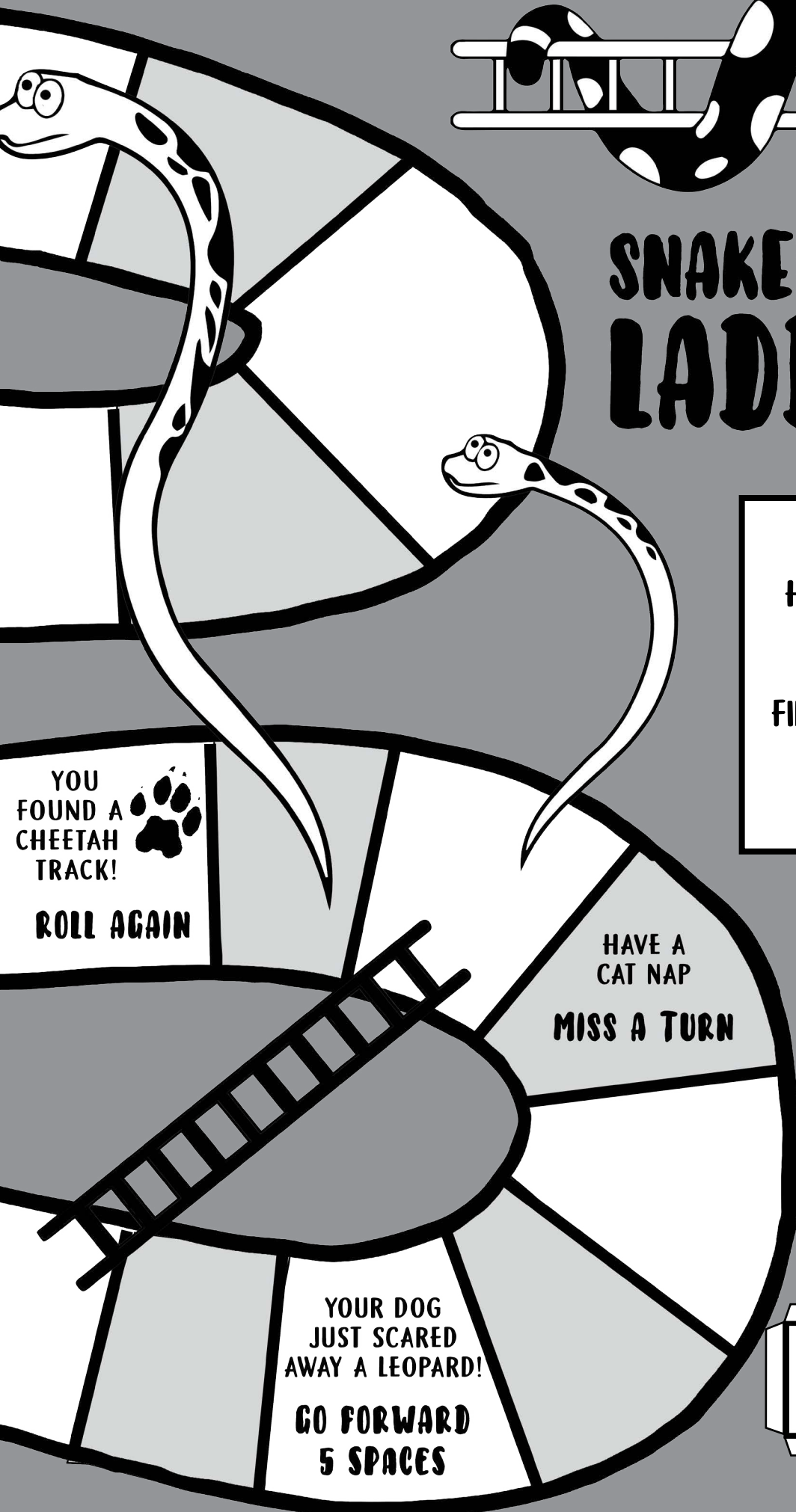
YOU'VE  
BEEN CAUGHT  
IN A SNARE!  
MISS 2 TURNS



CHIRP!  
YOU FOUND  
YOUR MUM!  
GO  
FORWARD  
3 SPACES

YOU HEAR  
CHEETAH  
PURRING  
ROLL  
AGAIN

**Start**



# SNAKES & LADDERS

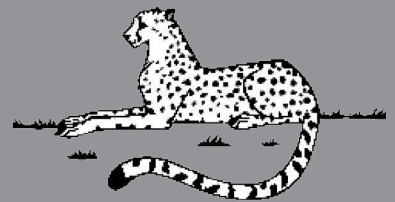
**FIND A COUNTER.  
HIGHEST ROLL STARTS.  
TAKE TURNS.**

**FIRST PERSON TO REACH  
THE HEAD OF THE  
SNAKE WINS!**

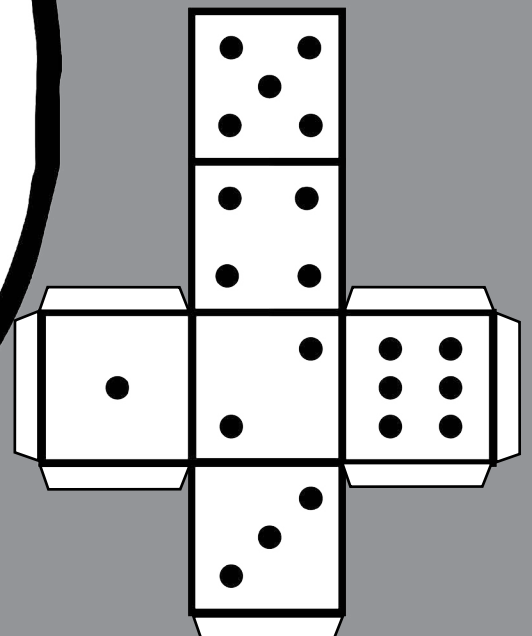
**YOU  
FOUND A  
CHEETAH  
TRACK!  
ROLL AGAIN**



**HAVE A  
CAT NAP  
MISS A TURN**

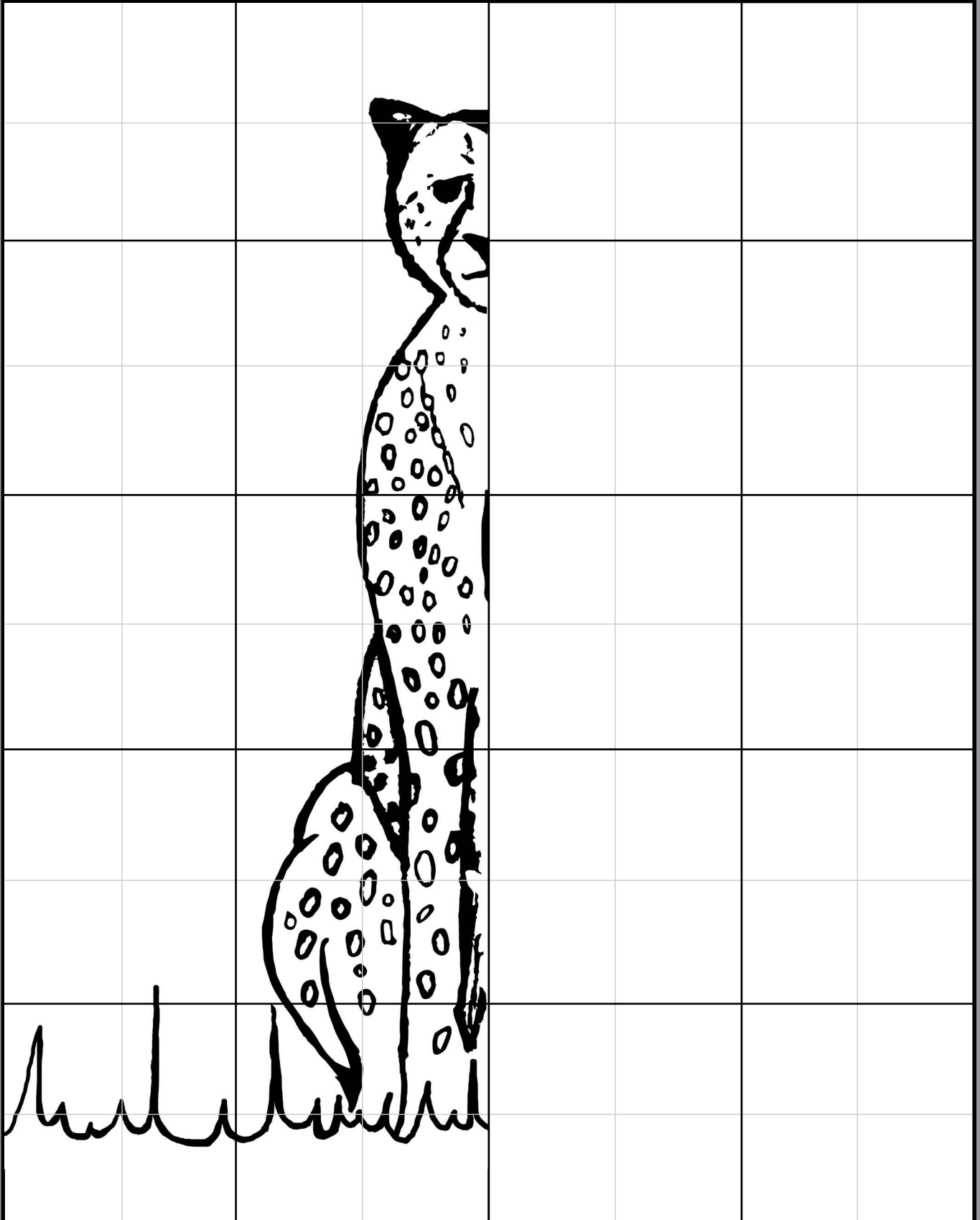


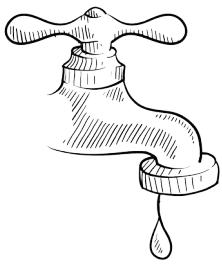
**YOUR DOG  
JUST SCARED  
AWAY A LEOPARD!  
GO FORWARD  
5 SPACES**



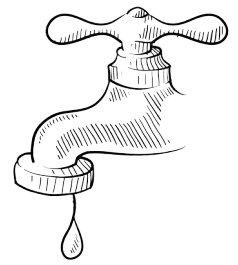
# FOLLOW MY LEAD

Draw the other side of the cheetah by copying what you see on the left, and then colour it in.





# WATER CONSERVATION MATHS



## TRY THIS AT HOME

If a leaking tap loses 50 millimetres (mm) of water a minute, how much water will be wasted in:

1 Hour? \_\_\_\_\_

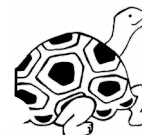
1 Day? \_\_\_\_\_

**Hint:** There are 60 minutes in an hour

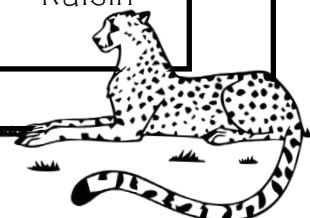
**Hint:** There are 24 hours in a day

## WATER PUZZLE

All animals and plants need water to live and grow. Fill in the open spaces with names of wild animals and fruit and vegetables beginning with each letter in the word WATER. Three have been filled in for you already.



	W	A	T	E	R
Wild Animals		Aardvark			
Fruit or Vegetables				Eggplant	Raisin



# INQUIZITIVE CHEETAH



How much have you learnt about cheetahs during this bush camp? Test your knowledge with this quiz.

1. Cheetahs are

- a) Important
- b) Ugly
- c) Slow

2. Who's job is it to protect the environment?

- a) The Government
- b) Adults
- c) Everyone

3. Which are scavengers:

- a) Cheetahs
- b) Vultures
- c) Kudus

4. What is an ecosystem?

- a) A cheetah disease
- b) A recycling plant
- c) A place where living and non living things live together

5. What do we need to survive

- a) Sweets, lollies and pizza
- b) Food, water, shelter, space and clean air
- c) TV, radio and computers

6. According to the IUCN Cheetahs are listed as

- a) Least Concern
- b) Vulnerable
- c) Endangered

7. The biggest threat to cheetahs is

- a) Pollution
- b) Lack of water to drink
- c) Conflict with people




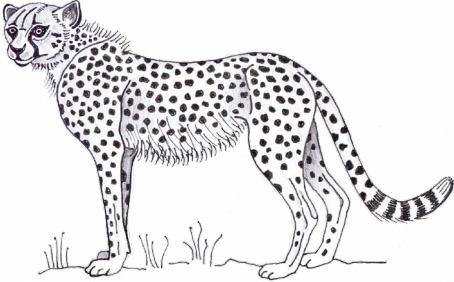
8. What tools can we use to coexist with cheetahs




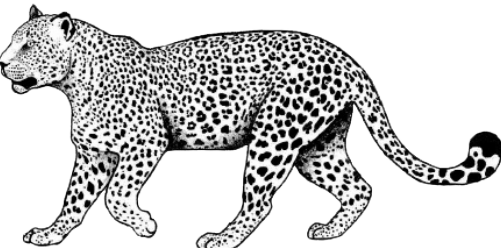
- a) Livestock guarding dogs
- b) Guns
- c) Botho




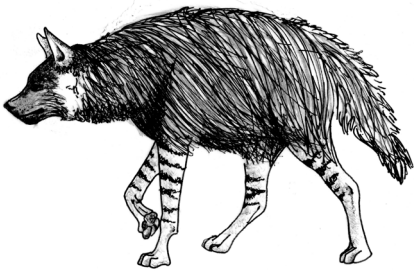


# FIELD GUIDE

Here you will find detailed information about some of the species we have in the bush surrounding our Education Centre. How many can you see or find tracks and signs of?

<p><b>CHEETAH (LETOTSE)</b></p>		<p><i>Acinonyx jubatus</i> <b>CARNIVORE</b> - Small and medium-sized antelope (steenbok, duiker, kudu, springbok, impala), and medium and large birds.</p>
<p>10cm</p> 	 <p>2-3cm segments</p>	

<p><b>LEOPARD (NKWE)</b></p>		<p><i>Panthera pardus</i> <b>CARNIVORE</b> - Insects, rodents, birds and medium-sized antelope (steenbok, duiker, kudu, springbok, impala).</p>
<p>7-9cm</p> 	 <p>2-3cm segments</p>	

<p><b>BROWN HYAENA (PHIRI YO MOROKWA)</b></p>		<p><i>Hyaena brunnea</i> <b>OMNIVORE</b> - Insects (termites), birds, rodents and fruit. Like vultures, they are also <u>scavengers</u> - 85% of their diet is made up of <u>carrion</u> - meat from dead animals.</p>
<p>8.5cm</p> 	 <p>2-3cm segments (white in colour)</p>	



**BLACK-BACKED JACKAL (PHOKOJE)**

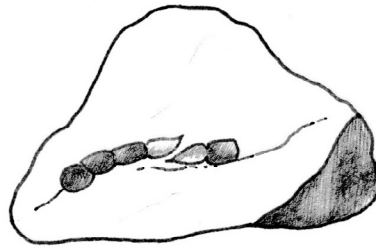


*Canis mesomelas*

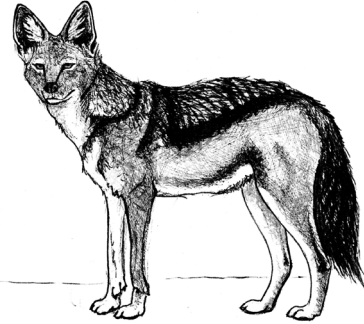
**OMNIVORE** - Young antelope, rodents, birds, reptiles and insects, as well as wild fruit and berries. They also scavenge carrion (meat from dead animals).



4cm



1.5 - 2cm segments



**AFRICAN WILD CAT (PHAGE)**



*Felis silvestris*

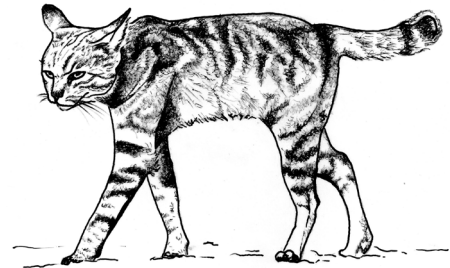
**CARNIVORE** - Rodents, small mammals, birds, reptiles, amphibians and insects.



3.5cm



1.2 - 1.5cm segments (buried)



**WARTHOG (MANTHINTHINYANE)**



*Phacochoerus africanus*

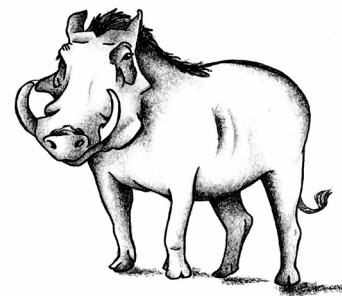
**HERBIVORE** - Short grasses (grazer), roots and Kalahari truffles.



4.5cm



5cm segments



**PORCUPINE (NOKO)**



*Hystrix africaeaustralis*

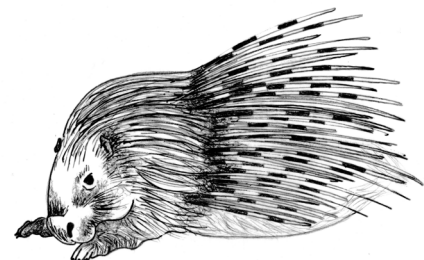
**HERBIVORE** - Roots, bulbs and bark, and they have been recorded to eat meat from dead animals.



7 - 8cm



4 - 7cm segments reddish in colour



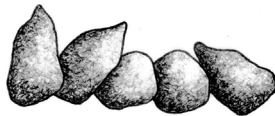
**KUDU  
(THOLO)**



*Tragelaphus strepsiceros*  
**HERBIVORE** - Trees and bushes (browsers)



6.5cm



2cm segments



**GUINEA FOWL  
(KGAKA)**



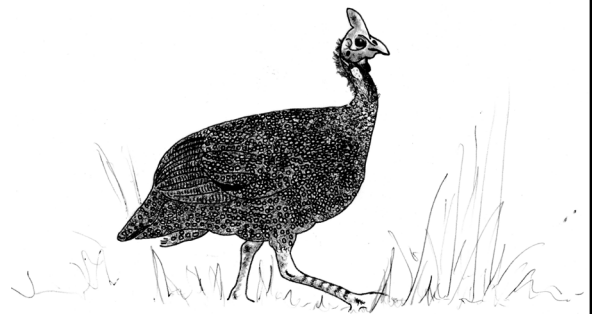
*Numida meleagris*  
**OMNIVORE** - Seeds, fruits, green leaves, snails, spiders, worms, insects, frogs, lizards, small snakes and small mammals.



8cm



2 - 3cm tubes



**SPRINGBOK  
(TSHEPE)**



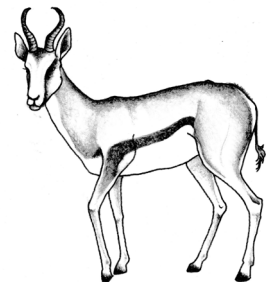
*Antidorcas marsupialis*  
**HERBIVORE** - Grazers (grass) and browsers (trees), but will also dig for roots and bulbs.



5.4cm



1.2cm pellets



**ELAND  
(PHOFU)**



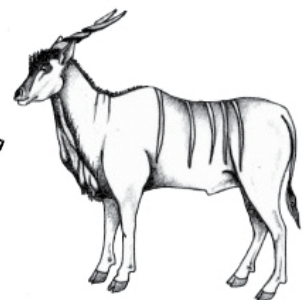
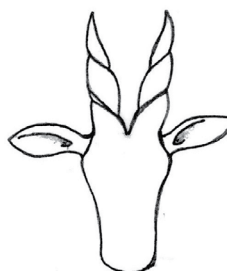
*Tragelaphus oryx*  
**HERBIVORE** - Grazers and browsers (trees and grass), and also digs for bulbs and eats fruit.



10cm

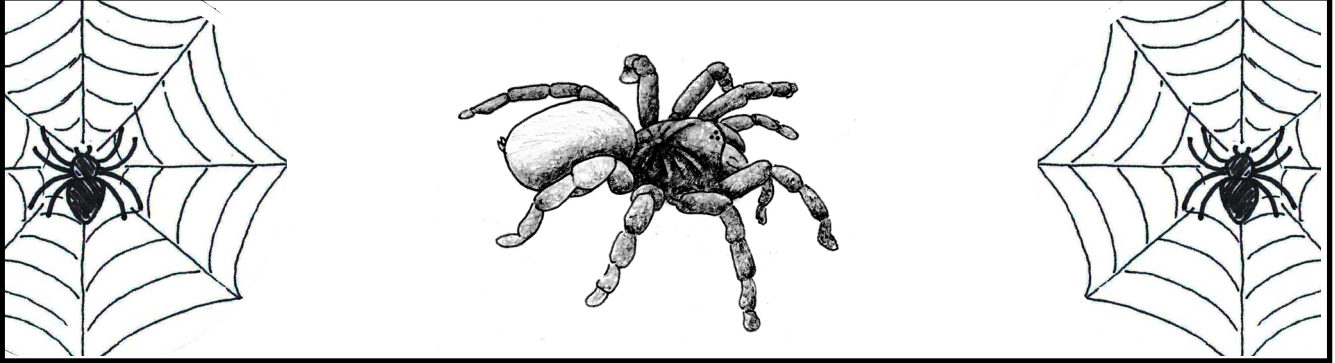


2.5cm pellets



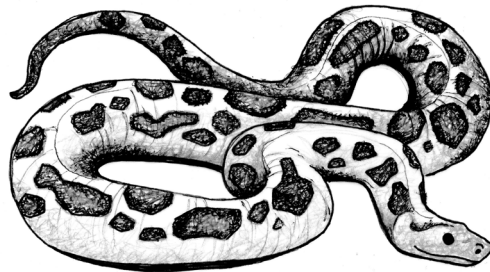
## SPIDERS (SEGOKGO)

They are **PREDATORS** that eat insects. Some dig holes and others spin webs in the trees or between rocks and grass on the ground. Some are big and some are small.



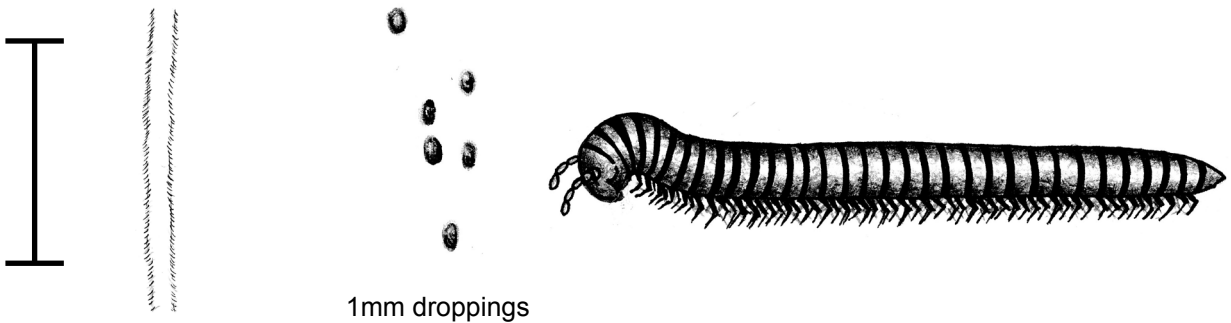
## SNAKES (NOGA)

They are **PREDATORS** that eat small animals rodents and birds, as well as other snakes. Some dig holes, some hide in caves and others camouflage themselves in the long grass or against rocks.



## GIANT MILLIPEDE (SEBOKOLODI)

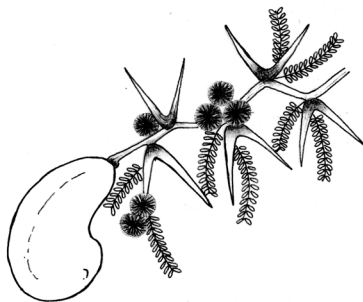
*Phacochoerus africanus*  
**HERBIVORE** - Short grasses (grazer), roots and Kalahari truffles.



1mm droppings

## CAMEL THORN TREE (MOGOTLHO)

*Vachellia (Acacia) erioloba*



Their thorns are mostly white, but brownish on the tip. The base of the thorn is thick. Their branches grow in a zig-zag. The fruit (pods) is grey and shaped like an ear. We use the wood for fuel (cooking). We can eat the sticky yellow gum and the bark and pods are used as medicine. Animals love to eat the sweet-tasting pods.

# GLOSSARY

**Adaptations** refer to ways in which people or animals adapt (change) to changing circumstances or environments. Like giraffes evolving long necks to reach the tallest trees.

**Atmosphere** is the layer of gas that surrounds the Earth. It is often called air, and is made up of many gases like oxygen, nitrogen, carbon dioxide, argon and water vapour.

**Biodiversity** refers to the variety and different types of life on earth. Biodiversity is essential to maintain balance in the ecosystem.

**Carbon dioxide** is a colourless gas that is important for life on Earth.

**Carnivores** are animals that only eat meat.

**Carrion** is meat from animals that are already dead. Animals that eat carrion are called scavengers.

**Climate** describes the weather in a certain area over a long time. For example, the Kalahari usually has a hot and wet summer and a dry and cold winter season.

**Climate Change** is the change in climate patterns and is caused by increased levels of carbon dioxide in the atmosphere from the use of fossil fuels and other human activities.

**Coexistence** when two things live peacefully side by side. For example, when cheetahs and farmers live together on farmlands with minimal conflict it is referred to as coexistence.

**Crepuscular** are animals that are active at dawn and dusk - like cheetahs.

**Diurnal** are animals that are active at any point in the daytime - like cheetahs.

**Droughts** are very long periods with less than normal rainfall.

**Ecosystems** are all the living plants, animals and other creatures and the non-living things that interact with each other in a particular environment.

**Endangered** plants, insects and animals are in danger of disappearing forever.

**Environment** is everything around us. It includes living, non-living and man-made things.

**Evaporation** happens in the water cycle, when water in rivers, pans, dams and the ocean is heated up by the sun and turns into gas (vapour) in the atmosphere.



**Extinct** is when certain plants, insects or animals no longer exist on Planet Earth.

**Flora and Fauna** are the plants (flora) and animals (fauna) that live in an area.

**Food chain** is the order in which living things eat one another, and it is the flow of energy from one level to the next in an ecosystem.

**Habitat** is the environment in which a plant, insect or animal lives.

**Habitat loss** is when the homes of animals are destroyed. This can be a natural or unnatural process, but it most often refers to humans moving into wild areas and pushing wildlife out.

**Herbivores** are animals that eat only plants.

**Human-wildlife conflict** is when people and wild animals have trouble living together. This can refer to when carnivores eat livestock or when herbivores eat crops on farms.

**Illegal Wildlife Trade** is when people steal wildlife to sell illegally on the black market. This refers to the illegal sale of alive or dead wild animals or parts like skins, claws, horns or tusks.

**Kalahari** is the name of the desert that stretches across Botswana and into Namibia. The first people of the Kalahari are known as the Kalahari San Bushmen.

**Livestock Guarding Dogs** are dogs that live with livestock and protect them from carnivores. Livestock Guarding Dogs are a great tool to minimise human-wildlife conflict.

**Nocturnal** are animals that are active at night - like leopards.

**Omnivores** are animals that eat both plants and meat.

**Pollution** is the introduction of harmful substances into the environment that can damage the environment and/or human health.

**Scavengers** are animals that eat carrion (dead animals). They play an important role in cleaning up the environment and helping stop the spread of diseases.

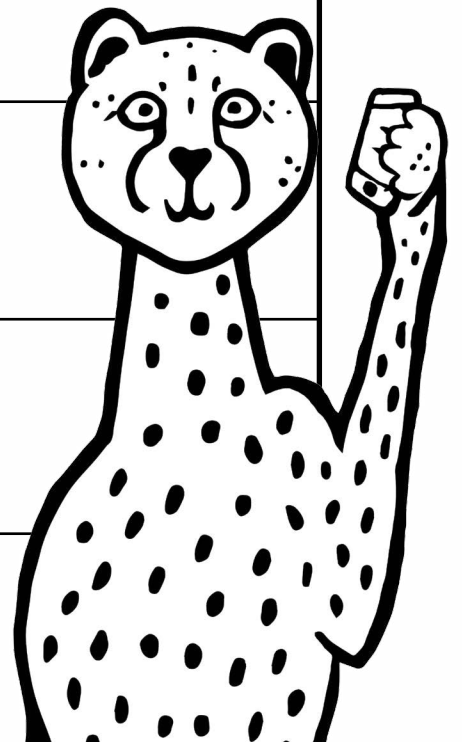
**Spoor** refers to the footprints or tracks of an animal or human. The Kalahari sands make it easy to follow spoor, which is called "spoor tracking" and the Bushmen are experts at this.

**Sustainable** is to look after our water, plants, soil, animals and air carefully, so that they stay healthy for future generations of people to also use.

**Weather** tells us what is happening in the atmosphere in a short time, like in one day. For example, whether it is sunny or cloudy, or hot or cold on a particular day.

# © USEFUL CONTACTS ©

<p><b>MINISTRY OF ENVIRONMENT, NATURAL RESOURCES, CONSERVATION AND TOURISM CALL CENTRE</b></p>	<p><b>0800 600 734</b>                  +267 391 4955                  +267 364 7900                  +267 364 7955</p>
<p><b>DEPARTMENT OF WILDLIFE AND NATIONAL PARKS HEAD OFFICE</b></p>	<p><b>+267 397 1405</b></p>
<p><b>POLICE HEAD OFFICE</b></p>	<p><b>+267 362 2000</b></p>
<p><b>RAPTORS BOTSWANA</b> (For raptor rescues)</p>	<p><b>+267 397 2855</b></p>
<p><b>RHINO CONSERVATION BOTSWANA</b> (To report poaching)</p>	<p><b>+267 680 1303</b></p>
<p><b>MOKOLODI NATURE RESERVE</b> (For wildlife rescues)</p>	<p><b>+267 316 1955</b>                  +267 316 1956                  +267 316 1542</p>
<p><b>CHEETAH CONSERVATION BOTSWANA</b> (For cheetah rescues and conflict reports)</p>	<p><b>Head office (Gaborone):</b> +267 350 0613                  info@cheetahconservationbotswana.org  <b>Field site (Ghanzi):</b> +267 651 1596                  pseele@cheetahconservationbotswana.org  <b>Northern office (Maun):</b> +267 7262 9703                  jhorgan@cheetahconservationbotswana.org</p>



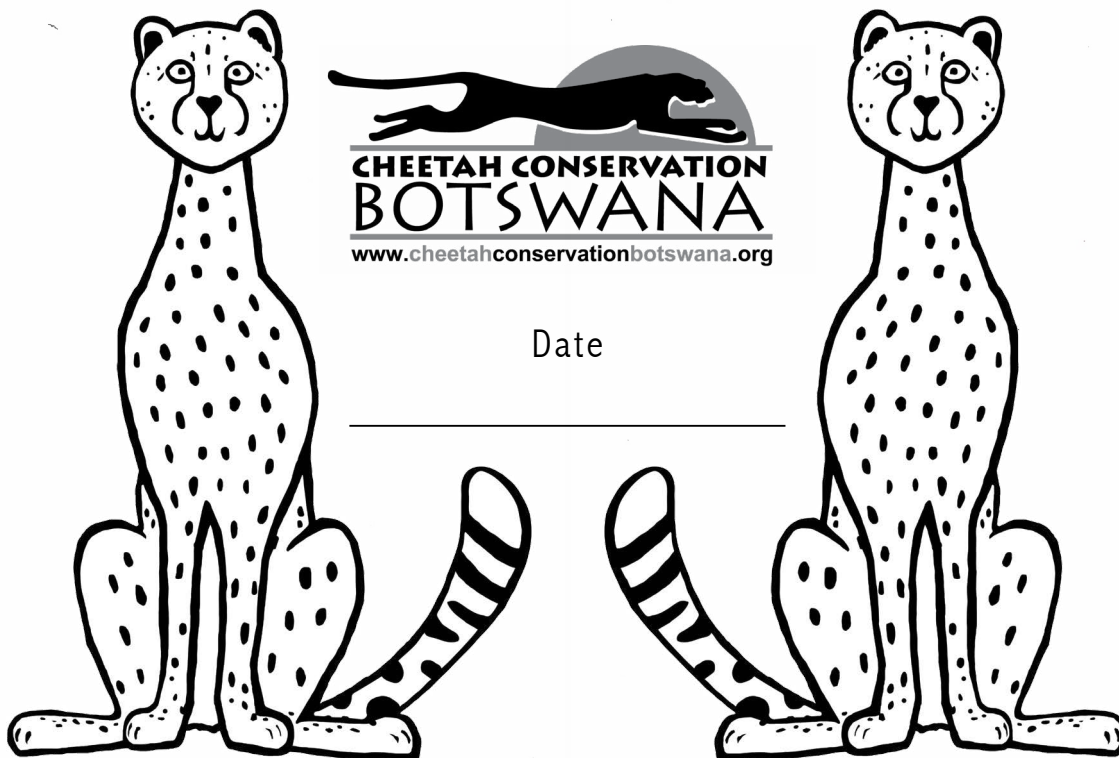
**CERTIFICATE  
OF  
PARTICIPATION**

**WELL DONE!!**

This certificate is awarded to

---

for the participation and completion of the  
**Cheetah Conservation Botswana**  
**Bush Camp Programme**





# FIELD NOTES



---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

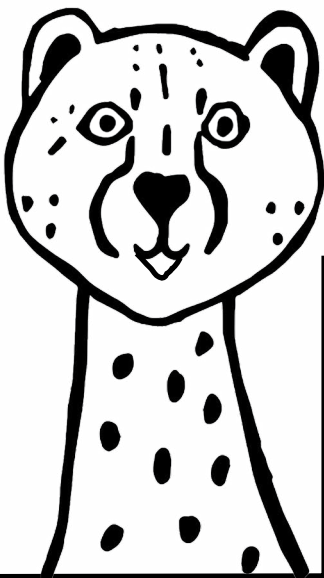
---

---

---

---

---



BYE-BYE!  
SEE YOU NEXT TIME!

