teacher resource pack:
key stages 1 & 2 / age 5 to 11 years
For millennia the lion has been a potent symbol for thousands of cultures throughout the world; a symbol of courage, of authority and of wisdom.

But this, the most iconic creature that has ever lived on our planet is in danger of losing its place as the King of Beasts.

Only with our collective pride there is still time to save the lion, to ensure the future of “the fiercest and most magnanimous of the four footed beasts” (Samuel Johnson’s Dictionary of the English Language, 1755).

The African Lion and Environmental Research Trust (ALERT) is dedicated to the facilitation and promotion of sound conservation and management plans for the African lion (*Panthera leo*), by means of a responsible development approach, and recognizing the species’ potential to provide substantial social, cultural, ecological and economic benefits.

The African lion: an ambassador promoting action to the benefit of all Africa’s people and wildlife.
introduction

The African Lion & Environmental Research Trust has collaborated with educational facilities worldwide to produce a series of teaching packs to aid classrooms across different age groups and curriculums.

We believe the iconic African lion captures the hearts and curiosity of all age groups; bringing Africa and its lions into the classroom can help create focus amongst students within a variety of subjects. We attempt to use African examples and case studies during lessons and activities to add variety to the curriculum and make learning more fun and exotic!

In this Teaching Pack for Key Stages 1&2 with children aged 5 – 11 years we have provided 6 topics with numerous activities and lesson plan ideas for teachers to pick and choose from. These topics may be used across the curriculum and are designed to meet all objectives and learning outcomes of Assessing Pupil Progress criteria.

For more information and to share your feedback about our teaching packs please contact Rae Kokes at: rae@lionalert.org

find your pride @ www.lionalert.org
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Africa is the 2nd largest continent in the world covering 30.2 million km².

It is home to over 1 billion people in 54 sovereign countries**; the highest population being in Nigeria.

Africa is surrounded by 3 different seas and oceans: the Mediterranean Sea to the North, the Indian Ocean to the east and the Atlantic Ocean to the west.

The highest point in Africa is Mount Kilimanjaro, found in Tanzania and reaching 5895m.

Africa contains the world’s largest hot desert; the Sahara in North Africa covers over 9 million km², almost a third of the land area of the continent.

Lake Victoria in East Africa is the largest lake on the continent and is one of the ‘Great African Lakes’ found along the ‘East African Rift’.

The 5 longest rivers in Africa are the Nile, the Congo, the Zambezi, the Orange and the Niger.

The Nile River is the longest river flowing for 6695km through 5 different African countries.

The African continent stretches across the northern and southern hemispheres. In the middle of the continent, separating the two hemispheres, is the equator. The equator is an area of the Earth closest to the sun because of Earth’s tilt. This means countries close to or on the equator in Africa are very hot all year round.

In southern and northern Africa though some countries are often only hot during the summer and become very cold in winter. Some African countries may even have snow for parts of the year.

** The United Nations does not recognize Western Sahara whilst the African Union does not yet recognize South Sudan; both organizations current list 53 countries.
Lesson plan

- **Introduction** – list all 7 continents on the classroom board alongside appropriate African related images (animals, people, landscapes, etc). Discuss the images with the class and ask them which continent they think the images are from and why (15mins)

- **Main** – go through geographical facts listed in this topic whilst children takes notes of the points they deem to be important (15mins)

- **Activity** – choose activity listed below (15-20mins)

- **Plenary** – go through the results of:
  Activity 1: ask children which African countries they have located,
  Activity 2: go through answers to fact sheet (10mins)

- **Homework** – ask children to take home ‘Countries of Africa’ worksheet to name and colour in 10 (or 10 more if used in class) countries on their maps.

**Activities**

1. Distribute a ‘Countries of Africa’ activity work sheet to each pupil. Using either an atlas or a globe ask the children to locate three African countries, colour in the appropriate country on their blank maps and name the countries they have chosen. (15mins)

2. Having encouraged the children to take notes of the pre-mentioned facts, distribute a ‘Facts of Africa’ worksheet to each pupil. (20mins)
Can you find, colour in and name three countries in Africa?
1. How many countries are there in Africa?

2. How many people live in Africa?

3. Name the largest desert in Africa.

4. Name 2 rivers in Africa.

5. Which is Africa’s biggest lake?

6. How big is Africa?

7. What is the highest point in Africa?
Topic two: what is like to live in Africa?
Background Information

Africa is home to hundreds of different tribes all over the continent. Some tribes are dated back to thousands of years ago and are some of the most ancient people in the world. Fossils found in Ethiopia are believed to be the oldest fossil record of modern humans (195,000 yrs old). These findings have suggested modern day man first appeared in Africa before spreading out and colonising the rest of the globe.

Many tribes vary greatly in culture and tradition in the North, South, East and West. It is estimated there are approximately 2000-3000 languages spoken upon the continent with even more dialects amongst these tribes. In South Africa alone there are 11 different languages spoken.

With a continental population of over 1 billion there is a lot inequality in some African countries, many people may live in poverty whilst others have great wealth.

The 10 poorest countries (based upon GDP in 2011) are all found within Africa where some live upon less than £1 a day. These issues are what we mostly see portrayed by the media in the Western world. It is important children understand what poverty may be like but also that not all those who live in Africa are poor!

To gather a perspective of the different types of livelihoods and lifestyles upon the continent we will look at the daily lives of 3 people living in different parts of Africa:

‘Chido’ is 5 years old and lives in Zimbabwe. She is from the Shona tribe.

‘Akida’ is a young Maasai warrior living in Tanzania.

‘Johann’ is a South African game ranger in the Kruger National Park.
Chido

Chido is a 5-year-old girl from the town of Gweru in Zimbabwe. She has 3 older sisters and 2 older brothers. They and her mother live in a small, one bedroom house 4km from town. Chido’s father passed away when she was a baby and now her mother has to provide for her and her five siblings alone.

Chido’s eldest brother, ‘Ticha’ is 15 and goes to school in town while Chido and the rest of the family have to work. Together they earn US$5 per week but Ticha’s school fees are US$2 per week. Chido must learn from a young age to help her family earn a weekly wage so that they may provide food for one another and perhaps one day afford to send Chido herself to school.

Everyday Chido wakes up at 5am to help her sisters prepare a breakfast of sadza porridge whilst her brothers collect firewood. After breakfast she and her sisters clean the house and then walk 1.5km to a water-tap and collect to heavy bucket each for washing, cooking and drinking. Meanwhile Ticha has begun his hour long walk to school and will not be home until after dark.

Chido’s 2nd brother ‘Clemence’ is unwell again and remains in bed for the day to rest. The medical clinic is a 2hr walk away and queues are often very long once there to see a doctor.

Once the sisters have returned with their water their mother washes their hair and dresses them for work. Most of Chido’s clothes are hand-me-downs from her older sisters and are too large for her but Chido enjoys pretending to be big girl.

Chido, her mother and her sisters head out at 7am as the sun begins to rise to start collecting scrap metal to sell. Many people will buy the pieces of metal from Chido’s mother but it is often hard to find large amounts. They walk 4km to the town of Gweru searching for metal along the way and then will sell pieces once they arrive there.

By 1pm, with the sun high in the sky, the temperatures are soaring and Chido, her mother and sisters take to the shade of some trees by the road leading to town. So far they have found very little metal to sell.

At 3pm the family reach town and head to a smelting factory where they often sell their scrap metal. They manage to sell their load for US 80 cents. With this money Chido’s mother is able to buy more sadza and some small vegetables from the supermarket before heading home.

At 6.30pm all the family are home and the girls begin to cook dinner for everyone. Clemence is feeling slightly better and sits outside with his family to eat under the stars. The family listen to Ticha gathered around a fire mother has built, as he tells them what he has learnt today in school. He gives Chido a toy car made of scrap wire he has built at school for her to play with.

By 8pm Chido is tucked into bed, tired from her long day and begins to dream about going to school when she is older.

New words & Phrases:

Sadza – a type of food found and eaten all over Africa. It is made from corn flour and is a staple diet for many households. Water and salt are added to the flour and it is stirred until it is sticky and fluffy, similar to mashed potato! It can be eaten for breakfast, lunch and dinner with many different kinds of meats and vegetables.

Smelting – this is a process used to make metal. Substances found in the earth, called ‘ore’ are heated up to very high temperatures and added to chemicals to produce metals we use every day, i.e. ‘iron ore’ is used to make ‘iron’ or ‘steel’ which we use to build houses, bridges and even cutlery!
Akida

Akida is a 21-year-old Maasai warrior living in the Ngorongoro Conservation Area of Tanzania. Akida and his Maasai people have lived in the area since 1840 as pastrolists and live off the land and their herds of cattle for meat, blood and milk.

Akida lives alongside the wildlife of Africa and encounters many animals everyday such as buffalo, elephant and, most frightening, lion. He and his tribe of 20 people live in a large self-built Kraal with their herd of 35 cattle. The Kraal is maintained everyday by Akida and other men in the tribe to make sure lions and leopards do not break in and kill any cattle.

Akida's wife and son also live in the Kraal and fear lions may attack them at night, but Akida is a brave warrior and promises to keep his family safe.

Everyday Akida wakes up very early in the morning at 4am. He wonders outside his house into the Kraal to check on the herd of cattle. He lights a torch and begins to count the herd. Once satisfied all the cows are there he checks the Kraal wall for any holes that may have formed during the night. Once he is checked the wall is still strong and secure he leaves the Kraal as the sun rises and begins to collect firewood to prepare breakfast. He returns and asks for his son's help in building the fire whilst his wife prepares a breakfast of fresh milk, sadza and meat prepared the previous night.

By 7am, after a hearty breakfast, Akida and his son begin to herd their cattle out of the safety of the Kraal to graze on the grassy plains elsewhere. His son leads the herd whilst Akida, using a long stick and spear, rounds up the cattle behind. Akida and his son sing a song to calm the herd as they venture out into the plains.

By 8:30am they have reached a suitable area for grazing. Because the local Maasai population has increased so much there are more and more cattle which means there are less and less places for them to graze. This means Akida must walk to places further away each day so that his cattle may feed adequately.

At midday the temperatures have reached +35°C so Akida and his son rest under an acacia tree. Both father and son soon fall fast asleep, no longer keeping watch over their herd.

Suddenly Akida is awoken by the sound of his cattle panicking. He and his son jump to their feet and spot two lionesses in the distance approaching the herd. They sprint around the herd and towards the lions yelling and waving their arms hoping to scare them. As they approach the hungry lionesses the lionesses flee leaving the herd unharmed.

At 4pm Akida and his son return home with their cattle. Akida's wife has begun to prepare dinner and offers her husband and son some milk to quench their thirst after a long day in the sun.

By 7pm the whole tribe gather around a fire in the Kraal and listen to Akida's tale of the two lionesses and he and his son's bravery on the grassy plains.

New words & Phrases:

Pastrolists — these are people who live upon raising and herding livestock such as cows, goats and pigs.

Kraal — this is an Afrikaans/Dutch word for an enclosure used to keep livestock in. Within these the Maasai also build their small houses so they may keep a watchful eye upon their animals.

Acacia — this is a type of shrub and tree known for its sharp thorns. The branches of these plants make very good walls/barriers to keep animals in or out of an area.
Johann

Johann is a 40-year-old game ranger from South Africa. He works in South Africa’s largest national park; the Kruger NP. Johann has been a game ranger for 20 years and knows nearly every animal and plant in the park like the back of his hand. It is his job to take tourists on safaris and show them the wonderful flora and fauna of South Africa in the Park. He also often attends to problems with animals in the park, i.e. a poorly rhino, an elephant stuck in a riverbed or an injured cheetah.

Johann lives with his wife and two dogs in the NP surrounded by wildlife every day and night. He works every day for 3 weeks and then has 5 days off. During his time off he may stay at home in the NP and rest, or visit his family living elsewhere in South Africa.

Johann has an early start every day at 4:30am. He cleans his game drive vehicle in the driveway of his house before driving to the tourist lodge nearby to pick up his guests for a game drive.

On his way to the lodge he spots a herd of elephants grazing upon some bushes and herd of zebra drinking at a waterhole.

Johann picks up his guests at 5:30am and takes them to see the elephant and zebra. He tells them all about their behaviour, body parts and diet. The guests take many photos of the animals and ask many questions, but Johann is able to answer all of them very well.

At 8:30am Johann returns to the lodge with his guests and they all sit down for a lovely breakfast of fruit, cereal, pancakes, sausages’, bacon and eggs. He will take them out for a 2nd game drive at 4:30pm but before that he must check upon an injured impala he has been told about.

At 12:00pm he finds the impala ram sitting by the side of the road. As Johann approaches the ram it tries to run away but it is limping very badly. Johann manages to catch and pick up the ram to take it to the park’s vet some 10km away in his vehicle.

When he arrives at the vet’s surgery he is told the ram has injured but not broken its leg but will make a full recovery after a few weeks of resting.

At 4:30pm Johann returns to the lodge to pick up his guests for another game drive. They are lucky enough to find a pride of lions this time and decide to stay and watch them until the sunsets.

At 7:00pm Johann returns his guests to their lodge before travelling home. His wife has made him a dinner of pap, ribs and vegetables. Johann’s wife listens to his story about the injured impala and pride of lions over the dinner table.

New Words & Phrases:

Flora and fauna - these phrase means ‘plants and animals; flora is another term often used to describe plants, while fauna is used to describe animals.

Game drive – this is an activity you may go on whilst on safari. A game ranger, like Johann, will drive you around a park to find and see many animals (also known as ‘game’ sometimes) and plants.

Impala – this is a medium sized antelope species found in many parts of Africa, often in large herds. They feed upon grasses and other plants.

Ram – this is a male impala but may be used to describe other male antelope, deer and sheep species.

Pride – this is the collective term for a group of lions. Lions are the only social big cats and the females will nearly always spend their entire lives within a pride.

Pap - also known as ‘sadza’ in other African countries. This is a type of food found and eaten all over Africa. It is made from corn flour and is a staple diet for many households. Locals add water and salt to the flour and stir until it is sticky and fluffy, similar to mashed potato! It can be eaten for breakfast, lunch and dinner with many different kinds of meats and vegetables.
Lesson plan

• **Intro** – Discuss with children what they think it would be like to live in Africa. List key words and phrases on board (10mins)

• **Main** – Read out a single story or all three to, or along with, class (10-25mins)

• **Activity** – choose a listed activity depending on class subject (15-40mins)

• **Plenary** - discuss outcomes of chosen activity, what they have learnt from the story and how they feel what it may be like to live in Africa (10mins)

• **Homework** – depending on class subject;
  - English – write a comprehension about an imaginative trip or life in Africa of their own, or carry out activity 3 at home
  - Geography – research the Masai people and Ngorongoro Conservation Area. Takes notes and share their findings during following lesson
  - DT/Art – design a toy that can be made for recycled waste/household goods, i.e. bottles, cans, scrap paper, etc, or research Maasai art and jewellery, copy/recreate their favourite findings

Activities

1. Ask the children to read the stories aloud in class. Afterwards, discuss contrasts of a specific story to living in their own country and their own lives. List the differences, good and bad, and discuss why they think there are differences. Ideal for geography lessons. (15mins)

2. Split the class into 3 groups and assign them a story each. After each group has read their story ask them to draw a picture, as a group, featuring the named characters and a certain part of the story they have read about. These are to be shared with the rest of class once completed. Discuss why they have picked the featured part of the story and what they enjoyed about the story. Ideal for geography / art lessons. (30mins)

3. Ask the children to write a continuation of their favourite story and then read it aloud to the class. Ideal for English lessons. (20mins)

4. Follow ‘Wire Toys’ worksheet. Distribute necessary equipment to class. Encourage children to create their own wire toys, i.e. a car like Chido’s, an animal from one of the stories, a character, etc. Ideal for DT and/or art lessons. (40mins)

5. Distribute ‘African Songs & Games’ worksheet and split the class into 2 groups. Many African songs/chants are based upon a call and response structure. Have the 2 groups sing alternate lines of a chosen song to one another like Akido and his son. Ideal for music lessons. (20mins)

6. Using the story of ‘Johann’ split the class into 4 groups; game drive guests, elephant herd, zebra herd and lion pride. Encourage the children to act out parts of the story with these characters behaving like the ones in the story. Ideal for PE lessons. (20mins)
Wire toys

Many African children use scrap metal wire to build a variety of toys, the most popular being push-along cars. Encourage the class to create cars or anything Africa and/or lion related. The activity can be started with just 3 wires each to make perhaps 2D creations, eventually moving onto more wires to create 3D toys.

You will need:

- Any scrap wire, electrical, copper, clothes hanger, etc, but always supervise children, as edges can be sharp. You could visit a local recycling centre to get your wire.
- Wire cutters small enough for children to use safely. Again always supervise the children whilst using the wire cutters.
- Safety glasses if deemed necessary

You could also use beads to decorate the toys or recycled tin cans to make wheels. Encourage the class to source recycled materials that they could use to build and decorate their toys.
African songs

Below are two songs from Africa. The songs can be sung in unison or as a traditional call and response chant between two groups.

**Lions Roar**

Lions roar, eagles soar,
Leopards growl, cheetahs prowl,
Snakes slide, eagles glide,
Lizards crawl, jackals call,
Monkeys leap, snails creep,
Ants heap, fledglings cheep,
Birds sing, wasps sting,
Panthers stalk, people talk.

**Walking Through Africa**

Walking through Africa
Walking through Africa, what do I see?
I can see inyoka looking at me.
Walking through Africa, what do I see?
I can see ufudu looking at me.
Walking through Africa, what do I see?
I can see indlovu looking at me.
Walking through Africa, what do I see?
I can see ikhozi looking at me.

inyoka (een-yoh'-gkah) a snake
ufudu (oo-foo'-doo) a tortoise, /oo/ as in fool
indlovu (een-dloh'-voo) an elephant
ikhozi (ee-koh'zee) an eagle
African games

Below are two games from Africa

Mbube, Mbube

Imbube is one of the Zulu words for ‘lion’. ‘Mbube’ is addressing the lion, calling to him. Pronounced : mboo'-bay. In this game the lion is stalking the impala.

• All players form a circle.

• Two players start the game. One is the lion, one is the impala.

• Blindfold them both and spin them around. (Children used to just close their eyes, but the temptation to peek is so great!)

• Players in the circle start by calling the lion, "mbube, mbube!"

• The closer to the impala the lion gets the faster the chanting becomes. Likewise if the lion is far away the calling decreases, in volume as well as repetition.

• If the lion has not caught the impala within a minute a new lion is chosen. If the lion catches the impala, a new impala is chosen

Mamba

A mamba is a big, deadly South African snake. There are green mambas and black mambas. Both are venomous.

• One person is chosen as the mamba.

• An area on the playground is marked off

• Everyone must stay within the marked off area. The object is to stay away from the mamba.

• At a signal the game begins.

• The snake tries to catch the players. When a player is caught that player joins the snake by placing his/her hands on the snakes shoulders or around the waist.

• Each new "catch" becomes another part of the snake's body, always adding to the snake's tail. (As the snake eats, it becomes bigger and bigger.)

• If a player leaves the designated area the player must sit down on the boundary and misses out the rest of the game.

• Only the "head" of the snake can catch new people. The snake can use its "body" to capture other players by encircling them, as players may not pass between the snake's body parts.

• Game ends when all but one of the players have been caught. The last person caught becomes the next mamba
Background Information

Geological and climate changes over thousands of years have shaped Africa to what it is today. 144 million years ago Africa was once a part of a single supercontinent known as ‘Gondwana’ along with South America, Australia, India and Antarctica. 44 million years later they had begun to drift apart to form oceans, seas in between and create the continents we have today.

Past ancient glaciers and ongoing volcanic activity have formed mountains, deserts and savannah grasslands, such as the famous Serengeti.

In this topic we will discuss 4 main habitat types found upon the African continent:

• Savannah
• Rainforest
• Desert
• Mountains

Savannah grassland – such as the Serengeti

Warm temperatures all year round with wet and dry seasons distinguish the savannah habitat. The low rainfall during the wet season is usually followed by long months of drought; the dry season. Grasslands such as that of the Serengeti are based upon very fertile soil, which has formed from volcanic ash dispersed by volcanoes like Oloinyo Lengai (‘vertisol’ soil). This soil allows tall grass species to thrive and dominate the landscape. Tree species such as the umbrella-shaped Acacias and stocky Baobabs are few and far between due to the lack of water. Rainfall in the Serengeti varies in different regions but peaks between March to May and November to December.

Rocky granite outcrops known as ‘kopje’s’ break up the horizon. These rocks that appear to float in a sea of grass are home to a variety of unique plant species and animals that take refuge there.

This fertile savannah grassland is home to a vast variety of animals and see’s some of the biggest migrations of mammals in the world.

Climate change has seen longer periods of drought in the area, which has resulted in hundreds of animals dying from hungry and thirst.

Rainforest – such as in the Congo Basin

The Congo rainforest in central Africa is the 2nd largest after the Amazon in South America. It contains 18% of the world’s remaining tropical rainforest, which is home to approximately 11,000 different plant species and 10,000 animal species. Like all rainforests the Congo sees high rainfall and high humidity all year round. The forest is divided into four layers:

• The emergent layer – these are the tallest trees reaching 100-240ft; they are widely spaced trees with long, thin trunks and small leaves. They are adapted to withstand strong, direct sunlight, strong winds and heavy rainfall.

• The canopy – these trees form the ceiling of the rainforest with large leaves. Trees reach 60-100ft and obtain most of the sunlight; blocking it out to the world below. Climbing plants such as vines and lianas also grow here up the taller trees.

• The understorey – here the plants are much smaller as they receive less sunlight than the taller trees of the canopy, these plant species often make good houseplants.

• The forest floor – very few plants grow here due to poor sunlight. Dead leaves and other natural litter fall and lay here to be eaten by decomposers like insects and bacteria.

Unfortunately logging companies are cutting down large areas of the rainforest every day. Tree species such as Oil palm and African Teak are used in our everyday lives so the demand for them is high. By the year 2030 experts predict 30% of the Congo’s forest will have been destroyed.
Desert – such as the Namib

The Namib Desert is thought to be the oldest desert in the world with arid conditions continuing for 55 million years. Like most deserts it receives little to no rainfall each year and little life can survive here; those that do are extremely well adapted.

Temperatures vary daily and seasonally with highs of 50°C and lows of 0°C.

Amongst vast open expanses of sand there are some of the tallest sand dunes in the world, reaching 300m high. These are formed by the strong winds blasting sand particles upon one another.

Mountains – Kilimanjaro

Mount. Kilimanjaro is Africa’s highest point and a part of the 4,000 mile long Great Rift Valley in East Africa. The fertile volcanic soils of the lower areas of the mountain used to be dominated by cloud forests but large areas have now been replaced by crops for coffee and tea. Similar to the rainforest the mountain is divided into different areas:

• Cloud forest

• Heather moorland – this area is home to small shrub plant species

• Alpine desert – a mostly barren area apart from mosses and lichens, there is little surface water and low oxygen levels

• Summit – the top of the mountain, there are freezing temperatures with caps of snow and ice and very low oxygen levels

Most animal species are found in the cloud forest region and are well adapted to the high altitudes there. Few animals are able to survive permanently further up the mountain.

Glaciers found upon the top of the mountain have melted by 33% since 1989 due to global warming, shrinking the famous height of the mountain.
Lesson plan

• **Intro** – Discuss with the children the concept of habitats and how habitats differ in different parts of the world due to geology, weather, animal’s and man-made activities (10mins)

• **Main** – Go through the 4 pre-mentioned African habitat types. Allow children to examine images of each habitat type with those provided either with individual handouts or placed upon the classroom board (25mins)

• **Activity** – Choose a listed activity depending on class subject. (15mins)

• **Plenary** – Go through activity results amongst the class and re-iterate what they have learnt (10mins)

• **Homework** – depending on class subject;
  - Biology/geography - research what animals may live in each type of habitat. Take notes and share their findings during following lesson

Activities

1. Distribute ‘Savannah Illustration’ worksheet. Instruct the children to colour in the image and label the following:
   - Grass
   - Acacia
   - Baobab
   - Kopjie
   - Mountains
   - Water
   Ideal for geography lessons. (15mins)

2. Distribute ‘Layers of the Rainforest’ worksheet. Instruct the children to label and describe each layer including tree heights, sunlight levels, etc. Ideal for biology lessons. (15mins)
Layers of the rainforest
Topic four: Animals of Africa
Background Information

Africa is home to a vast variety of animals of all shapes and sizes, adapted to the different habitats found in Africa. In this topic we will focus on the savannah habitat.

Like humans all animals require food, warmth and shelter to survive. All animals use their sense of smell, sight, taste, touch and hearing to survive, but some species will use certain senses more than others. These differences between different animals, along with many others, means we need to organize those that are similar to one another into groups to make identifying them easier; this is known as ‘classification’.

For example in a savannah grassland there are:

• Vertebrates – animals with backbones

• Invertebrates – animals with no backbones

These 2 groups can be divided further into groups of mammals, birds, insects, amphibians, arachnids and reptiles.

An animal is mammal if it:

• Has a backbone
• Has lungs
• Have mammary glands to feed their young
• Are warm-blooded
• Give birth to live, fully-developed babies

An animal is an insect if it:

• Has no backbone
• Has 6 legs
• Has 3 body parts – head, thorax & abdomen

An animal is an amphibian if it:

• Has a backbone
• Has wet skin
• Has lungs
• Lives in water and on land

An animal is an arachnid if it:

• Has no backbone
• Has 8 legs
• Has 2 body part – head & abdomen

An animal is a reptile if it:

• Has a backbone
• Has scaly skin
• Has lungs
• Are cold-blooded
• Live on land
• Lay eggs
In the savannah the most famous animals are called the ‘Big 5’:

- The elephant
- The lion
- The leopard
- The rhinoceros (black & white)
- The buffalo

These animals are all mammals because they fit the biological criteria mentioned earlier. As well as being classified as mammals we can classify and recognize certain species by their adaptations. Adaptations are the things an animal physically has or a behaviour it does to survive in its environment.

Here we will examine how these 5 animals are well adapted to live in a savannah habitat.
The African Elephant (*Loxodonta africana*)

- Elephants have very large, thin ears. These are used to regulate their body temperature and keep them cool during the heat of the day by flapping them. They are also used to funnel sound into their ears making them very good listeners!

- Elephants have trunks. This is a long extension of their nose and upper lip. They consist of 100,000 muscles and tendons. They have 2 projections on the end that act like fingers helping them to pick and grasp small, delicate objects such as marula fruits and small acacia leaves. They also have a very keen sense of smell and it is thought they can smell water and seek it out in dry seasons.

- Elephants have very wrinkly skin. These wrinkles increase surface area and trap small amounts of moisture, which make them another good cooling adaptation for living in a hot environment.

- Elephants have a single pair of strong tusks. These are used during fights with one another but are also used to peel edible bark off trees such as baobabs.
The African Lion (*Panthera leo*)

- Lions have a golden, tawny colored coat. This enables them to blend in very well with the tall grass of a savannah habitat whilst stalking their prey.

- Lions have long legs, slender bodies and very strong muscles to help them chase and bring down large prey such as buffalo.

- Lions live in social groups called ‘prides’ of males, females and their cubs. This group living strategy allows the pride to successfully defend a territory that contains abundant prey species and water all year round.

- Lions have thin skin and white fur on their bellies. This area when exposed helps cool down their body temperatures during the heat of the day by lying on their backs.
The African Leopard (*Panthera pardus*)

- Leopards have spotted fur. These spots act as camouflage by breaking up the leopards shape making it hard for prey species to spot them when they’re hunting in tall grass and bushes.
- Leopards have very long tails helping them to balance whilst climbing tall trees found in the savannah.
- Leopards are very good hunters and are able to change their diet if their regular prey species (impalas, gazelles, wildebeest) are in short supply, i.e. during the dry season. They have been known to eat monkeys, rabbits, birds and even insects!
- Leopards have relatively small bodies but very strong muscles. Adult leopards often drag carcasses twice their own weight into the heights of trees preventing other savannah predators like hyenas and lions from stealing their dinner.
The White Rhinoceros (*Ceratotherium simum*)

- White rhino have a large, square upper lip used to graze grasses (unlike black rhino which have a hooked lip to browse on trees and bushes).
- Rhinos have large horns on their faces. These horns are made of keratin, which is what hair and nails are made of also. They are very hard and are used to fight off predators or other rhinos.
- Rhinos have very large feet. These large surface areas help the heavy animals to spread their weight and move quickly.
- Rhinos have very thick, rough skin to help protect them from the strong sunlight, thorny bushes and attacks from predators.
The African or Cape Buffalo (*Syncerus caffer*)

- Buffalo live in herds using numbers to help protect individuals from predators.
- Both males and females have large horns spreading on top of the head. These are used to defend themselves from predators and during fights with other buffalo.
- The tuft of long hair at the tip of their tails is used to swat away biting insects found in large swarms in the savannah at times.
- They have thick skin to protect them from the strong sunlight, thorny bushes and attacks from predators.
Food Chains & Webs

All the animals we find in the savannah habitat form an ecosystem. For an ecosystem to function, all the biotic and abiotic parts must work together. For animals like those we have discussed to survive, they must be a part of the food chain.

The food chain is the most important part of an ecosystem. Changes to it can result in many animals starving, plants dying, and an ecosystem collapsing. Here we will look at how the food chain works in the savannah grasslands and how important it is to every kind of animal.

All food chains begin with:

1. **The sun**
   - The sun provides food for plants through **photosynthesis**

2. **Plants**
   - Plants provide food for animals, these are **producers**

3. **Herbivores**
   - Herbivores are animals that eat plants

4. **Carnivores**
   - Carnivores are animals that eat other animals

Food chains are not always linear, and other organisms can create ‘branches’ from a single food chain. These form ‘food webs’, i.e., ticks are parasites that feed off buffalo blood, oxpeckers are birds that feed on the ticks, and caracals are cats that may prey on the birds.
New words & Phrases

Predators – these are animals that hunt and eat other animals (prey), i.e. lions hunt and eat buffalo.

Ecosystem – this is when all the living and biotic things in an environment work together.

Biotic and Abiotic - these are living and non-living factors of life. Biotic factors are produced or related to living things, such as predation. Abiotic factors are not produced or related to living things, such as weather.

Food chain – this a community of organisms where each member is eaten by another within the chain.

Photosynthesis – this is the process plants use to make food (carbohydrates) from sunlight using chlorophyll.

Producers – these are the organisms that begin a food chain. They provide food for other organisms, i.e. grass provides food for rhinos.

Herbivores – these are plant-eating animals.

Carnivores – these are meat-eating animals that often hunt and kill other animals.
Lesson plan (Classification)

• **Intro** – Ask the children to list African animals they know of out loud and list these on the board grouping ‘vertebrates’ and ‘invertebrates’ together. Once listed explain the difference between the 2 groups of animals (10mins)

• **Main** – Go through different classifications of animals listed using specific species as examples. Use animals found in your home country as well as Africa to demonstrate similarities throughout the world (25mins)

• **Activity** – Use ‘Classifying Organisms Key’ activity (15mins).

Split the class into groups and distribute ‘Classifying Organisms Key’ worksheet to each group. Using animals previously mentioned in topic or those of own choice, demonstrate to children how to use the key to classify an animal. Assign each group 3 animals to classify using the key. Ideal for biology lessons. (15mins)

• **Plenary** – Go through activity results with the class, discuss what they have learnt and answer any questions (10mins)

• **Homework** – Distribute a ‘Classifying Organisms Key’ worksheet to each pupil and ask them to identify 3 animals at home or whilst out and about, i.e. a pet, wildlife in park and/or garden, etc.
Lesson plan (Adaptation)

- **Intro** – List the ‘Big 5’ animals on the classroom board and ask the children to identify them. Discuss the habitat type they live and the concept of adaptation to that habitat (10mins)

- **Main** – Go through the 5 animals and their adaptations (25mins)

- **Activity** – Adaptations (20mins)
  
  Ask the children to draw their favourite ‘Big 5’ animal and label different body parts/physical adaptations listed. Ideal for biology lessons.

- **Plenary** – Go through activity results with the class and discuss what they have learnt (5mins)

- **Homework** – Research an animal of their choice and how it has adapted to its environment. Take notes and share findings with class during following lesson
Lesson plan (Food Chains)

- **Intro** – List appropriate parts of a food chain on board using African animals listed as examples (sun, grass, buffalo, lion). Explain the concept of all animals requiring food to survive within an ecosystem and this creates a balance (10mins)

- **Main** – Go through examples of food chains and definitions of different parts (producers, herbivores, carnivores, predators, etc) (20mins)

- **Activity** – Use Activity (15 – 30 mins)

  Distribute ‘Food Chains’ worksheet. Ask the children to fill in the appropriate listed words into the blanks and cut and stick pictures of relevant animals upon the food chain. Children can source images of relevant animals using appropriate websites.

- **Plenary** – Go through activity results with the class and what they have learnt (10mins)

- **Homework** – Ask the children to create a food chain for animals they may find in their garden or a park close to home. Share findings with class during following lesson
Food Chain Worksheet

Fill in the blanks in the sentences with the correct terms listed below and add or draw pictures of relevant animals or plants on the right that fit each description.

Predators  Herbivores
Carnivores  Plants
The sun  Photosynthesis
Producer

All food chains start with the....................

...........use the sun to produce food by..............

Grass provides food for animals so grass is called a..................

Animals known as..........................eat plants.

These animals are eaten by.........................

Animals that hunt and eat other animals are.....................
Topic five: Big Cats of Africa
Background Information

Africa is home to some of the world’s most beautiful and famous big cats: the lion, the leopard and the cheetah. Once found throughout the continent many of these cats are now only found in small areas.

In this topic we will look at the biology, conservation and history of these cats in Africa.
The African lion (*Panthera leo leo*)

The African lion is probably the most famous big cat in the world. It has been used throughout history to symbolise strength, courage, pride and victory. They have been the subjects of fascination to us for thousands of years. References to lions date back to 900 BC within the Bible. Of all wild animals, the lion is mentioned most; in 32 of the 66 books of the Bible, totalling 130 times. Today we find lions symbolising royalty, chivalry, football teams, advertising cars and clothes, and even featuring in music star videos.

Some 10-20,000 years ago an early form of the lion was the most widespread large mammal on earth after humans; found in Europe, the Americas, throughout Europe and in the Middle East. Now, outside of Africa, the lion only exists as a population of around 400 animals in India; the endangered sub-species called the 'Asiatic lion' (*Panthera leo persica*).

Lions have played important parts in the culture and tradition of many tribes in Africa. The Egyptians worshipped lion gods such as 'Sekhmet'. The Zulu, amongst other tribes, in South Africa believe wise chiefs and shamans turn into lions and young Maasai men kill lions as a part of a ritual in becoming a man.

Today the lion is the main tourist attraction in Africa. National parks with wild lions will attract more tourists to visit and therefore will receive more money to help maintain them.

The noble lion is often used to symbolize Africa and its wildlife. Could you imagine an Africa without lions?
Biology

1. Lions are mammals because they are warm-blooded, have lungs and give birth to live young (cubs).
2. They are the second largest cats in the world after the tiger.
3. Males on average weigh 190kg and females 130kg (that’s approximately the weight of 45 domestic cats!)
4. They have 30 teeth, 4 of which are the large ‘canine’ teeth used for gripping and puncturing flesh.
5. Lions can reach speeds of approximately 30mph over short distances.
6. Lions’ eyesight is approximately 8 times better than ours.
7. Lions breed and give birth to cubs all year round. They have a gestation period for approximately 120 days and give birth to litters of 1-6 cubs.
8. Lions eat many different prey species such as impala, gazelles, buffalo, elephant, kudu and giraffe.
9. The females of a pride do most of the hunting. Males will help out when the prey is large and more weight is needed to bring it down.
10. Lions roar to communicate with one another and warn others of their presence; a roar can be heard from up to 5 miles or 8km away.
11. Only male lions have manes. It is thought these are used to attract females and signify dominance and strength. It is also thought climate has affected the size and colour of manes, i.e. in colder North Africa lions that once ranged there had thicker, longer and darker manes.
12. Lion are the only social cats of the world’s big cats. It is believed the formation of prides help lions defend and retain a territory and its resources.
13. Lions on average sleep for 21hrs per day!
Conservation

African lions were once found throughout the entire continent with figures stating there were approximately 200,000 lions in 1975. This population has now shrunk to around 35,000 or less. They are listed upon the IUCN Red List as ‘vulnerable’.

This huge decline in numbers is due to numerous reasons:

1. **Hunting** – hunters pay large sums of money to shoot lions
2. **Poaching** – poachers often lay traps for other animals in a lions habitat but the lions accidentally get caught in them and suffer serious injuries and death
3. **Loss of habitat** – as populations of people in Africa increase they need more land for homes and growing food, so lions lose their habitat
4. **Human-lion conflict** – as people begin to live in a lions habitat they are more likely to encounter lions; lions sometimes kill people’s livestock if they struggle to find normal prey and have even killed people, this has resulted in many people killing lions in defence or as a precaution
5. **Disease** – just like us lions can catch dangerous diseases. Many diseases have been spread by human activity and influence and this has resulted in many lions dying
6. **Inbreeding** – as populations of lions decrease those that remain continue to breed with one another even if they are related, resulting in offspring born with many health problems and unable to survive.

Many organizations such as The African Lion & Environmental Research Trust (ALERT) and African governments are now working to protect and save lion populations. Government law is protecting areas that are still home to lion populations so there can be no hunting or poaching. People who live with lions are being shown how to prevent human-lion incidents from occurring.

Communities are also being encouraged to conserve and protect the lions in their area, and that by doing so they can help their community by receiving money from tourists who pay to see lions in the wild.
New Words & Phrases

**Endangered** – this is an animal or plant species that is in very high risk of becoming extinct

**Sub-species** – these are animals of the same species but small differences in their anatomy, habitat or behaviour allow us to separate them into further groups

**Shamans** – these are members of a tribe that are believed to be able to communicate with the supernatural world

**Gestation period** – this is another term for the length of a pregnancy

**Territory** – this is an area of land defend by and individual animal or a group of animals

**Resources** – these are the things required by an animal to survive, i.e. prey species and water

**IUCN** – the International Union for Conservation of Nature

**Red list** – this is the IUCN’s list of the world’s animal and plant species and their current individual conservation statuses based upon population numbers and habitat sizes, i.e. lions are ‘vulnerable’

**Vulnerable** – this is an animal at risk of becoming extinct but less than those who are classed as ‘endangered’

**Poachers** – these are people who illegally take, shoot or catch wildlife in a private or protected area

**Livestock** – these are domestic farm animals, i.e. cows, goats, sheep, etc

**Offspring** – this is another term for an animal’s babies, i.e. a lionesses’ litter of cubs may be referred to as her ‘offspring’
The African leopard (*Panthera pardus pardus*)

Similar to the African lion, leopards have been featured throughout our history. They have been found in mythology, art and upon coats of arms all over the world but this is mainly now found only in Africa. King John of England in the 13th Century was said to have had a tame pet leopard in the Tower of London!

Unlike the lion though there are many sub-species of leopard of the taxonomic name *Panthera pardus* (*P.p.*) worldwide today:

1. African leopard (*P.p. pardus*)
2. Arabian leopard (*P.p. nimr*)
3. Amur leopard (*P.p. orientalis*)
4. Persian / Central Asian leopard (*P.p. saxicolor*)
5. Javan leopard (*P.p. melas*)
6. Sri Lankan leopard (*P.p. kotiya*)

And others with a different taxonomic name

1. Clouded Leopard (*Neofelis nebulosa*)
2. Sunda Clouded Leopard (*Neofelis diardi*)
3. Snow Leopard (*Panthera uncia*)

Leopards are the most widely distributed big cats but it is the African leopard that is the most well documented leopard that exists today. Although they are successful hunters they do fall victim to lions, hyenas and wild dogs stealing their meals and even attacking them.

As a part of the famous ‘Big 5’ many tourists will visit Africa to see a leopard in the wild, yet they are well known for being very secretive and hard to spot.

Sadly many leopards are still shot for their beautiful skins in Africa. These skins are worn in traditional African rituals but also as a fashion statement in the form of a coat or may be a handbag. A leopard skin can be bought for £600-£1000.
Biology

1. Leopards are mammals because they are warm-blooded, have lungs and give birth to live young (cubs).
2. They are the second largest big cats found in Africa, after the lion.
3. Males on average weigh 80kgs and females 50kg.
4. Leopards can reach speeds of 37mph over short distances.
5. Leopards are solitary animals and are only found with other leopards when breeding or if a mother has cubs.
6. Leopards are very good climbers and spend a many hours of the day resting in trees and watching for prey.
7. Leopards are very strong and are able to carry prey that weighs much more than their own weight into trees for safety.
8. Leopards are covered in rosettes on their fur, which act as great camouflage whilst they are in trees and bushes stalking prey.
9. The rosette pattern on each leopard is unique; like a fingerprint.
10. Leopards are mostly nocturnal hunters.
11. Like lions, leopards can roar, but not as loudly!
12. Leopards are often found living in a territory along a river where there is plenty of cover from tree and bushes growing there.
13. Leopards are very good swimmers and enjoy being in water.
14. Leopards prey upon medium to small sized animals, i.e. impalas, rabbits and porcupines.
15. A leopard’s tail is as long as its entire body length to give it excellent balance and agility.
Conservation

Due to the leopards secretive nature little is really known about current leopard populations in Africa. It is generally believed because of their ability to adapt to numerous habitat types they are able to survive many human pressures such as habitat loss. Despite this belief leopards are still under threat from:

1. Hunting
2. Poaching
3. Competition for prey – many prey species leopards hunt are also hunted by local people leaving small, insufficient numbers in an area for leopards to survive upon
4. Poisoned meat – many farmers and hunters poison meat to kill competing and/or threatening leopards in an area
5. Body part uses – the skin, teeth and other body parts are sold for a variety of different uses in Africa, Europe and China.

It is still legal to hunt certain numbers of leopards in many African countries. Hunters will pay large sums of money to shoot a leopard legally in a private or protected area. Unfortunately many leopards roam outside protected areas and are therefore more at risk from other illegal activities. Areas with increased human populations have seen leopards disappear from that area resulting in a decline of 36.7% from their historical range.

Leopards are at the top of their food chain and to lose them from an ecosystem would have serious knock-on effects upon other animals in an area.

Their conservation status is classified as ‘near threatened’ on the IUCN Red List.

Many organizations and governments are working to protect leopards within and outside protected areas. Many projects focus upon preventing leopard-human conflict occurring, i.e. protecting local livestock from being killed by leopards.
New Words & Phrases

**Solitary** — if an animal is described as solitary this means it lives alone throughout its life

**Rosettes** — these are the circular patterns on a leopard's coat that look like small roses

**Nocturnal** — if an animal is described as nocturnal this means it is active mostly at nighttime

**Agility** — this is the ability to move and change direction very quickly and smoothly

**Historical range** — this is the area an animal once covered for many years

**Conservation status** — this is an indicator of how likely or unlikely a species is to become extinct and how much protection they need to survive in their habitat

**Near threatened** — this is an animal that may be considered to be threatened with extinct in the near future
The Cheetah (*Acinonyx jubatus*)

The cheetah is the smallest of Africa’s big cats. Unlike the lion and the leopard it is not a part of the *Panthera* family. *Acinonyx* is Greek for ‘no move claw’. Unlike the lion, leopard and other cats the cheetah’s claws are non-retractable, similar to a dog. Also different from other big cats, the cheetah is famous for its ability to ‘purr’ like domestic cats.

Similar to the lion and leopard the cheetah once roamed many parts of the world such as Persia and India. A small population of approximately 50 Asiatic cheetahs (a cheetah sub-species) can still be found in Iran (Persia) today while other isolated populations still roam Africa.

The cheetah was once used as a status symbol in African royalty throughout the continent. The Egyptians were documented to have tamed many as pets and trained them to hunt for them. They would be kept on leashes, blindfolded, and taken to areas where there were prey species. Once prey was within reaching distance the owner would remove the cheetahs blindfold and have them chase down and kill the prey. They are naturally less aggressive than other big cats due to the slim and relatively weak body frame, and therefore are supposedly easier to tame; even today cubs are still sold illegally as pets.

They have been represented in many famous books and paintings for hundreds of years and are still very popular today in tourism. Many visit National Parks such as the Masai Mara in Kenya where there are still fairly large populations of cheetahs to see.

They are often outranked by other larger predators such as lion, hyenas, leopards and wild dogs. On average they lose 50% of their prey to other predators.

They are known as the greyhound of the cats for their immense speed.
Biology

1. Cheetahs are mammals because they are warm-blooded, have lungs and give birth to live young.

2. They are the third largest big cat in Africa after the lion and the leopard.

3. Both males and females are relatively light (35-65kg).

4. They are the world’s fastest land mammal at 70 – 75 mph.

5. Its lean body, long legs and non-retractable claws aid its speed.

6. Its tail is longer than its body to make it more agile when running.

7. They have very large hearts and lungs adapted to help them run at high speeds.

8. Cheetahs prey upon small to medium sized antelopes such as gazelles that also run fast.

9. The cheetah uses the open expanses of a savannah habitat to spot prey and run them down.

10. Because they are so well adapted to running in these habitats they are unable to survive in other habitats unlike the lion and leopard.

11. Females are solitary with the exception of when they have cubs. Males will sometimes stay together throughout their lifetime in a male coalition only meeting up with females to breed.

12. Cubs are born with long, greyish fur along their backs; it is thought this is used to disguise them from predators that may kill them.

13. Cheetahs are mostly diurnal; hunting during the day but resting during the hottest part of the day.

14. Cheetahs cannot roar but ‘purr’ and ‘chirp’, this sound is often mistaken for being a bird!
Conservation

15,000 cheetahs were thought to roam Africa in the 1970’s. Since then there has been a 30% decline leaving approximately 10,000 cheetahs in 25 African countries. The largest known population is found in Namibia.

This decline is due to:

1. Habitat loss
2. Hunting
3. Poaching
4. Disease
5. Human-cheetah conflict
6. Competition for prey
7. Impact of other predators — many other predators such as lions, leopards and hyenas often kill cheetahs and their cubs.

Because of their hunting behaviour they require large, open areas to live in. Many countries such as Namibia and Kenya protect cheetahs by law but some still allow the legal hunting of them.

Many organizations and governments have developed national action plans to help protect and save cheetahs. The Cheetah Conservation Fund (CCF) has a project known as the ‘Livestock Guarding Dog Programme’. This organization breeds and trains dog to protect local livestock from attacks by cheetahs in the area. This has resulted in cheetahs becoming fearful of approaching livestock and therefore defending farmers are shooting fewer cheetahs.

Cheetahs eat specific prey species and struggle to survive when poachers kill many of these animals for themselves. Many protected areas have ‘anti-poaching units’ which help protect the cheetah’s food.

Cheetahs are classified as ‘vulnerable’ on the IUCN Red List.
New Words & Phrases

Non-retractable – all cat species are able to move their claws in and out of a thin layer of skin known as a ‘sheath’ in their paws. Cheetah’s lack this sheath and are unable to pull them inside; therefore their claws are always exposed.

Male coalition – this is a group of male cheetahs that are usually related to one another, i.e. brothers or cousins. Male lions also form male coalitions.

Diurnal – if an animal is described as diurnal this means it is mostly active during the day. It is the opposite of ‘nocturnal’.

Anti-Poaching Unit – these are groups of people that patrol a protected area looking for poachers and removing any traps they may lay to catch animals in the area.
Lesson plan

1. **Intro** – Ask the children to name any big cats they know of that live in Africa. Name all 3 on classroom board and discuss the concept of conserving them (10mins)

2. **Main** – Go through information about each animal. Depending on age group and subject, all 3 may be covered in a single lesson or just 1 can be focused upon (30mins)

3. **Activity** – Choose a listed activity depending on class subject (15-20mins)

4. **Plenary** – Go through activity results amongst the class and reiterate the importance of these animals (5mins)

5. **Homework** – Assign either activity 1 or 2 to complete at home, depending on which has been used already in class.

Activities

1. Distribute a ‘Big Cat Quiz’ worksheet to each pupil. Ask the children to answer the questions and fill in the blanks with the correct words and phrases listed. Ideal for biology and geography lessons. (15mins)

2. Distribute a ‘Guess the Feline’ worksheet to each pupil. Ask the children to assign a pre-mentioned big cat to the lists of biological characteristics listed. Ideal for biology lessons. (15mins)

3. Ask the children to draw their favourite cat and list:
   a. 1 biological characteristic
   b. 1 history fact
   c. 1 threat to populations
   d. It’s conservation status
   Ideal for biology and geography lessons. (20mins)

4. Ask the children to discuss and note how they would conserve a big cat population, i.e. would they allow hunting in an area, would they employ anti-poaching units, would they educate local people, etc? Ideal for geography lessons. (20mins)
1. Are lions social cats?

2. Which two big cats have spots/rosettes?

3. How many cheetahs are estimated to be in Africa today?

4. How many lions are estimated to be in Africa today?

5. Which big cat has ‘non-retractable’ claws?

6. What is the conservation status for the African leopard?

7. What is the conservation status for the African lion and cheetah?

8. Name 2 threats facing all 3 big cat species.
Name which big cat each list is describing

- The largest cat in Africa
- Lives in social groups known as ‘prides’
- Its roar can be heard from 5 miles away
- Listed as ‘vulnerable’
- Mentioned 130 times in the Bible
- The males have a ‘mane’
- Sleep on average for 21hrs each day

This cat is a.........................

- The fastest land mammal in the world
- A mostly solitary cat
- Cannot roar
- Cubs are born with long, grayish fur on their backs
- 10,000 remain in Africa
- Largest population is in Namibia
- Egyptians once kept them as pets and used them for hunting

This cat is a..........................

- The most widely distributed big cat
- Often hunted for its beautiful skin
- A solitary cat
- Very good climbers
- Its tail is as long as its entire body
- Listed as ‘near threatened’
- Very secretive cat and often hard to spot

This cat is a..........................
Topic six: Conservation of African Wildlife
Background Information

Africa is home to some of the world’s most unique yet endangered species. They all play important roles in a variety of ecosystems across the continent. To lose just one species from a food chain could have very serious effects upon the other animals in an area. For example:

1. With no big cats there would hardly be any one to eat herbivore species like antelopes and gazelles
2. This is great news for them but this also means their population would increase meaning more and more grass would be eaten
3. Eventually these animals would eat all the grass in an area so there was nothing left
4. With no grass many other animals would die from starvation. Local people would be unable to provide their livestock with grass to graze upon
5. Less tourists would visit the area meaning there would be less money to help look after the area, its habitats and the animals that live there
6. This lack of money would also mean people employed to look after the area and its wildlife, i.e. anti-poaching units, would lose their jobs. People living in a local community would no longer receive money and may then struggle to feed their families
7. Over time the ecosystem and local economy would collapse; many other animals would die and many people would struggle to survive from a lack of resources

Africa sadly, is at very high risk of losing some of its species due to the activities of man. Even the activities of those living thousands of miles away are having an effect on African wildlife. Climate change is resulting in droughts, floods and deadly heat waves in Africa. If we all helped to stop climate change by recycling, not wasting water and food, not polluting and littering, we could help Africa’s wildlife.
Many species are endemic to Africa and even to small specific places in Africa itself. If these species become extinct in these areas we would never see them again. Some species that we have already lost in the wild are:

1. Northern white rhino
2. Cape warthog
3. Bubal hartebeest
4. Quagga

One day we may only be able to find certain animals in zoos and safari parks because there are no more left surviving in the wild.
So what can be done?

We can help conserve Africa’s wildlife by:

1. Supporting and donating to charities and non-governmental organisations working to protect and conserve wildlife in Africa

2. Buying **eco-friendly** products that have not in any way destroyed an animal’s habitat or effected its ecosystem

3. Travelling and visiting responsible tourist destinations if going abroad, i.e. those that use money received from visiting tourists to help look after an area and its animals

4. Supporting local communities through charities and non-governmental organisations

5. Creating awareness; telling friends and family members about the conservation issues in Africa and what can be done

6. Looking after your own environment and stopping the effects of climate change by recycling, preventing pollution, not wasting water and food, etc

It is important that we work to conserve the wildlife of Africa and all other countries today so that future generations may see and enjoy them tomorrow!

“If all the beasts were gone, men would die from a great loneliness of spirit, for whatever happens to the beasts also happens to the man”

Chief Seattle of the Suwamish Tribe
New Words & Phrases

**Economy** – this is the producing, sharing and receiving of money for a government, organization or business.

**Endemic** – this term is used to describe plants, animals and even diseases that are found only in specific places on Earth and nowhere else.

**Eco-friendly** – these are materials, places or activities that are non-harmful to the environment.
Lesson plan

1. **Intro** – discuss the uniqueness of African wildlife and the concept of endemic species (10mins)

2. **Main** – discuss the concept of conservation and the impact the loss of a species can have upon a habitat and other wildlife in an area (20mins)

3. **Activity** – choose an activity listed (25mins)

4. **Plenary** – discuss results of chosen activity and re-iterate the importance of conserving wildlife (5mins)

5. **Homework** – assign activity 1 or 2 depending on activity used in class. Share findings with rest of class in the following lesson

Activities

1. Design a poster highlighting the importance of wildlife conservation. Images may be sourced using the internet. Ideal for geography and biology lessons. (25mins)

2. Research the listed extinct animals via appropriate websites on the internet. Take notes and discuss why the species became extinct and what could have possibly been done to save it. Ideal for geography, biology, history and ICT lessons. (30mins)
What next?

ALERT offers numerous ways that your students can follow the progress of our conservation work, including following the lives of our released lion prides. Visit the news page on our web site at www.lionalert.org

Some schools have got their children to undertake various activities to raise funds for the program. If you would like more information on ideas and how to donate any funds raised please contact us at rae@lionalert.org

We also offer a pen-pal programme where your pupils can communicate with children of their own age who live in Africa. The children participating can share their experiences in school, daily routines and lifestyles with one another. This will improve their knowledge and understanding of the wider world even further and offers them the chance to make a new best friend from the other side of the world!

If your class would like to be apart of our pen-pal programme please contact Rae Kokes for further details on rae@lionalert.org

Finally, we hope that this teacher’s pack has been useful. If you have any suggestions or feedback so that we can improve this pack please let Rae know by emailing her at rae@lionalert.org

Together we can make a difference to your students and to the continent of Africa; its wildlife and its people.

"In the end, we conserve only what we love.
We will love only what we understand.
We will understand only what we are taught."

Baba Dioum, Senegalese poet