



IMAGINE

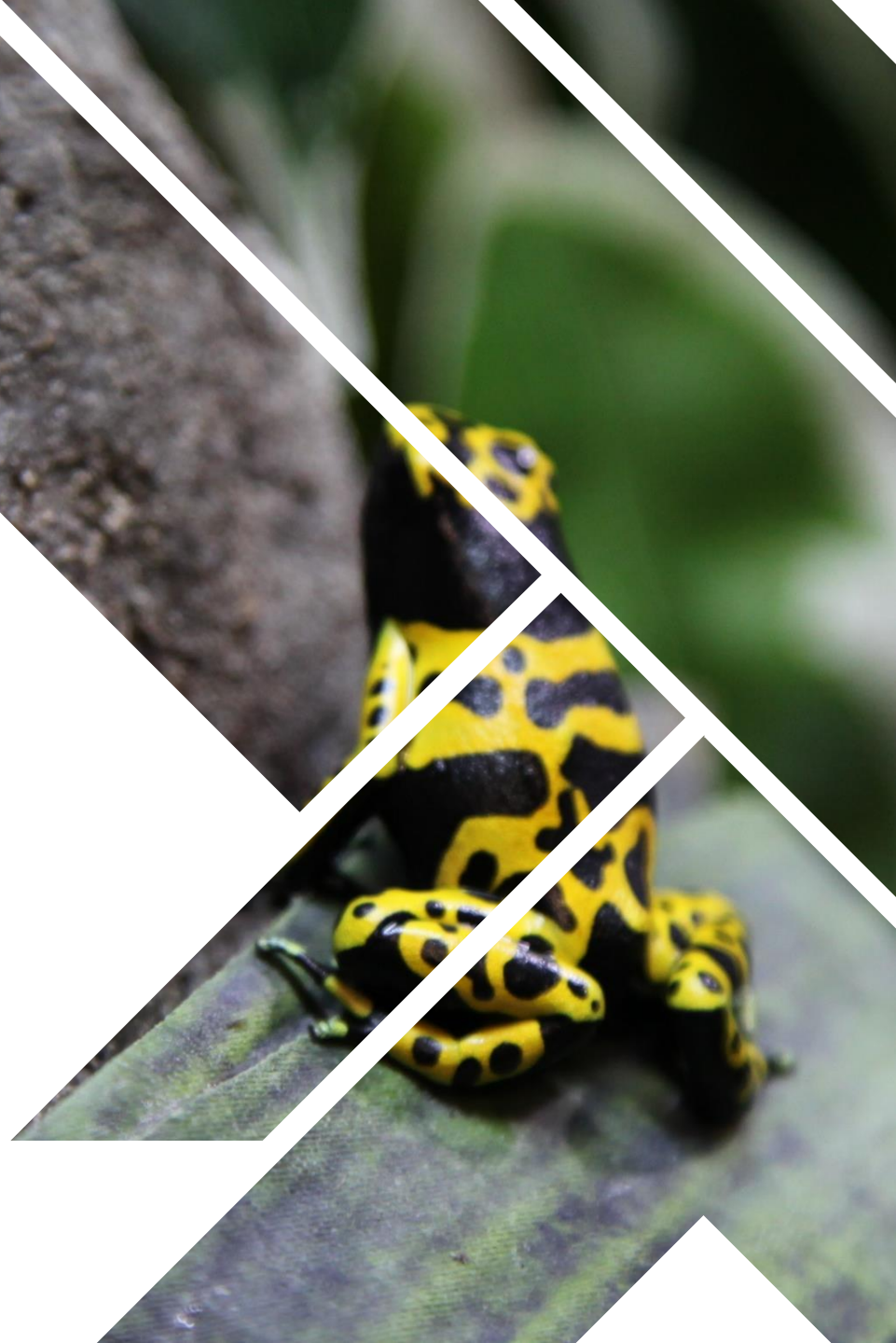
# PARK LIFE

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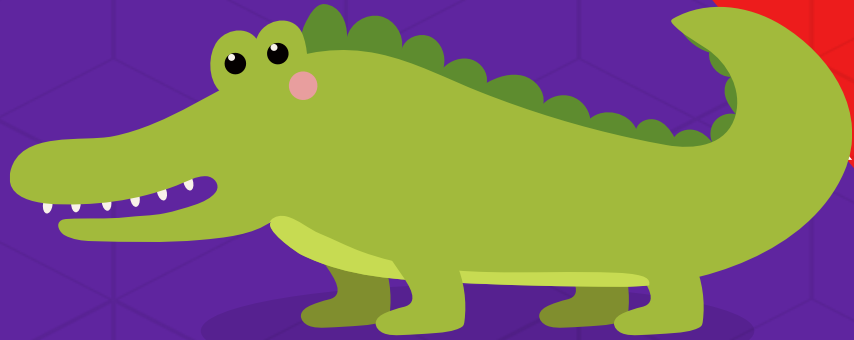
Primary Smart Conservation  
Lessons 1 & 2

> an RS Components **ImagineX** resource

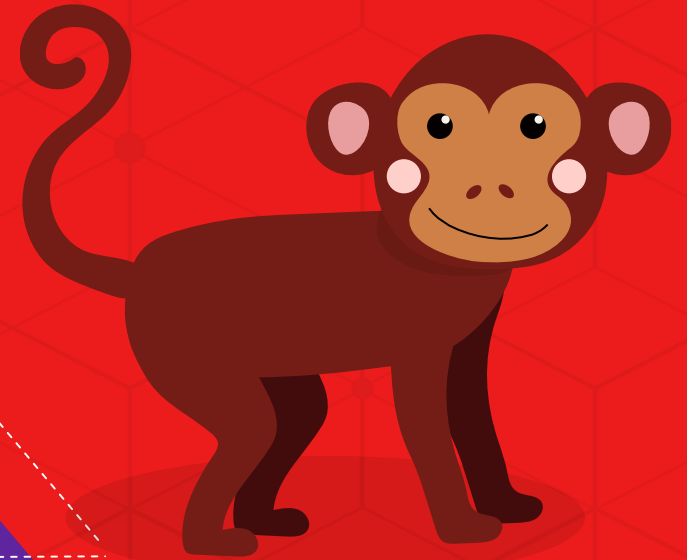
# LESSON 1



What are  
their needs?



What is your  
favourite animal?





# Wild or 'captive'?

- Usually born in the wild
- Are free to roam in their environment/habitat
- Control how they socialise and breed
- Hunt/forage for their food
- Have little/no contact with people
- Often born in captivity – usually in zoos
- Are kept in controlled environments
- Have their socialising and breeding controlled
- Are provided food by humans
- Have a lot of contact with humans and are often trained

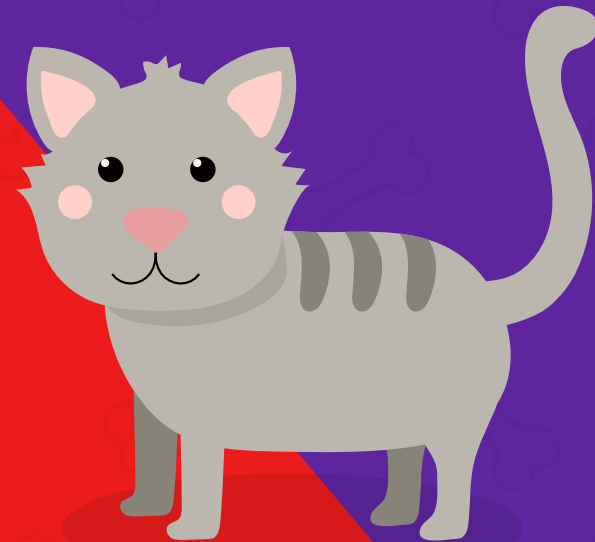


# ‘Domestic’ animals

- Are bred in captivity – but not in zoos
- Are tame and usually trained
- Depend on humans completely for survival

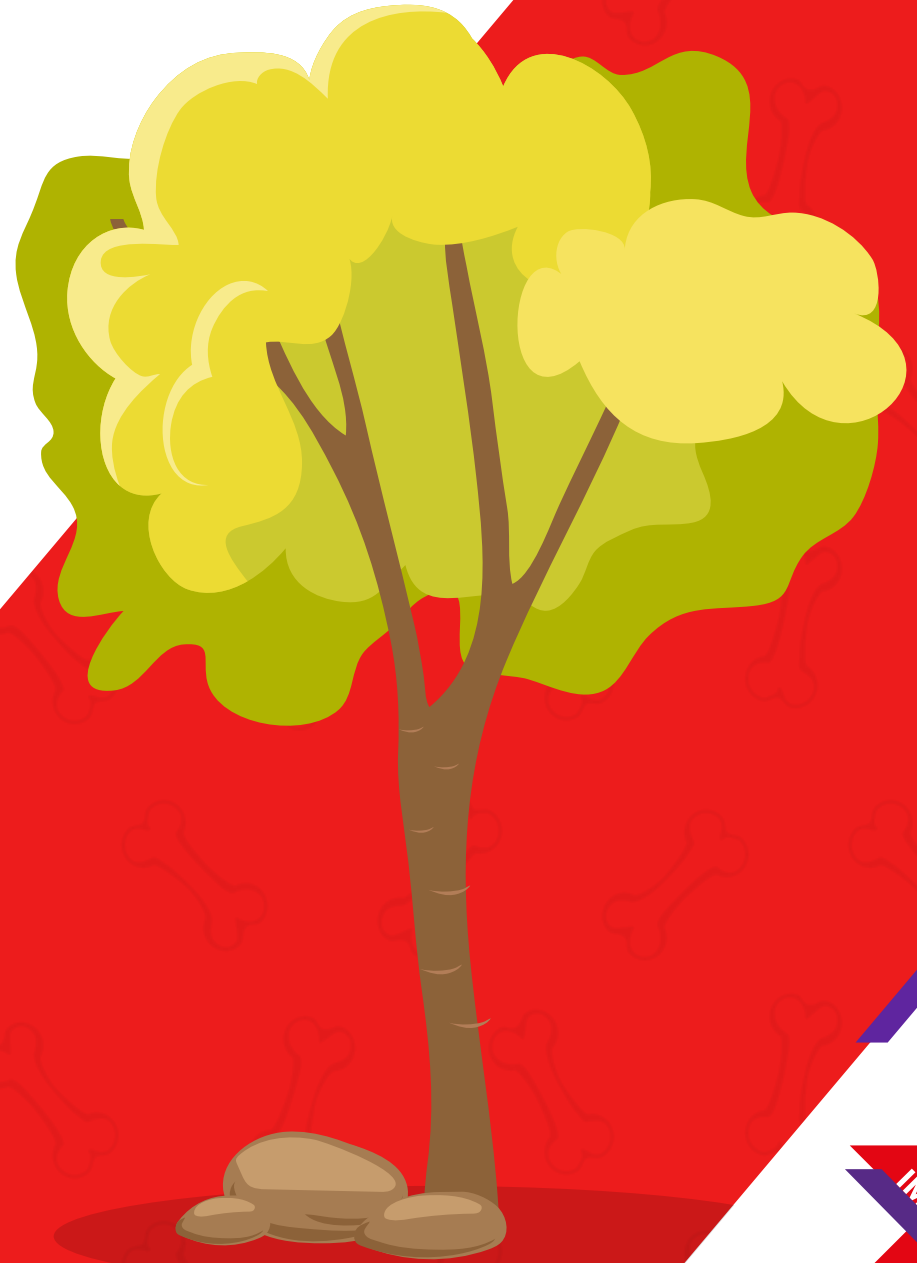
Are kept:

- As pets (cats, dogs, hamsters, birds)
- For work (guide dogs, police horses etc.)
- For food and products (sheep, cows, chicken etc.)



# What do all living things need?

- A suitable habitat (a place to live)
- A suitable diet
- Ability to socialise





# Do different animals have different needs?

## CLASS

- Mammal
- Reptile
- Amphibian, fish, bird

## THEIR 'WILD' ENVIRONMENT

(where in the world that species is from)

## WHAT THEY EAT

- Herbivore
- Carnivore
- Omnivore

## HOW THEY LIKE TO INTERACT WITH OTHER ANIMALS

- Social
- Solitary





# Why shouldn't some animals be pets?



- Hard to recreate their natural habitat
- Need to be kept with their own species
- Are dangerous to humans
- Are hard to train correctly





# Animals in zoos are often not suitable as pets. But they can be safely kept in zoos

British Animals Laws ensure they are kept healthy and happy.

- The Animal Welfare Act
- The Dangerous Wild Animals Act
- The Zoo Licensing Act



Drusillas Park, a special UK zoo, has 15 inspections a year to make sure it is obeying UK animal laws.

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IMAGINE

# HABITATS

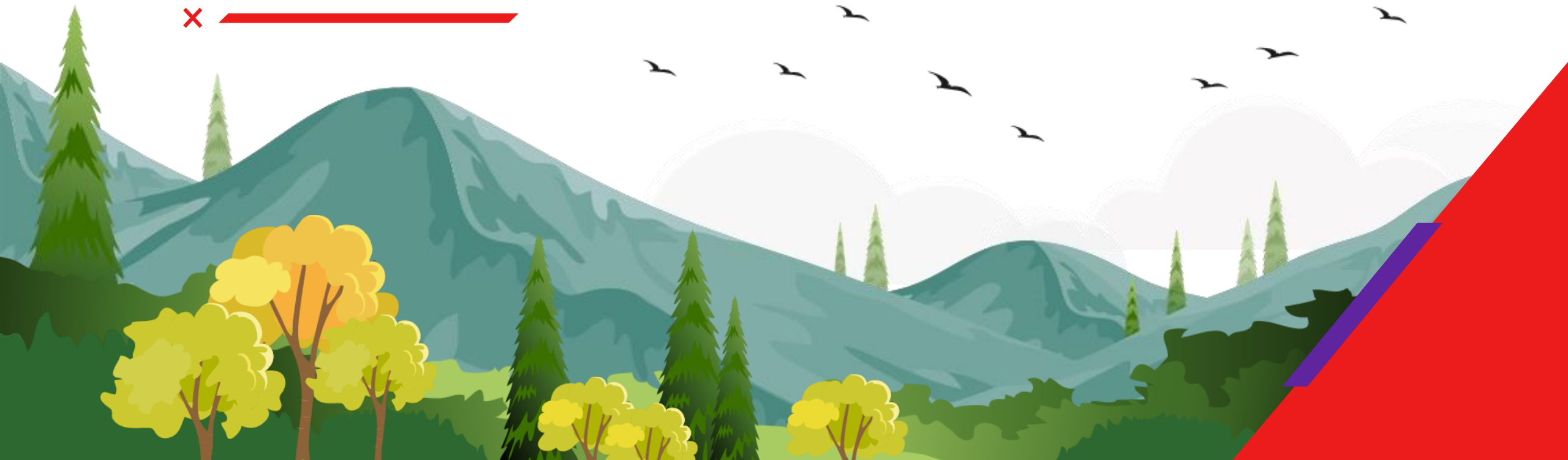
Today we're  
going to focus on...





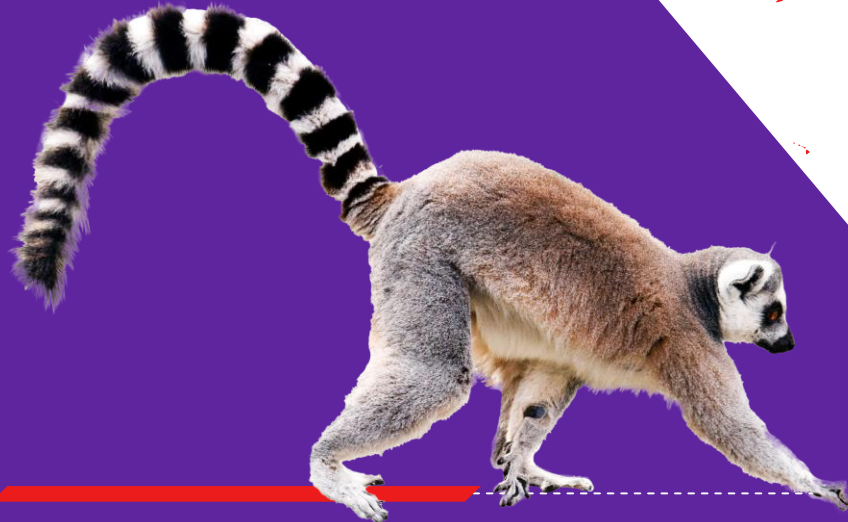
LET'S MEET SOME OF THE  
DRUSILLAS PARK RESIDENTS...

# TIME TO IMAGINE





# Being a... Ring-tailed Lemur!



**Location:** South Madagascar

**Habitat:** Hot, scrubby, tropical forests (18 to 29°C)

**Diet:** Flowers, leaves, insects (omnivorous)

**FACT:** Lemurs have become endangered due to habitat destruction. Thankfully, they breed well and live happily in captivity, as long as their enclosure is just right.



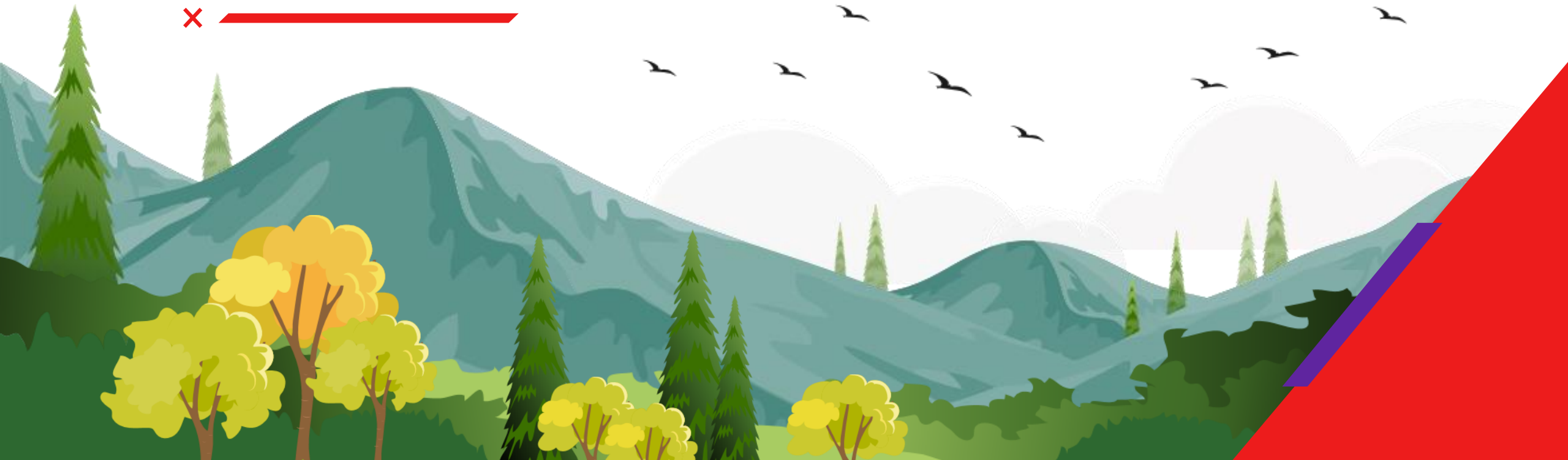
# What do you need to be a healthy, happy lemur?

- Lots of sunlight
- Lots of exercise outdoors
- Lots of other lemurs to socialise with
- Warm indoor enclosures
- Forest-like settings





# TIME TO IMAGINE





# Being a... Two-toed Sloth!



**Location:** Amazon Rainforest (South America)

**Habitat:** Humid rainforest canopies (24 to 33°C)

**Diet:** Buds, shoots, leaves, fruit (herbivorous)

**FACT:** Sloths are the slowest-moving mammals out there. They live in the canopies of trees (and are almost always hanging upside down) and are threatened by deforestation. They have very low body temperatures too, so need to conserve energy and stay warm.

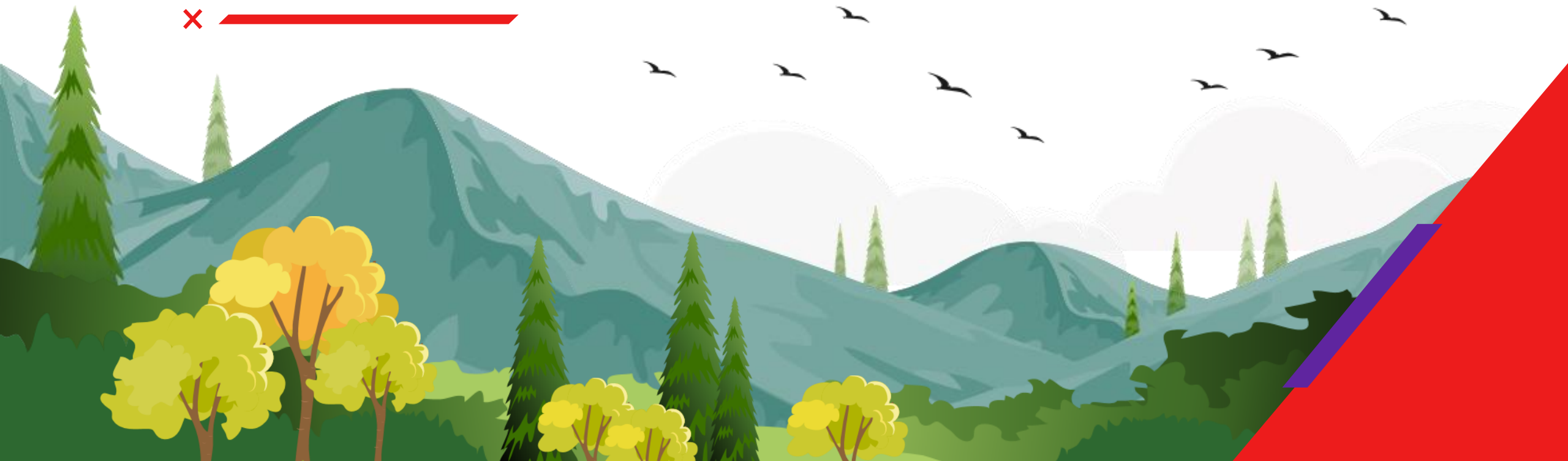


# What do you need to be a healthy, happy lemur?

- Lots of sunlight
- A very warm, humid enclosure
- Lots of trees and branches to hang from
- Places to hide and sleep

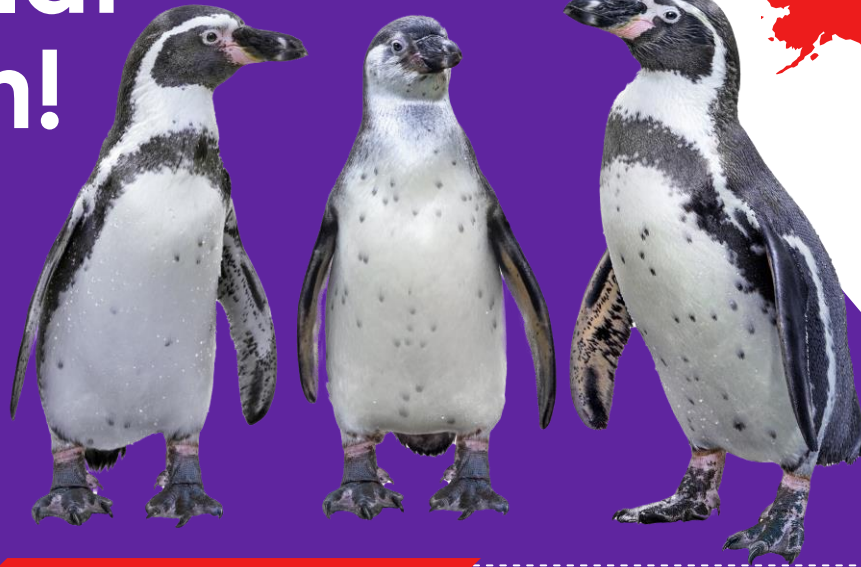


# TIME TO IMAGINE





# Being a... Humboldt Penguin!



**Location:** the coasts of Chile and Peru (South America)

**Habitat:** Rocky islands and coasts (0 to 20°C)

**Diet:** Small fish (carnivorous)

**FACT:** Sloths are the slowest-moving mammals out there. They live in the canopies of trees (and are almost always hanging upside down) and are threatened by deforestation. They have very low body temperatures too, so need to conserve energy and stay warm.



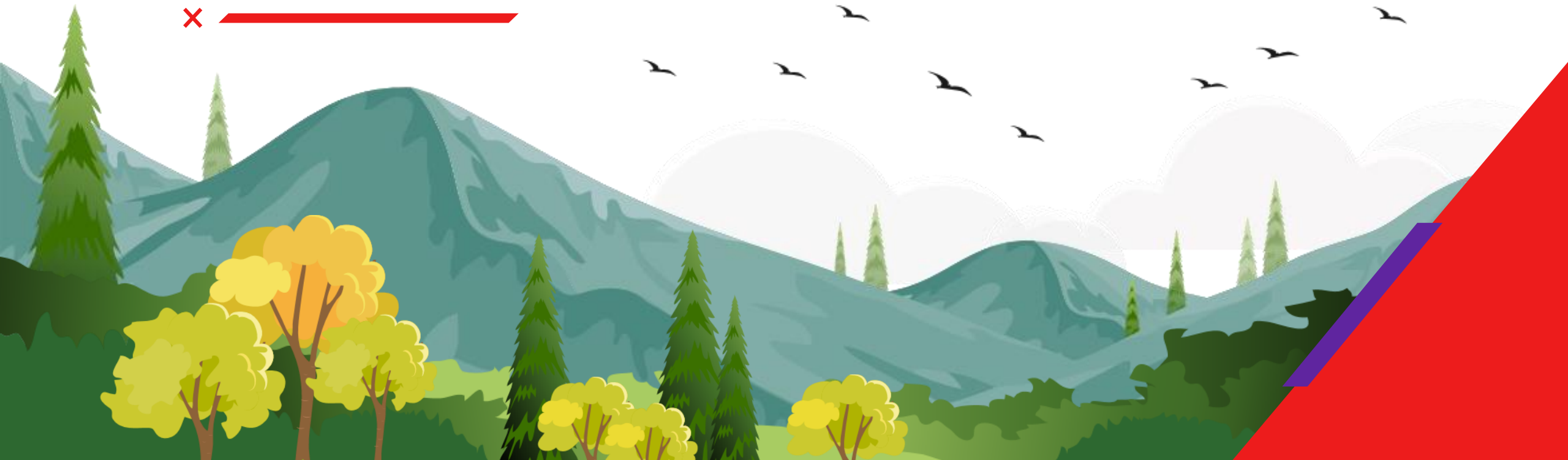
# What do you need to be a healthy, happy penguin?

- Cold, deep water to swim in
- Hot rocky ground to nest in
- Tunnels to hide in
- Lots of other penguins to socialise with

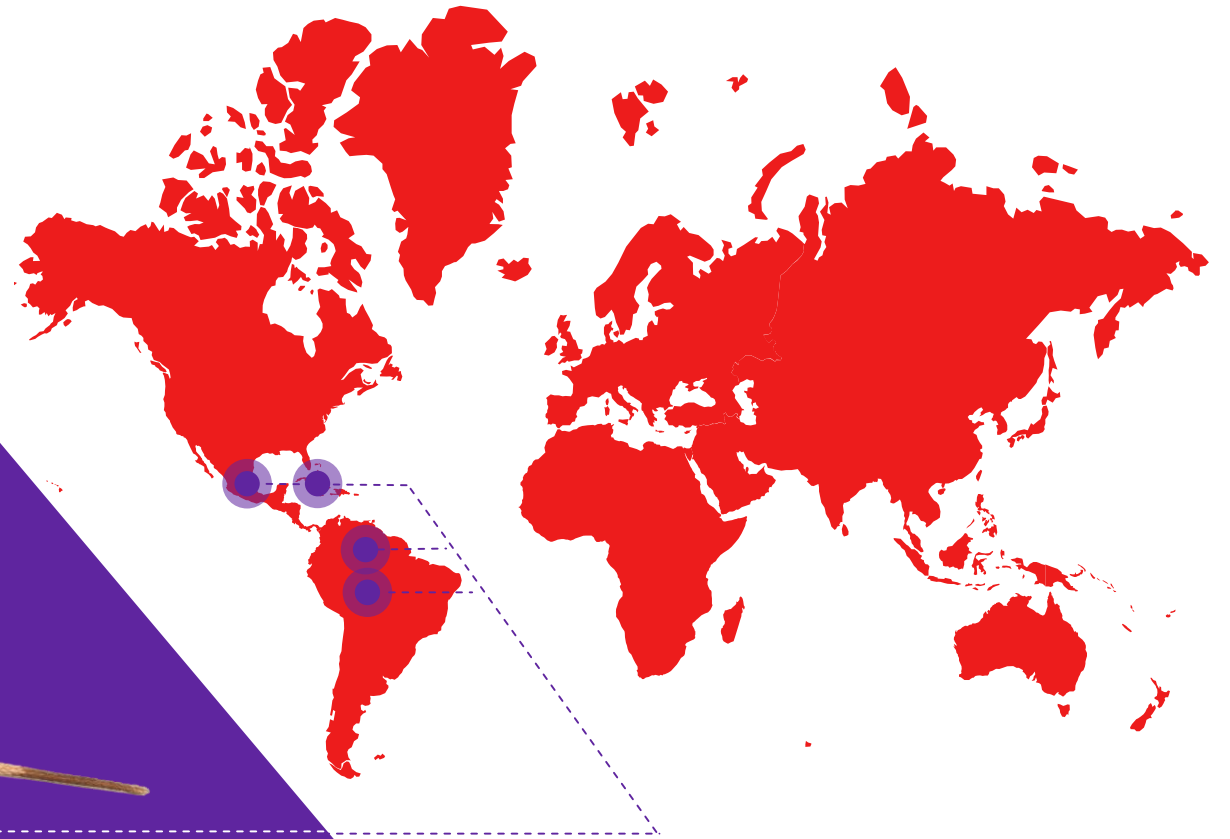




# TIME TO IMAGINE



# Being a... Green Iguana!



**Location:** Rainforests across Central and South America and the Caribbean Islands

**Habitat:** Humid rainforest canopies (23 to 37°C)

**Diet:** Flowers, fruit, leaves, shoots (herbivorous)

**FACT:** The solitary Iguana can grow up to 1.8m in length, with a tail that can break off and regrow if grabbed. Iguanas are popular as pets, but sadly often don't live very long due to needing very special care. They are getting rare in the world, but thrive in captivity.



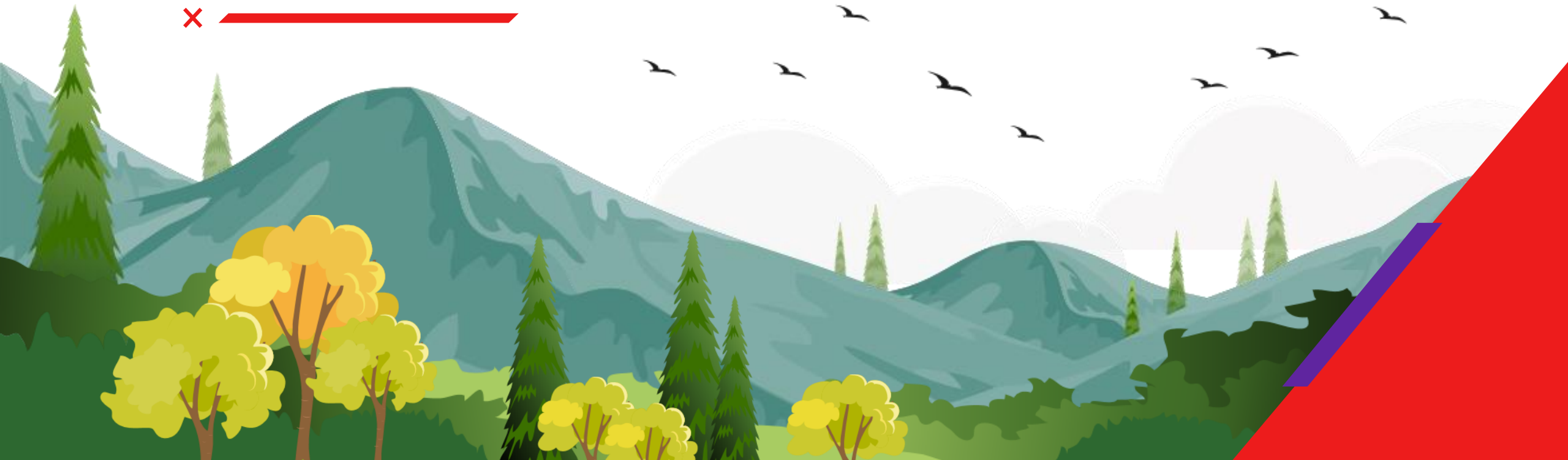
# What do you need to be a healthy, happy iguana?

- Lots of branches for climbing and shedding
- A hot, humid environment
- Hot rocks to warm up on
- Cool spots to cool down on
- Damp places to hide

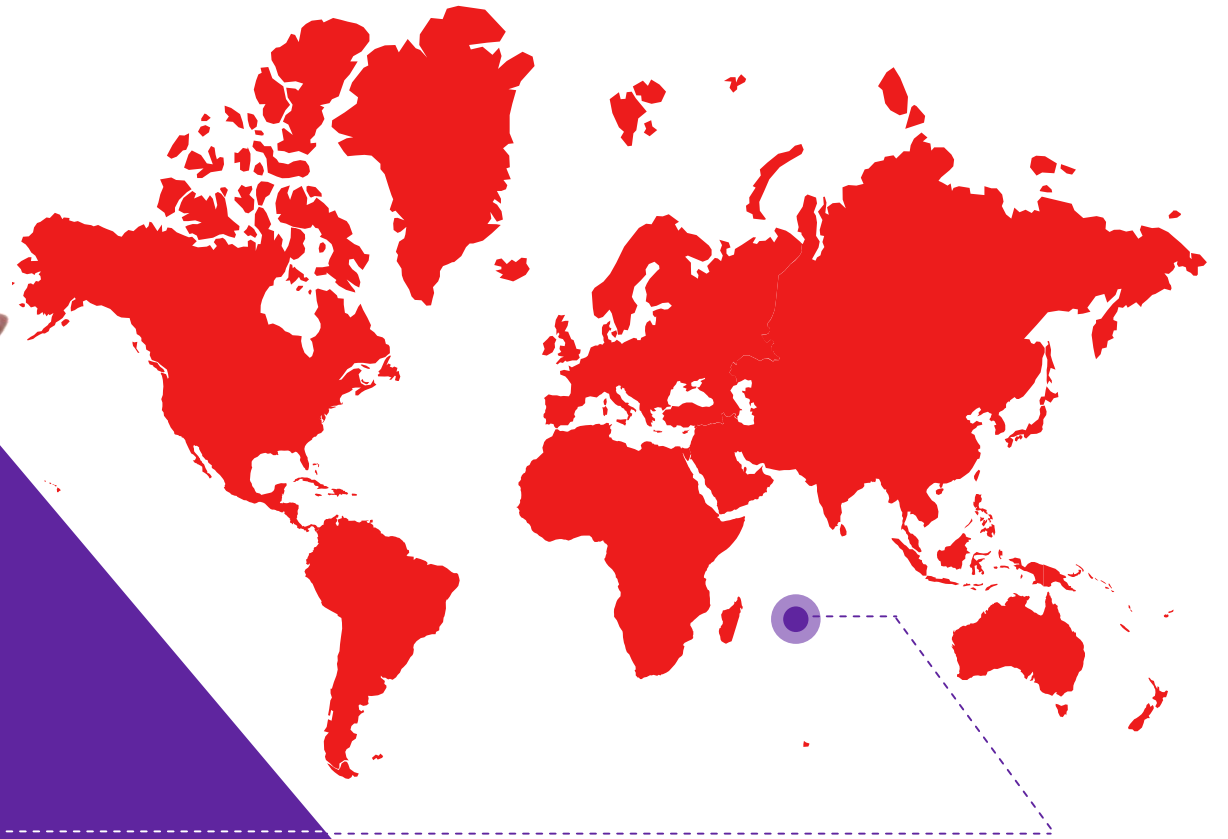




# TIME TO IMAGINE



# Being a... Rodrigues Fruit Bat!



**Location:** Rodrigues Island (in the Indian ocean)

**Habitat:** Dark, damp caves (21 to 32°C)

**Diet:** Flowers and fruit (herbivorous)

**FACT:** Also known as 'flying foxes', these sociable nocturnal fruit bats are a big conservation success story. They were saved from extinction, going from just 100 in the wild to 4,000 thanks to a captive breeding and release programme.



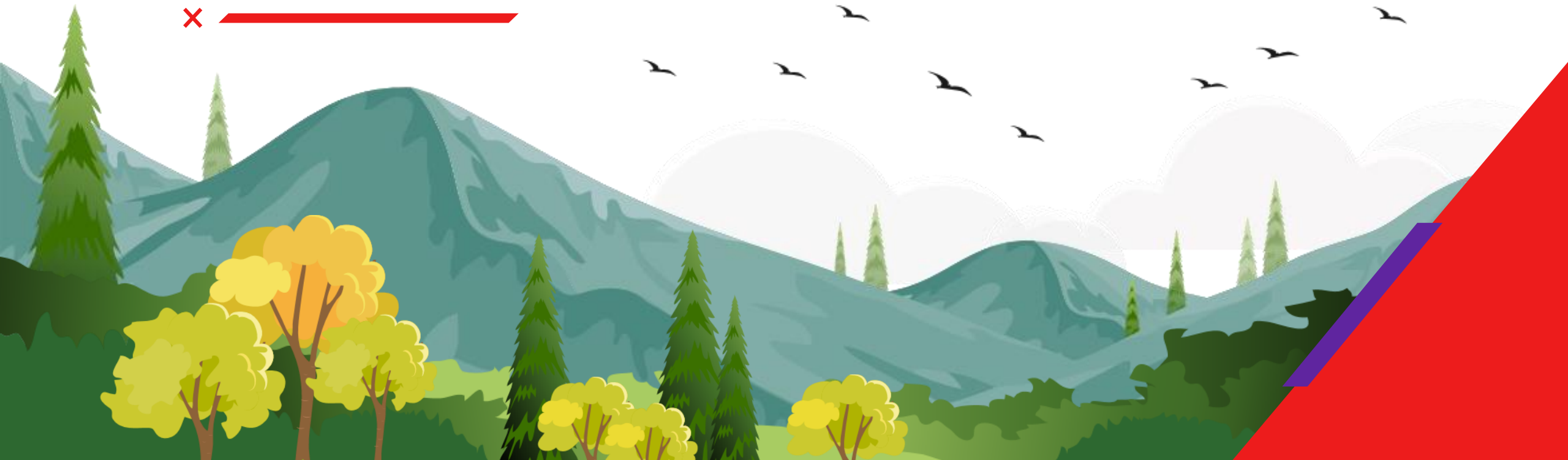
# What do you need to be a healthy, fruit bat?

- A dark enclosure (even during the day)
- A damp and warm place to sleep
- Places to hang upside down
- Space to fly around
- Lots of other fruit bats to socialise with





# TIME TO IMAGINE





**Being a...  
Zoo Keeper!**





# What could you do to look after these animals?

- Feed them the correct diet (in the correct amounts)
- Monitor their behaviours
- Clean their enclosures
- **Monitor their enclosures**
- **Maintain their enclosures**

These tasks require:

- Special technology
- Special training



[PLAY INTRO VIDEO FOR  
DRUSILLAS PARK – COLIN - RS HEROES]

What is Colin's role?



Why is he qualified to do it?



Why is his job so important for the animals?



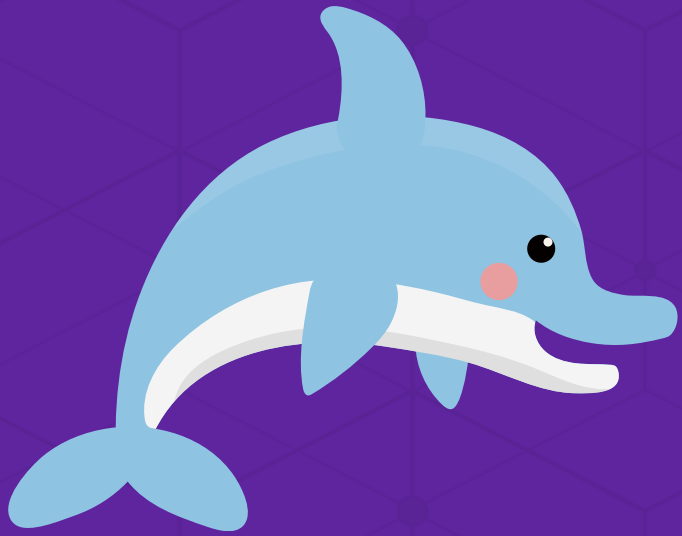
# IN LESSON 2



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**You're going to  
be zoo engineers!**



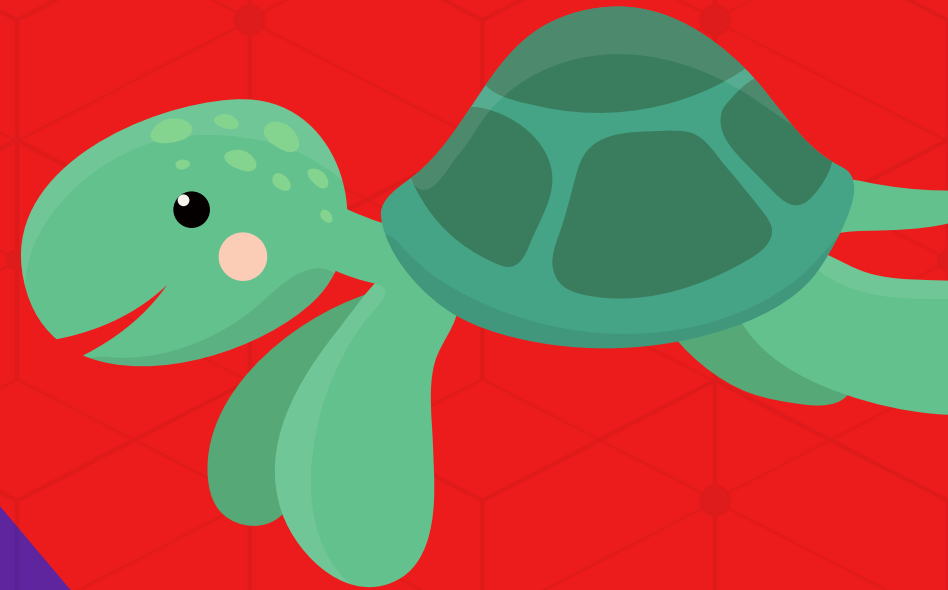


# Homework

## Think about:

What kind of tools/technology you would need to:

- Monitor enclosures
- Maintain enclosures





**SEE YOU IN LESSON 2!**

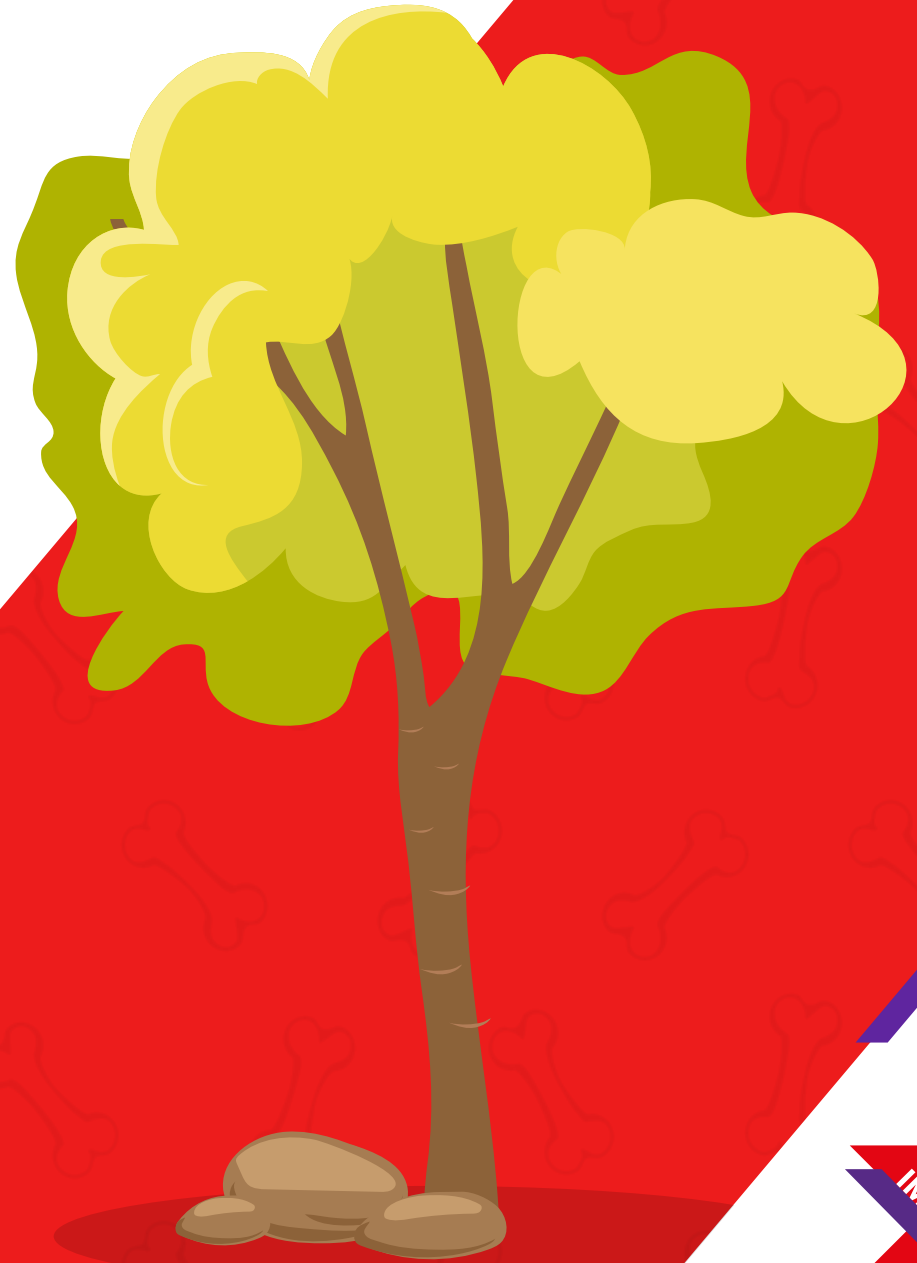


# LESSON 2



# What do all living things need?

- A suitable habitat (a place to live)
- A suitable diet
- Ability to socialise

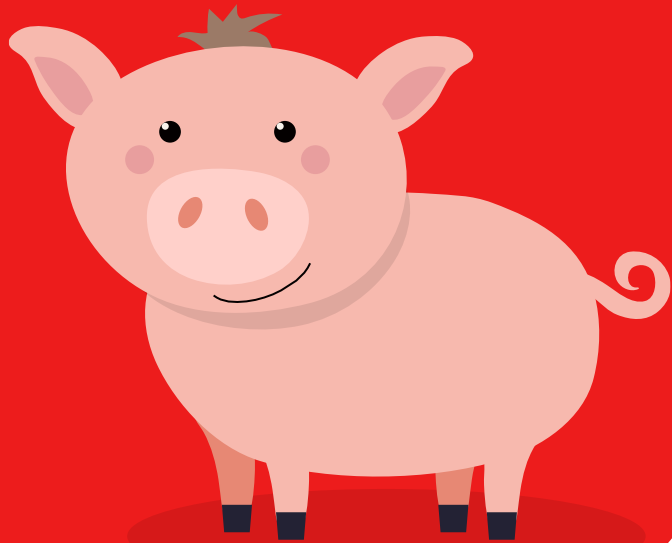




# Think about



How do these  
different animals  
have different needs?



- Ring-tailed Lemurs
- Two-toed Sloths
- Green Iguanas
- Humboldt Penguins
- Rodrigues Fruit Bat



# What do zookeepers do for their animals?

- Feed them the correct diet (in the correct amounts)
- Monitor their behaviours
- Clean their enclosures
- **Monitor their enclosures**
- **Maintain their enclosures**

These tasks require:

- Special technology
- Special training



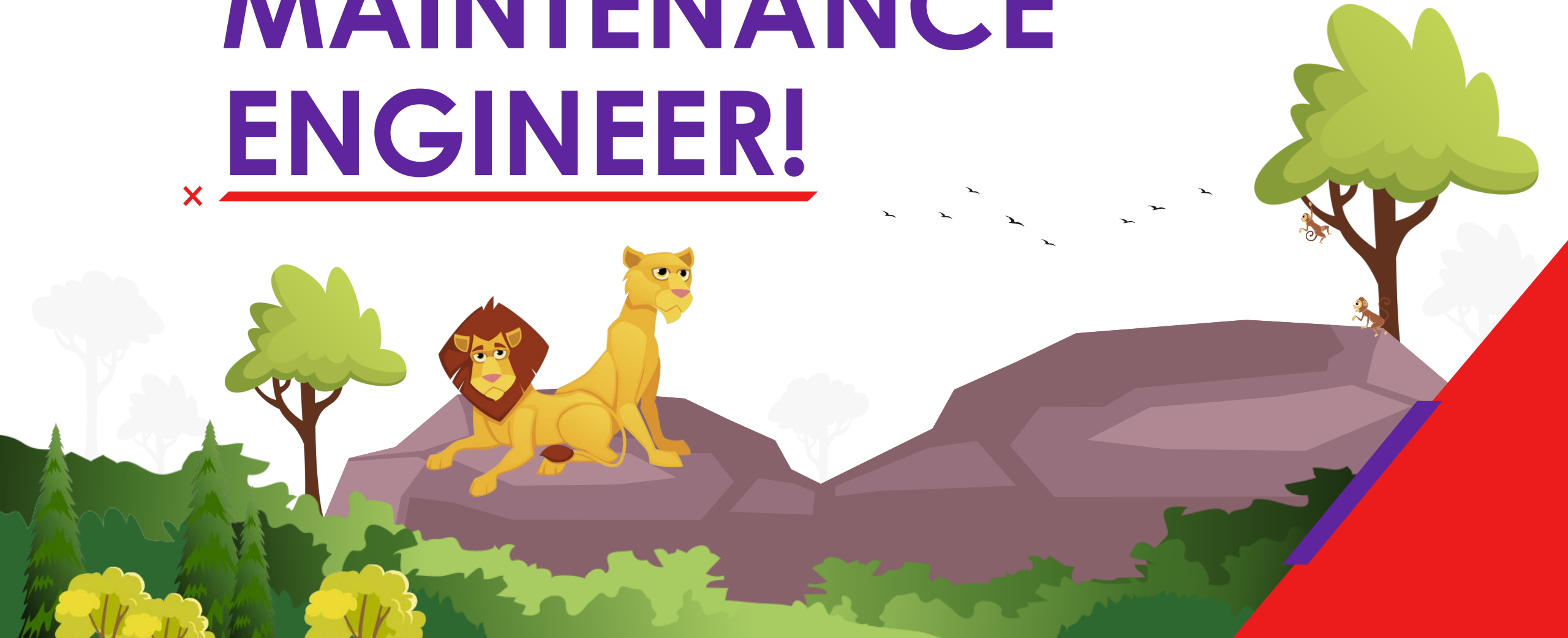
# TIME TO IMAGINE



# BEING... A ZOO MAINTENANCE ENGINEER!



x



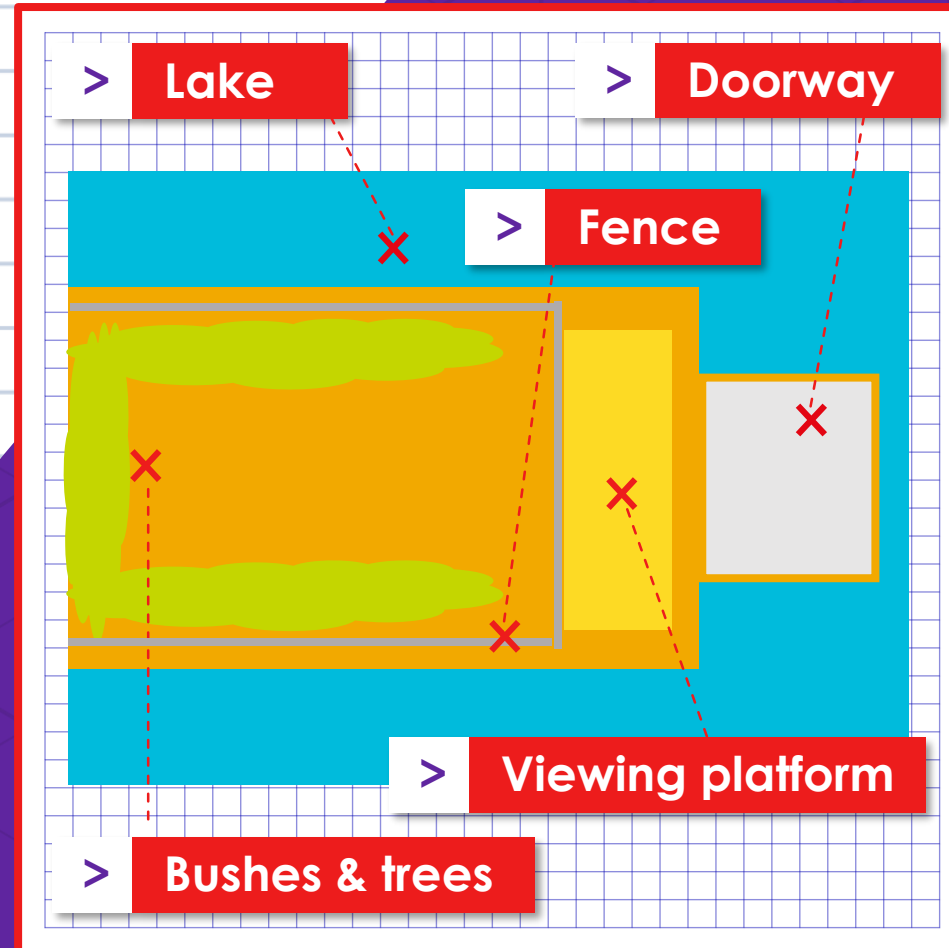


# Design your own smart enclosure

## THINK ABOUT

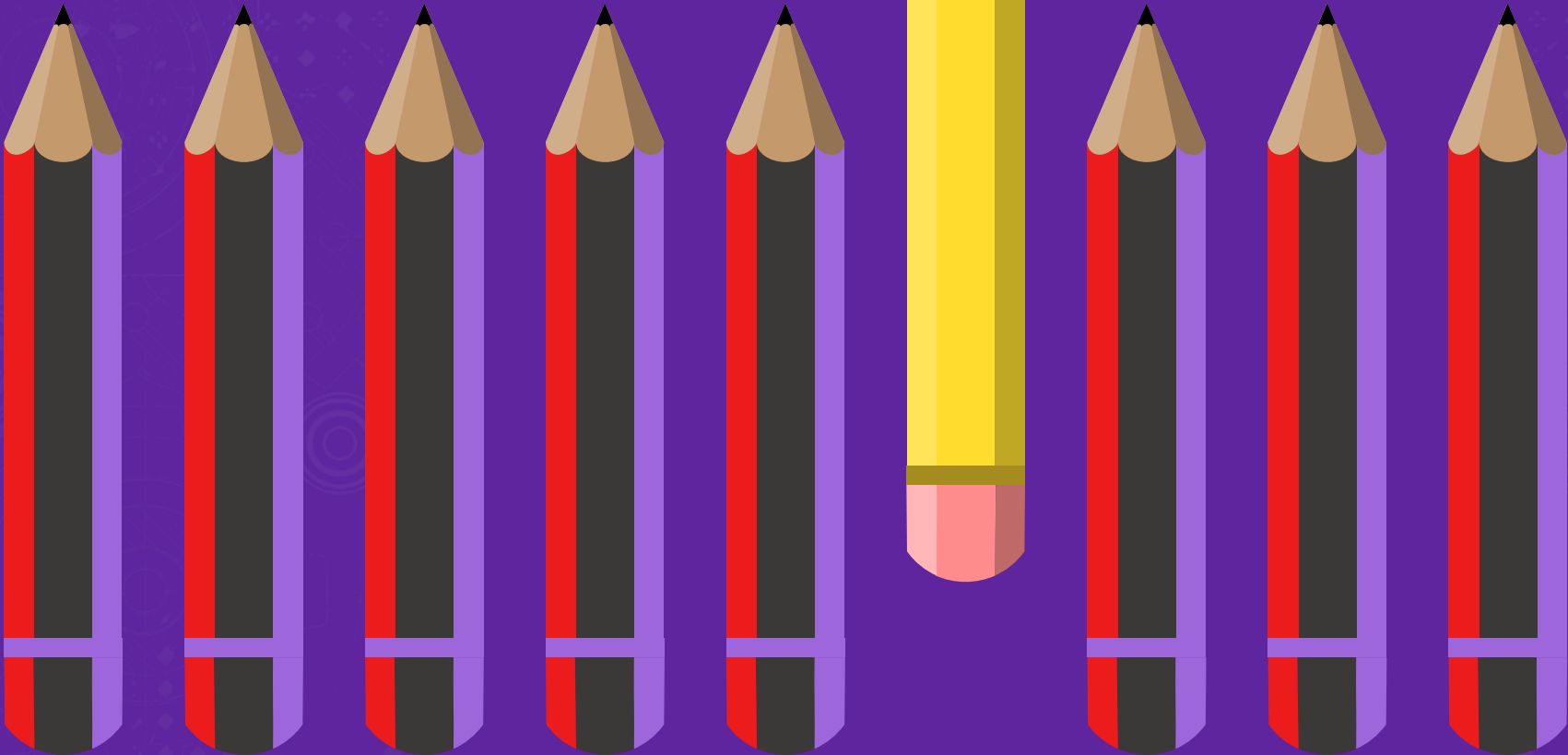
- Outdoors or indoors?
- Light or dark?
- Dry or wet?
- Humid or fresh?
- Hot or cold?
- Big or small?
- Enclosure features (trees, rocks, pools etc.)

## > Sample zoo enclosure



# TIME TO

# DESIGN!



# Think about... technology

## ENCLOSURE

- Indoors or outdoors (or both)
- Type (open, semi-open, closed)
- Walls (glass, fencing, caged, none)

## LIGHT

- Lighting controls

## AIR

- Air quality sensors
- Air humidifier
- Air conditioner

## HEAT

- Heating sensors
- Heaters

> Air

> Light

> Heat

> Light

> Air

> Sample zoo enclosure

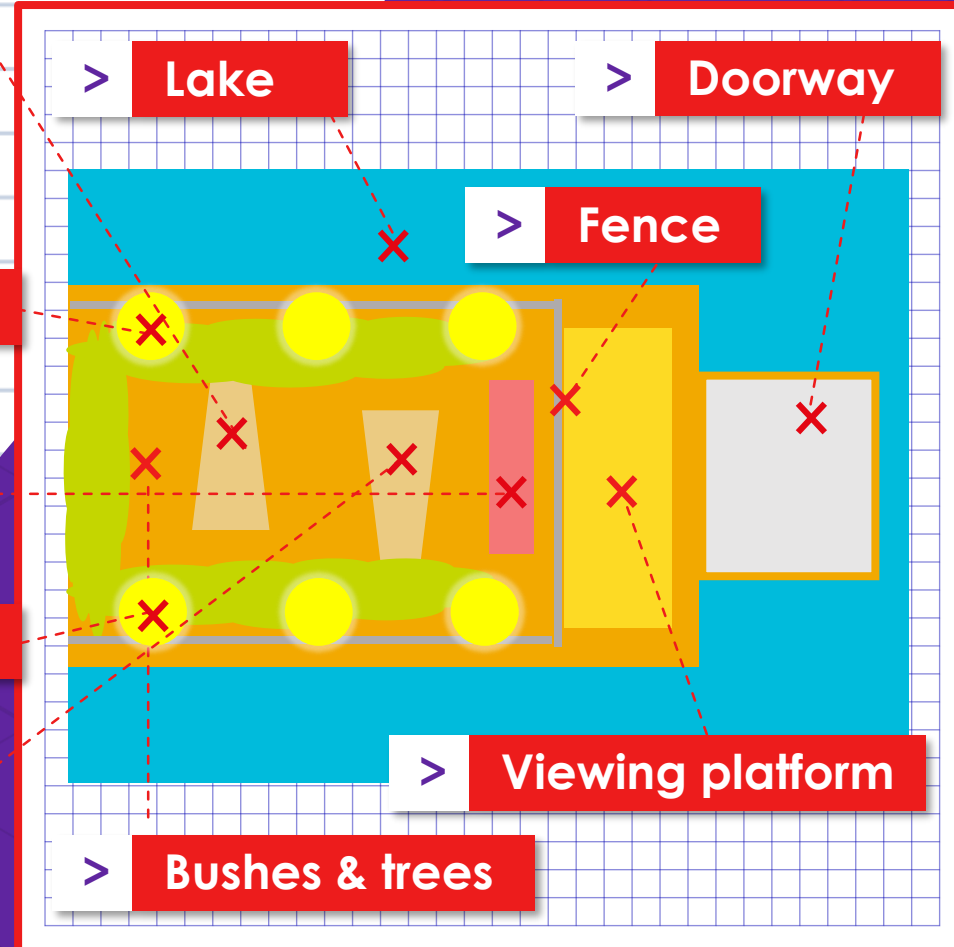
> Lake

> Doorway

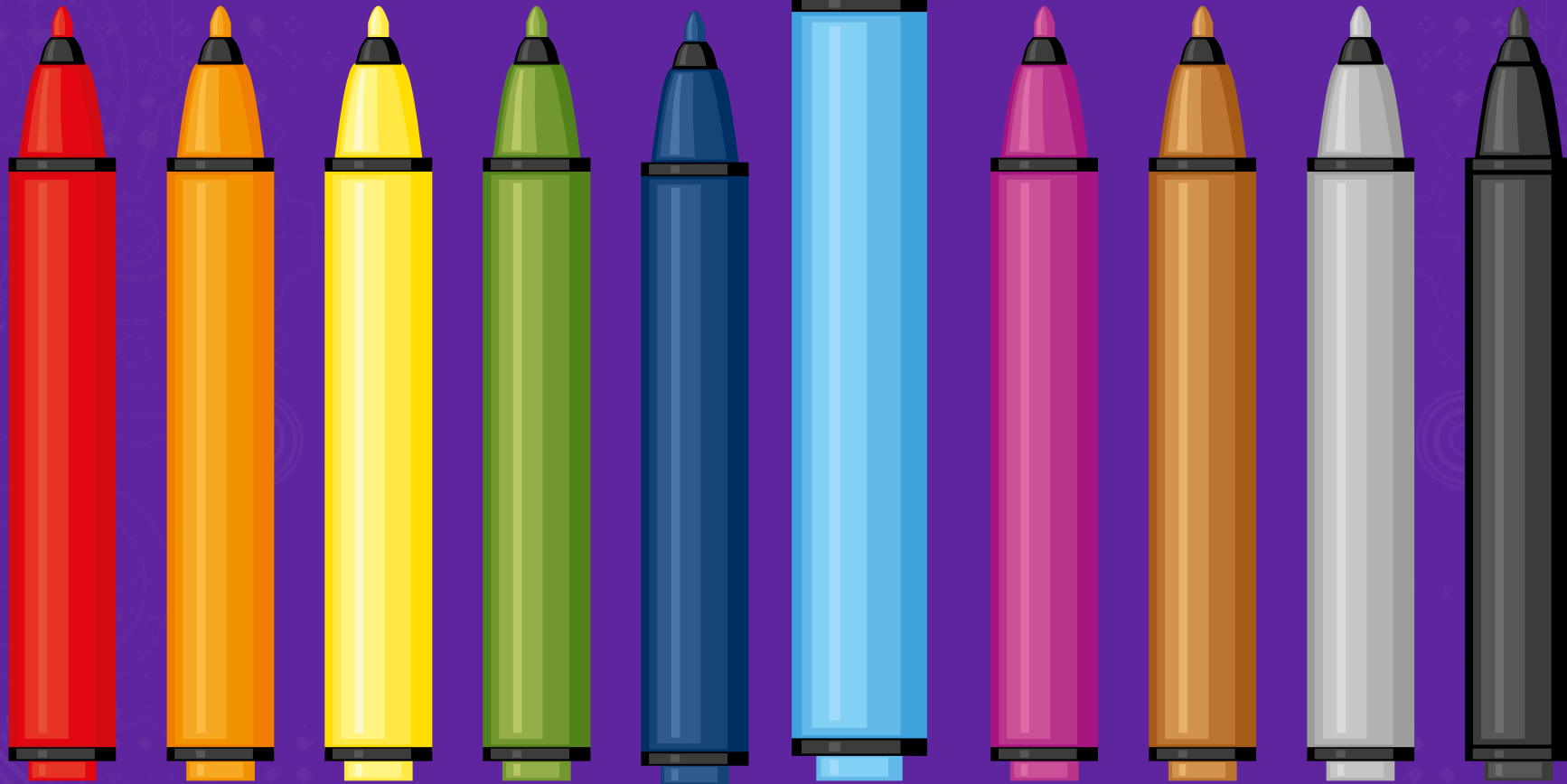
> Fence

> Viewing platform

> Bushes & trees



# TIME TO SHARE!





# Endangered animals are...

- A species at serious risk of 'extinction' (which means dying out completely)



# Why do animals become endangered?

- Habitats are being destroyed (e.g. deforestation)
- Hunting and poaching
- Over-harvesting
- Illegal pet trade
- Animals being forced to live in the wrong places for them
- Pollution
- Climate change





# Why do some people not like zoos?

- Animals are kept in cages
- Animals are not in their natural environment
- Animals are being used for entertainment
- Not all animals breed well in zoos
- They believe it's better to help animals in the wild
- Animals rarely get released into the wild



# Why do we need zoos?

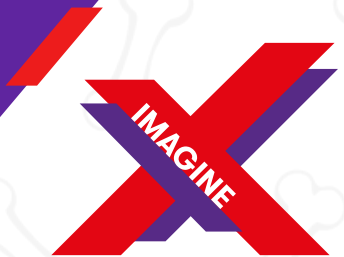
Conservation



Education



Research







# Conservation



- Preservation through captive breeding programmes (such as the lemurs and the bats)
- Animals are donated to other zoos so they can start their own breeding programmes
- If their natural habitats are suitable, release back into the wild

Zoos are the main reason many animals have been saved from extinction.



# Research

- Studying breeding patterns and behaviours
- Developing:
  - Better methods of conservation
  - Better methods of care
  - Better medicines
  - Better ways of helping animals in the wild

Zoos are the main reason many animals have been saved from extinction.



# Education

- Animal appreciation and respect
- Spreading awareness of how and why animals become endangered
- Encourage the preservation of habitats
- Change individuals' behaviour (encourage recycling, reduction of waste, animal care)

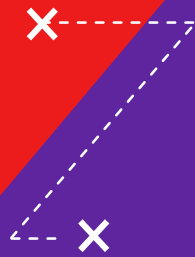
Most zoos put the money they make from selling tickets back into research and conservation.



# Think about



How **you** could help preserve the natural environment of...



- Ring-tailed Lemurs
- Two-toed Sloths
- Green Iguanas
- Humboldt Penguins
- Rodrigues Fruit Bat
- Rodrigues Fruit Bat
- Other endangered animals?







IMAGINE

> an RS Components **ImagineX** resource