

Educators' and Parents' Guide



About Curiosity Cove

At Curiosity Cove, children learn about nature and wildlife through play. This interactive playscape offers multi-sensorial and hands-on experiences that spark curiosity and imagination. Children are encouraged to role-play and explore the world through the eyes of animals, deepening their appreciation of the natural world while engaging in play.



Wetlands

Discover the role of the most important life source of all living things — water.



Forestlands

Explore the places that animals rest, nest and take refuge.



Grasslands

Embark on the vital journey of migration, and see if you can blend in with your surroundings, just like many grassland animals!



Drylands

Find out how animals adapt and survive in extreme desert environments.

Curiosity Cove is open daily

Session 1 : 10.00am – 12.00pm

Session 2 : 12.30pm – 2.30pm

Session 3 : 3.00pm – 5.00pm

Session 4 : 5.30pm – 6.30pm



Download the Mandai App
for more information



Planning a Learning Journey

1 Determining Learning Outcomes

Curiosity Cove offers opportunities to achieve learning outcomes for any of the five learning areas in the NEL framework. Here are some examples:

- **Aesthetics & Creative Expression:**
Create a tune and explore music patterns at the Singing Tree.
- **Discovery of the World:**
Explore tiny life forms inside the Microscopic Canopy.
- **Health, Safety & Motor Skills Development:**
Enhance gross motor skills as children navigate terrains across different habitats.
- **Language & Literacy:**
Engage in conversations about animals, movements and habitats.
- **Numeracy:**
Investigate patterns, sizes and shapes in nature.

2 Find Out More

Visit the webpage [here](#) for more information about Curiosity Cove.

Education Programmes:

Curious Creatures: Who Lives Here?
Curious Creatures: Who's Chasing Who?
Curious Creatures Overnight Camp

Find out more [here](#).

Self-guided Learning Journey:

- Review this resource and use it to facilitate learning outcomes (from pages 4 to 18).
- Watch our Video Guides [here](#) for simple tips to navigate Curiosity Cove.

Preparation for a fruitful learning journey:

- Brief your children on Curiosity Cove's rules and regulations before the learning journey.
- Watch Ranger Buddies Virtual Show – Curiosity Cove Part 1 (link [here](#)) and Part 2 (link [here](#)).

3 Get In Touch

Click [here](#) to request for information on admission charges and to register your interest in visiting Curiosity Cove.

Explore our specially curated preschool programmes [here](#). To secure your desired slot, please register your interest with us three months in advance.

Important things to note:

- Each time slot booking is two hours.
- For safety reasons, all guests to Curiosity Cove must wear grip socks.
- Each admission ticket includes a pair of grip socks.
- Guests enjoying complimentary admission are required to purchase a pair of grip socks at \$3 each.





Suggested Activities for Self-Guided Learning Journey

Pre-Visit Activity

Let's make Animal Puppets!

Invite children to design and craft their own animal puppets before the visit to Curiosity Cove. Encourage them to bring these puppets along on their learning journey, adding imagination and excitement as they explore the play zones in Curiosity Cove.

1 Gather your children and say:

“ Today we're going to make puppets of animals that can be found in the different habitats at Curiosity Cove! ”

2 Use the animal character cards (Pages 6 and 7) and ask guiding questions such as:

What does it eat?

How does it move?

Where does it live?

3 Have each child pick one animal to work with. Use the templates provided (Pages 8 and 9) or guide children to craft their own puppets using various materials.

Optional challenge: Encourage the use of recycled materials.

4 Prompt children to decorate their puppet with colours, patterns, or accessories that reflect their animal's character.

5 Invite them to introduce their puppet to the class. Encourage them to make the puppet move or “speak” in a way that shows its personality.

Key Learning Outcomes:

- **Discovery of the World:**
Learn about animals' habitat, diet and behaviours.
- **Aesthetics & Creative Expression:**
Design and role-play with puppets.
- **Health, Safety and Motor Skills Development:**
Develop fine motor skills through cutting, gluing and painting puppets.



Wetland

Animal: Common Greenback Frog

Diet: Insects, spiders and other small invertebrates

Fun Facts

- Long sticky tongue to catch prey.
- Long, powerful hind legs allow them to leap far away.
- Webbed feet to help them swim in water.
- Can live on both land and water.



Rainforest

Animal: Orangutan

Diet: Fruits, leaves, and tree barks

Fun Facts

- They are apes. Unlike monkeys, they do not have a tail.
- Special hand and feet and long limbs help them swing from tree to tree.
- Build nests using leaves and twigs to sleep at night.



Grassland

Animal: Cheetah

Diet: Gazelle, hares and wildebeest

Fun Facts

- Spots help cheetahs camouflage in tall grass. (camouflage means to blend in with the surroundings)
- The fastest land animal. Long legs and tail, and sharp claws enable them to reach speeds of up to 115km/h (faster than the speed limit for cars on our highway) .



Desert

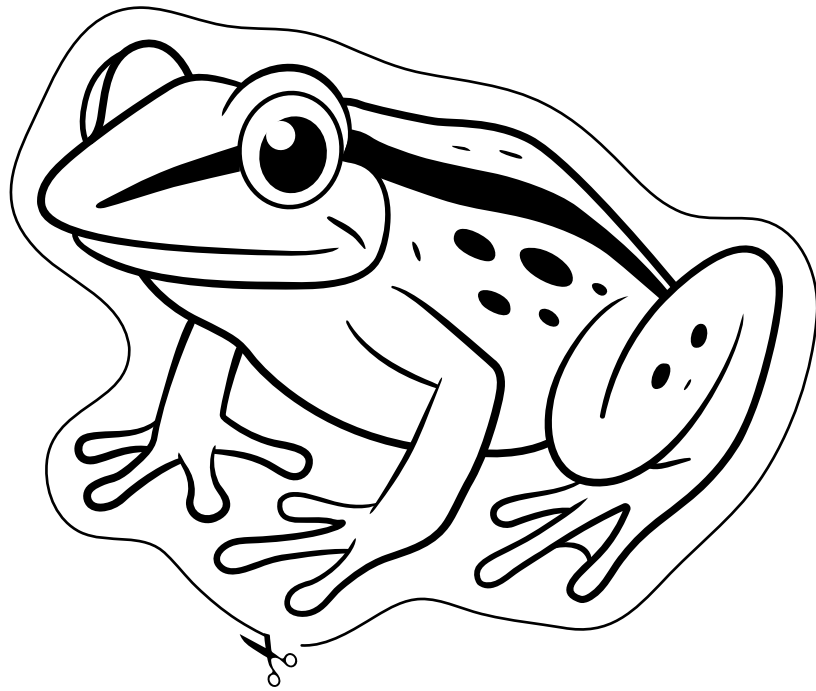
Animal: Sidewinder Rattlesnake

Diet: Small mammals like rats, rabbits and squirrels

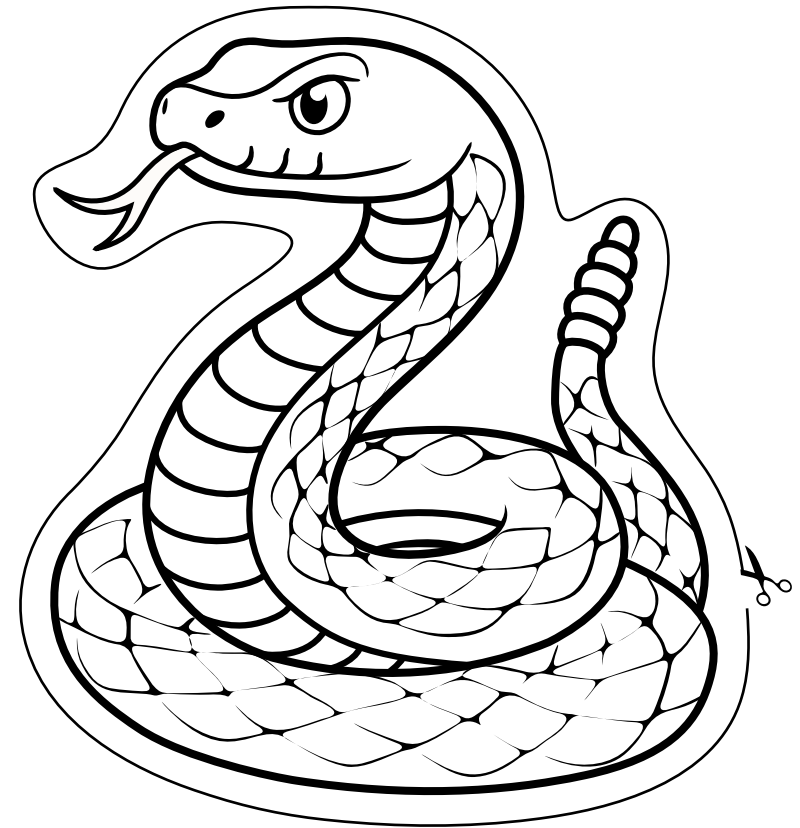
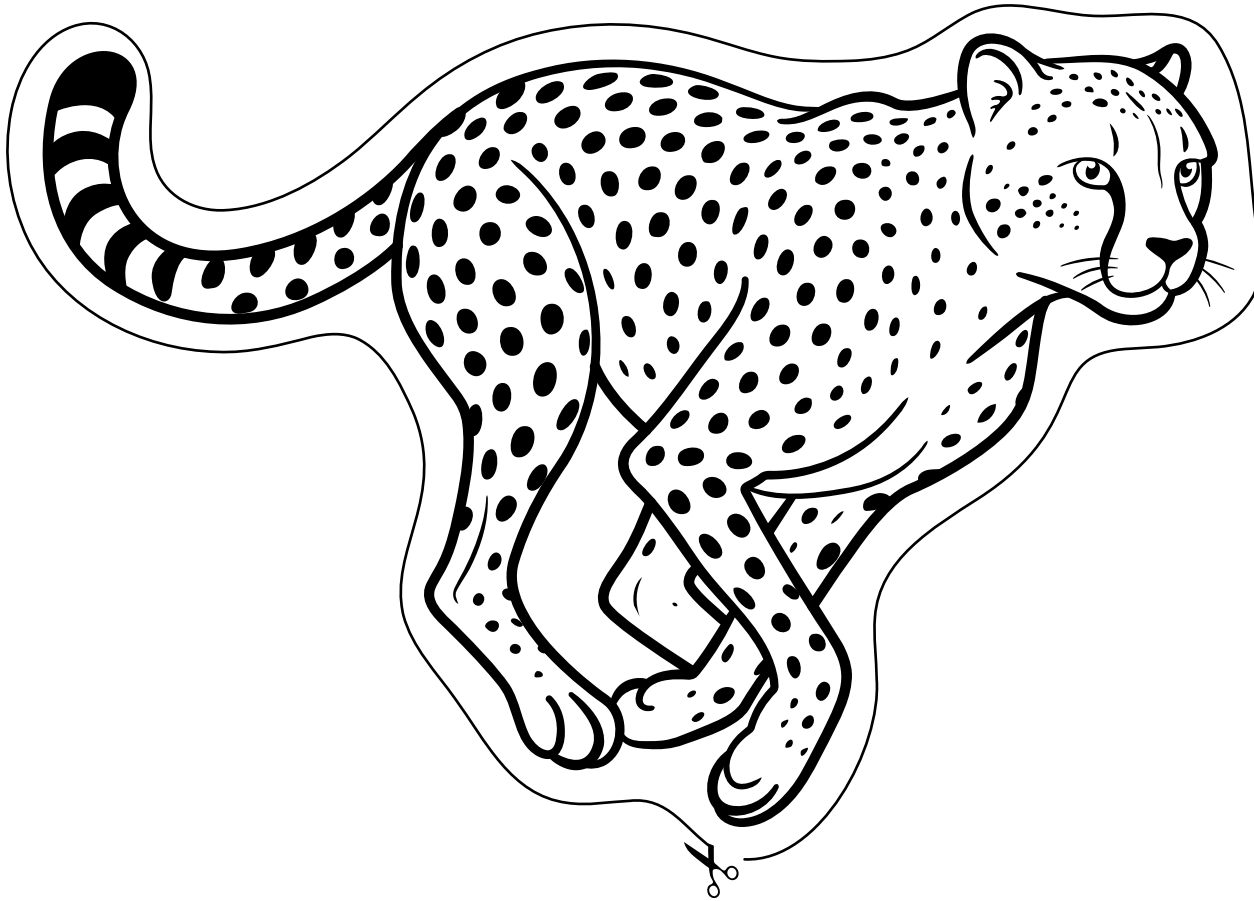
Fun Facts

- Rattlesnakes use the special pits on their faces to detect the heat of potential prey.
- They rattle the end of their tail to scare away enemies.
- They hide under the sand and wait for the animal to come close, then attack quickly.
- They move across the desert in a wave-like motion, with only a few parts of its body in contact with the ground at any time.

Animal Puppet Template



Animal Puppet Template



Pre-Visit Activity

Let's learn about habitats!

Invite children to explore the four different habitats at Curiosity Cove, including wetlands, forestlands, grasslands and drylands through movements, sounds, and imaginative play.

- 1 Show children photos or videos of the four habitats. Ask guiding questions such as:

What do you observe about this habitat?

Use five words to describe this habitat.

What animals do you think live here?

What sounds or movements do these animals make?

Refer to Pages 11 and 12 for key features of each habitat, along with animals that live in those habitats.

- 2 Introduce the animal character cards (Pages 6 and 7). Discuss how each animal moves within its habitat.

- 3 Call out an animal or habitat from the cards and have children move around the space like that animal would. Encourage them to use sounds, gestures and pretend actions.

Bonus challenge: If children have completed the animal puppets on pages 8 and 9, they can use the puppet as their avatar instead.

- 4 Gather children in a circle to reflect on their experience. Encourage them to share one thing they learned about an animal or its habitat.

Key Learning Outcomes:

- **Discovery of the World:**
Recognise different habitats and their key features.
- **Language and Literacy:**
Expand vocabulary e.g. encourage usage of descriptive words for animals, their movement, habitats etc.
- **Health, Safety and Motor Skills Development:**
Develop gross motor skills through hopping, swinging, running and slithering.



Did you know?

In Singapore, wetlands include the mangroves and mudflats at Sungei Buloh Wetland Reserve and the freshwater marshes at Kranji Marshes.

Wetlands

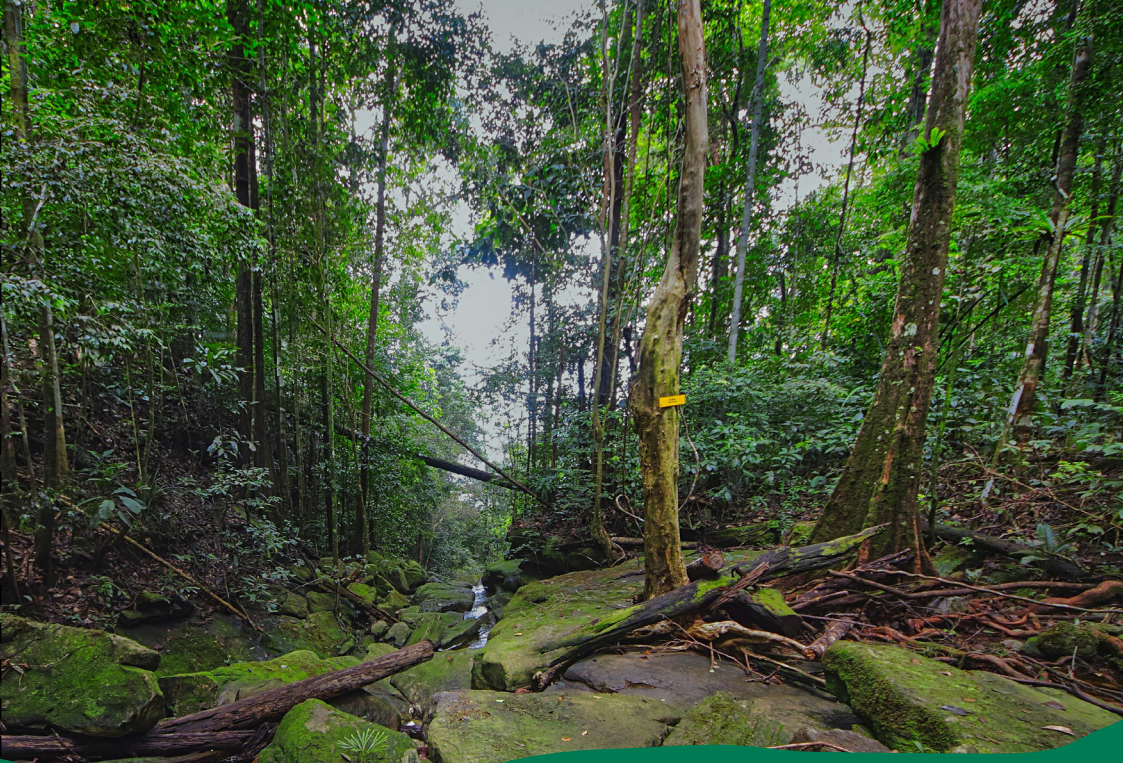
A wetland is a place where the ground is wet or covered with water for part of the year. The water can come from underground, nearby rivers or lakes, or even the sea. Sometimes, the water is salty, and sometimes it is fresh.

Words associated with wetlands:

Muddy, wet, water plants, mangrove, pond, algae, damp

Animals that live in and around wetlands:

Crab, crocodile, snake, mudskipper, heron, etc



Forestlands

A tropical rainforest is a type of forestland that stays green all year because it is warm and rainy most of the time.

Rainforests have four layers:

- Emergent – the tallest trees that rise above others
- Canopy – the leafy treetops where most animals live
- Understorey – the young trees and shrubs
- Forest floor – dark and damp with fallen leaves, streams and rivers

Words associated with rainforests:

Green, tall trees, vines, humid, leafy, damp, jungle, shade

Animals that live in rainforests:

Butterfly, tortoise, tiger, lizard, hornbill, monkey, etc



Grasslands

Grasslands are big, flat open areas where grasses grow everywhere and only a few trees are found.

Grasslands happen in places where there is not enough rain to support the growth of a forest, but not so little that a desert forms. The land is usually dry, sunny and windy.

Words associated with grasslands:

Flat, dry, grassy, open, windy, sunny, wide, golden, savanna

Animals that live in grasslands:

Zebra, wildebeest, giraffe, cheetah, lion, birds, etc



Drylands

A desert is a type of dryland that gets fewer than 25 cm of rain in a year. Deserts cover more than one-fifth of the land on Earth.

Some deserts are hot, like the Sahara in Africa, while some are cold, like the Gobi in Asia. Only about 20% of deserts are sandy.

Words associated with deserts:

Dry, sandy, rocky, hot, cold, empty, cactus, dunes

Animals that live in deserts:

Camel, fennec fox, tortoise, snake, dung beetle, etc

During Visit Activities

Animal Adventure Dramatic Play

Invite children to role-play as an animal or use their animal puppets to role-play a journey through the different habitat zones at Curiosity Cove. They will narrate their animal's adventure, interact with peers, and complete small "missions" in each zone.

- 1 Gather your children and introduce the activity.
If they have their own animal puppets:
To go on an adventure through the four different habitat zones with their animal puppets.
If they do not have animal puppets:
Children will take on the perspective of a chosen animal that lives in any of the four habitat zones.

- 2 As children move through the habitat zones, use guiding questions to spark imagination:

How does your animal move or get across?

What sounds does it make or hear?

What happens if it meets another animal?

What does it do when hungry, tired, or scared?

- 3 Assign small missions in each habitat zone, e.g.:
Wetlands: Balance on a rock, log or leaf
Forestlands: Climb to a safe spot to sleep
Grasslands: Find a hiding place from a predator
Drylands: Search for water to drink
- 4 Gather children in a circle for reflection time:

What did you learn about where your animal lives?

What did your animal enjoy most?

What was the hardest part?

Key Learning Outcomes:

- **Social and Emotional Competencies:** Build empathy by taking the perspective of animals; practise turn-taking and cooperative play.
- **Aesthetics and Creative Expression:** Express ideas and imagination through role-play and dramatic storytelling.
- **Health, Safety and Motor Skills Development:** Practise gross motor (crawling, climbing, jumping) and fine motor skills (puppet manipulation).

During Visit Activities

Other zonal activity ideas: Forestlands Zone

The rainforest is home to more than half of the world's plants and animals. Discover this amazing diversity at the Forestlands.



Activity Ideas:

- Head to the Microscopic Canopy to discover animals living in the four forest layers. Challenge children to a game of I Spy to see who can find an animal first.
- At the Singing Tree, interact with the features to produce a melody of sounds and lights. As a class, create your own unique music. Incorporate numeracy by making patterns and practising counting skills.

Extend your visit

Reinforce concepts introduced through play with an authentic encounter at Singapore Zoo where children can see and hear the animals they've imagined up close. Visit the following exhibits and use the resources to help you plan your learning journey:

Orangutan Island

Animals We Love: Orangutans for See-Think-Wonder prompts and Nature Loose Parts activity.

Video Guide – Rainforest Animals in Danger (Orangutan Island) and its accompanying **Tip Sheet** for children to find out what they can do to help rainforest animals in danger.

Fragile Forest

Animals We Love: Mousedeer for See-Think-Wonder prompts and I Spy activity.

Video Guide – Fragile Forest for activity prompts, and its accompanying **Tip Sheet** with pre, during and post-visit activity suggestions.

Tiger Exhibit

Animals We Love: Tigers for See-Think-Wonder prompts and Nature Loose Parts activity.

During Visit Activities

Other zonal activity ideas: Grasslands Zone

Teach about prey-predator relationships at the Grasslands.



Extend your visit

Reinforce concepts introduced through play with an authentic encounter at Singapore Zoo where children can see and hear the animals they've imagined up close. Visit the following exhibits and use the resources to help you plan your learning journey:

Wild Africa

Video Guide – Wild Africa for activity prompts, and its accompanying **Tip Sheet** with pre, during and post-visit activity suggestions.

Activity Ideas:

- Have some children play pretend as zebras and hide among tall grass. Others can role-play as cheetahs to hunt the 'zebras'. Take turns.
- At the Watering Hole, have children try to cross from one side to the other by stepping on the rocks. Watch out for the crocodile!
- Both prey and predators gather at the watering hole in search of water. Have children look at the animals' reflections in the water and discuss who is predator and who is prey.

During Visit Activities

Other zonal activity ideas: Drylands Zone

Beneath the desert sand, animals thrive. They dig burrows to hide from danger and stay cool in the hot sun. Some even use their tunnels to store food or move around.



Activity Ideas:

- Play a game of charades at the Underground Galleries. Have children copy the actions of a chosen desert burrower on the interactive wall while the rest guess which animal it is.
- Meerkats do sentry duty at the top of their mounds to look out for predators. Take turns being a foraging meerkat or the sentry on lookout.

Extend your visit

Reinforce concepts introduced through play with an authentic encounter at Singapore Zoo where children can see and hear the animals they've imagined up close. Visit the following exhibits and use these resource guides to help you in planning your learning journey:

RepTopia/Reptile Kingdom

Learn more about snakes and other reptiles! Use [Video Guide – Reptile Kingdom](#) for activity prompts, and its accompanying [Tip Sheet](#) with pre, during and post-visit activity suggestions.

Great Rift Valley of Ethiopia

Learn more about the animals that live there, and have children describe the meerkat and hamadryas baboon exhibits.

Meerkat – observe how they take turns to do sentry duty.

Hamadryas baboon – observe how they behave and interact. Play a game of "I Spy" to get children to notice the individual baboons and their behaviours.

Post-Visit Activity

Let's build an animal habitat diorama!

Invite children to recreate the habitat of their animal puppet and bring the puppet to life within it. Children will demonstrate understanding of animal behaviours, habitat features, and interactions through creative play.

- 1 Recap their experiences at Curiosity Cove:



- 2 Brainstorm with children on the features of their habitat diorama. Consider where to place the habitat features (e.g., trees, water, soil). Here are some considerations:

Food and water

Other animals

Shelter or hiding spots

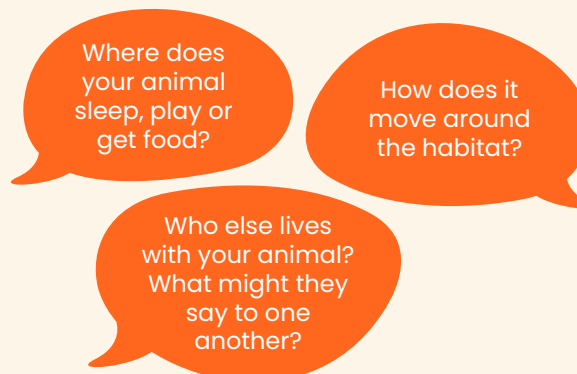
Space

- 3 Start building the habitat diorama using natural/recycled materials.

Parental Involvement: Have parents help prepare the materials, or get them involved in the building process.

- 4 Place the animal puppets and other newly created animals into the diorama. Prompt children to "act out" behaviours of the animals in the diorama (e.g., frogs hopping, orangutans eating fruits, cheetah stalking prey).

- 5 Initiate a show-and-tell session for children to narrate a story about their animal's day in the habitat. Here are some guiding questions:



Key Learning Outcomes:

- **Social and Emotional Competencies:**
Build empathy by taking the perspective of animals.
- **Language and Literacy:**
Narrate stories and describe habitat features and animal actions.
- **Aesthetics and Creative Expression:**
Design a habitat and act out animal behaviours.
- **Discovery of the World:**
Demonstrate understanding of habitats and animal adaptations.

Other Post-Visit Activities



1 Animal Puppet Storybook

Compile children's illustrations and stories into a class book showcasing their animals' adventures.

Instructions:

- Read a story set in one of the habitats visited. Have children verbalise or act out what their animal puppets would do.
- Each child creates a page illustrating what their animal did in their habitat with the following prompts as examples:
- My animal is a _____.
- It lives in the _____.
- It climbed on _____ and hid under _____.



2 Native Wildlife

Zoom in to learn about the different habitats in Singapore and our local wildlife.

Resources Available:

Ranger Buddies Virtual Show: Singapore WOWlife

- Watch the show [here](#) to learn about Singapore's wild animals.
- Complete the activities [here](#) and [here](#).

Ranger Buddies Virtual Show: Not Bugged By Bugs

- Watch the show [here](#) to learn about the insects that live in our rainforests.



3 Helping Our Animal Friends

Have children explore the challenges animals face in different habitats and think about ways they can help.

Instructions:

1. Pick one habitat and discuss the threats animals face. Use page 19 as a guide or research together with your children.
2. Ask children to draw or suggest one way they can help the animals: "What can we do to keep them safe?"
3. Compile their ideas into a class pledge poster to display in the classroom.

Resources Available:

Watch the Ranger Buddies Fights Deforestation show [here](#) to learn about deforestation. Complete the activities [here](#).

Help Our Animal Friends!



Wetlands

Dirty water from factories and farms, and rubbish on land can enter wetlands and make it hard for animals to live in.

This is called **pollution**



Keep waterways clean by throwing rubbish into bins.
Join wetland clean-up days with your family or school.



Forestlands

People are cutting down trees to get wood for paper making, producing electricity, and farming.

This is called **deforestation**



Join tree-planting activities.
Use less paper and recycle.
Ask your parents to buy sustainable rainforest products.



Grasslands

Over-farming and clearing land for crops (plants grown for food) can hurt the grasslands.

This is called **habitat loss**

Read books and watch videos to learn more. Share your knowledge with family and friends, and let them know the importance of protecting grasslands (and other habitats).



Drylands

Less rain and hotter weather can dry up water holes. It can also cause more wildfires that burn dryland trees and bushes.

This is caused by **global warming**

Use water wisely. Switch off the tap when brushing your teeth or washing your hands, and take shorter showers.



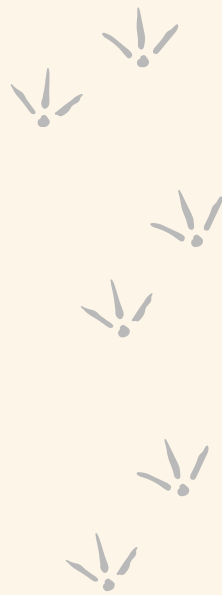


Animal Glossary

Animal Tracks



Elephant



Greater Flamingo



Lion



Frog



Siamese Crocodile



Crow

Animal Tracks



Duck



Orangutan



Mousedeer



Hippopotamus



Ostrich



Antelope

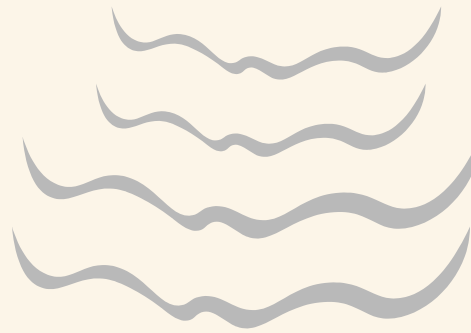
Animal Tracks



Desert Goat



Saharan Desert Camel



Rattlesnake



Kangaroo Rat



Roadrunner

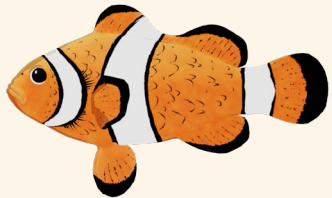
Wetlands

Try spotting
these animals at
Reef Retreat

Seahorse



Clownfish



📍 Underground Galleries



Hermit Crab

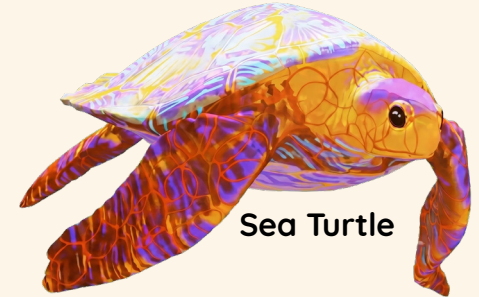


Octopus

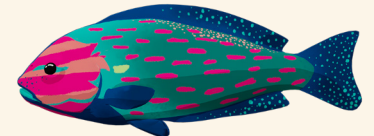


River Shark

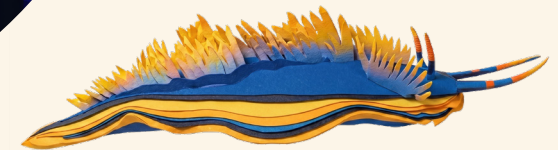
Sea Turtle



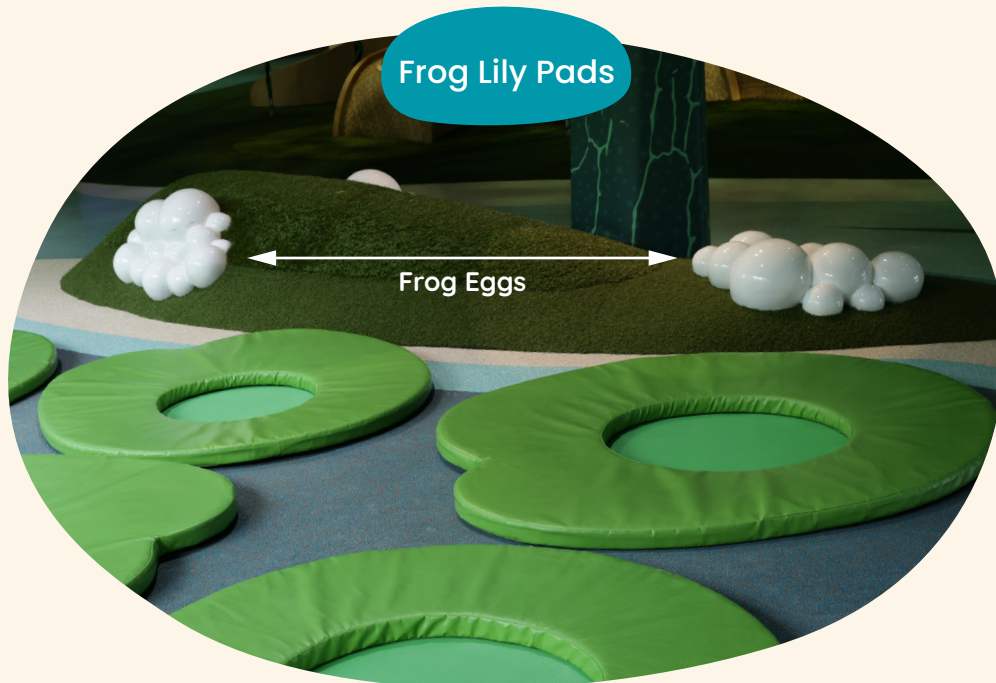
Wrasse Fish



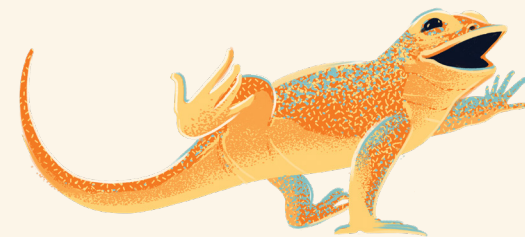
Nudibranch



Wetlands

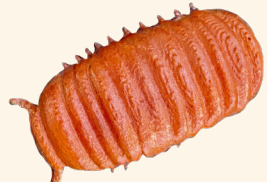


Tree Frog



Shovel-snouted
Lizard

Forestlands



Pill Millipede



Lanternfly



Gecko



Iridescent Beetle



Malaysian
Jewel Centipede



Weevil Insect
Larvae



Rhinoceros
Beetle



Pangolin



Tree Frog



Forest
Cockroach



Land Snail



Try spotting these
animals hiding
under leaves,
rocks and logs

Forestlands

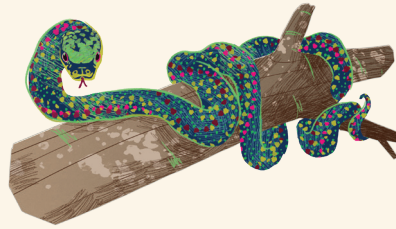
On the Trees



Barbet



Tarsier



Paradise Tree Snake



Hornet Nest



Squirrel



Buffy Fish Owl



Hornbill



Asian Hornet

Forestlands

Orangutan
Nests



Spider Web



Baya Weaver
Nests



Orangutan



Golden-silk Orb Weaver



Baya Weaver

Forestlands



Nest and Eggs



Crow



Bowerbird



Monitor Lizard



Ostrich

Forestlands

Try spotting
these animals at
**Microscopic
Canopy**



Lanternfly



Gecko



Land Snail



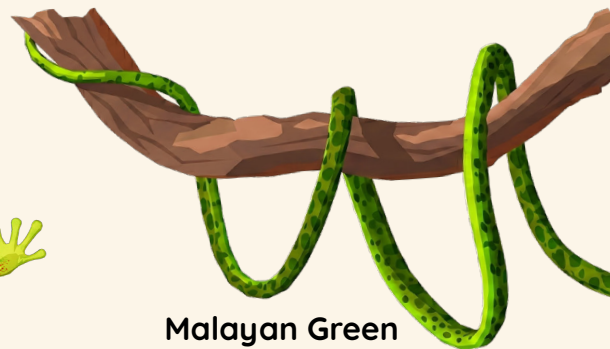
Eight-spotted
Crab Spider



Iridescent Beetle



Tree Frog



Malaysian Green
Whipsnake



Copper-throated
Sunbird



Black Ant



Katydid



Atlas Moth



Hercules Beetle

Grasslands



Elephant

Some of these animals are hiding among the grass. Can you spot them?



Hyena



Cheetah



Rhinoceros



Lion

Grasslands



Ostrich



Lion



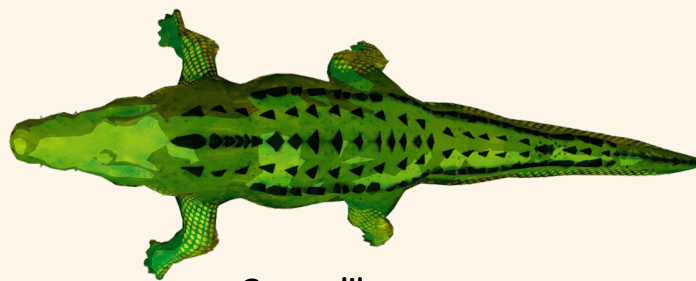
Elephant



Cheetah



Buffalo



Crocodile



Mongoose



Giraffe



Rhinoceros



Hyena



Zebra



Wildebeest

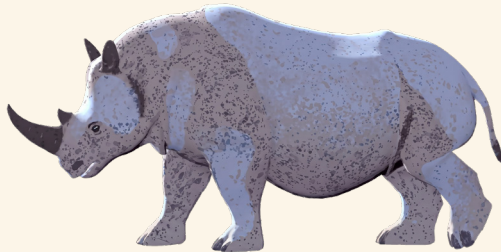
Grasslands



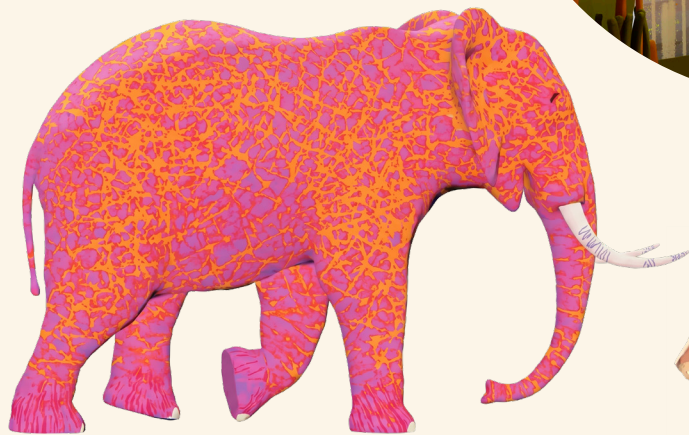
Wildebeest



Hyena



Rhinoceros



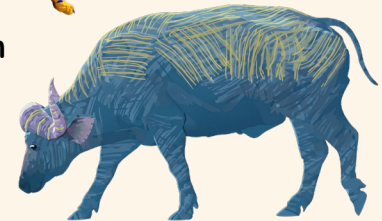
Elephant



Try spotting
these animals at
Nature's Theatre



Cheetah



Buffalo



Ostrich



Giraffe



Mongoose



Zebra



Lion

Drylands



Nubian Ibex

Rock Wall



Bat Cave



Long-eared Bat

Meerkat Burrow



Meerkat

Giant Snake Belly



Horned Viper

Drylands



Fennec Fox



Meerkat



Silver Ant



Jerboa



Try spotting
these animals at
Underground
Galleries



Hyrax



Golden Mole



Desert Monitor



Scorpion