

My Nature Field Journal



Anhimaceros albertis



Pelargopsis capensis



Clitoria ternatae



Cinnamomum iners



HELLO EXPLORER!

Are you ready to discover the natural world around you? There is no better way than visiting a nearby park, garden or forest for a walk with your curiosity and the items below.

This Nature Journal belongs to:

Name:

Age:

I love nature because:

I'm interested in:



☐ Birds



☐ Flowers



☐ Mammals



☐ Trees



☐ Reptiles



☐ Sketching



☐ Amphibians



☐ Nature Walks



☐ Insects

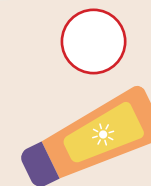


☐ Others:

Things to pack for your walk:



☐ Cap



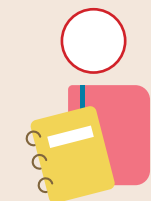
☐ Sunscreen



☐ Mosquito repellent



☐ Water bottle and snacks



☐ Notebook



☐ Pen or pencil



☐ Umbrella



☐ Map



☐ First aid kit



TRAIL TIPS!



Be Prepared: Pack all the items you need and read the rules of each nature area before you start your walk.



Walk and Talk Quietly: Animals hide when they hear loud noises. Walk quietly and you will spot more of them.



Observe from Afar: Please do not touch or feed the animals, they have enough food in the forest.



Take Your Time: Use your senses to observe the world around you during your walk.

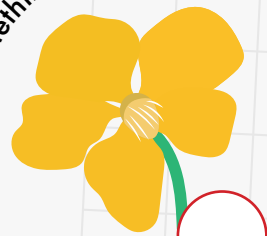
Take only pictures.
Leave only footprints

SENSES

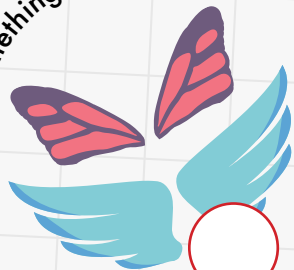
Now that you are ready for your walk, remember to use your senses to take in the world around you. Check off your discoveries below.

Look! I can see:

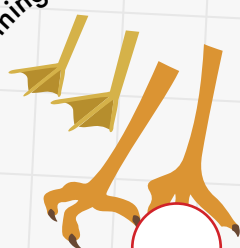
Something yellow?



Something with wings?



Something with 2 legs?



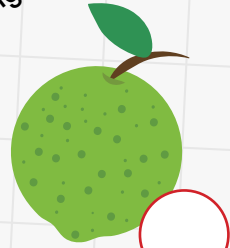
Something brown?



Something hairy?



Something round?

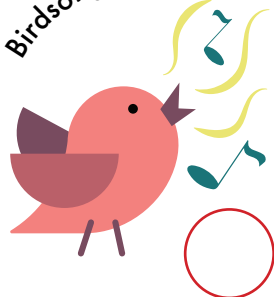


Listen! I can hear the:

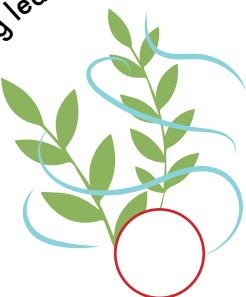
Wind blowing?



Birdsong?



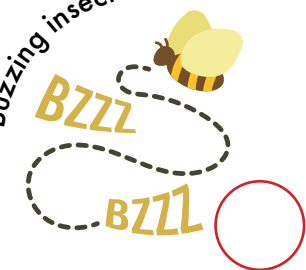
Rustling leaves?



People talking?



Buzzing insect?



Running water?



Try touching:

Something
ROUGH

Something
SMOOTH

Something
WET

Something
DRY

Something
SOFT

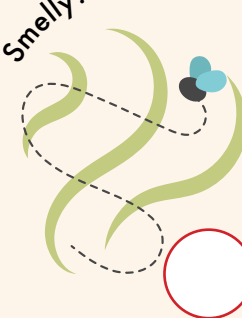
Something
HARD

Do you smell something:

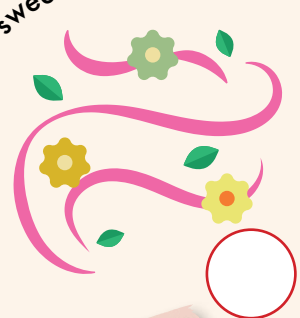
With a fruity smell?



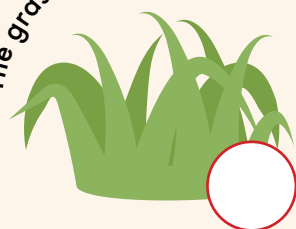
Smelly?



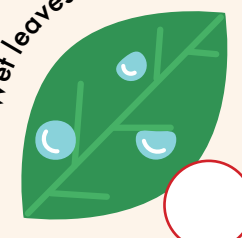
With a sweet smell?



The grass?



Wet leaves?



Date:

Time:

Location:

Weather:

LEAVES

Leaves come in many shapes, sizes and colours, how many different leaves have you spotted on your walk?

Circle the leaves you have spotted!

Heart-Shaped
CORDATE



Oval
OVATE



Egg-Shaped
OBOVATE



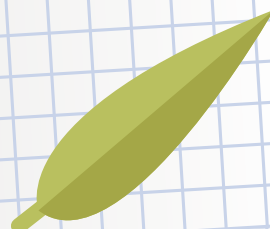
Arrowhead-Shaped
SAGITTATE



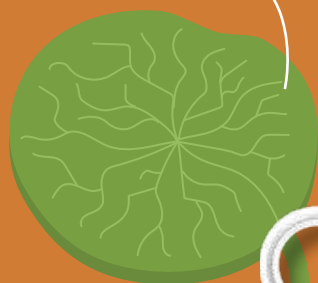
Rectangular
OBLONG



Lance-Shaped
LANCEOLATE



Orbicular
Round



Look Under!

The underside of some leaves has a different colour than the upper surface.

Did you know?

Plants use their leaves to make food and the oxygen we breathe, this process is called photosynthesis.



Smooth



Toothed



Lobed

LEAF HUNT!

Look at the ground around you. Can you spot any fallen leaves? Draw 3 leaves with different shapes that you have found and record your observations below.

Leaf #1

Colour:
Shape:
Texture:
Hairy/Smooth/Rough
Other observations:

Leaf #3

Colour:
Shape:
Texture:
Hairy/Smooth/Rough
Other observations:

Leaf #2

Colour:
Shape:
Texture:
Hairy/Smooth/Rough
Other observations:

Look Closely

Do you see any animals on the leaves of a plant?



Did you know?

Leaf cutter bees live in hollow bamboo. They make semicircle cutouts from fresh leaves to line their nests. Can you spot any leaves with such cutouts?

Photo credit: Zestin Soh



Date:

Time:

Location:

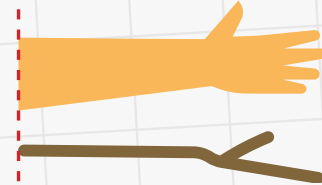
Weather:

TREES

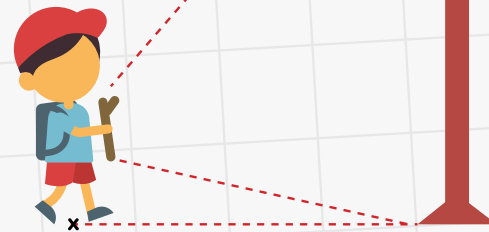
Trees can be found in many parks, gardens, forests, beaches and even by roadsides in Singapore. Look around you, how many trees do you see?

How to Measure a Tree?

Step 1: Get a straight piece of wood about the length of your shoulder joint to the tip of your finger tips.



Step 2: With outstretched arm, holding the middle of the stick, move closer or further away from the tree until the top of your stick aligns with the tree top and the bottom part of the stick to the base of the tree.

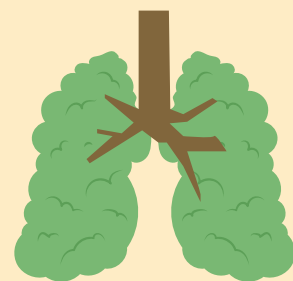


Step 3: Mark the spot and measure to the base of the tree, this will give you the height of the tree.

Benefits of Trees



Home to many plants and animals



Provide us with clean air to breathe



Lower surrounding temperatures to keep us cool

Plant a Tree!

If you are interested in planting your own tree, you can join the OneMillionTrees movement to restore nature back into Singapore.

Find out more here:

<https://www.nparks.gov.sg/treesg/one-million-trees-movement>



TREE SHAPES

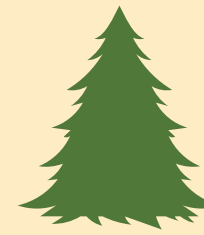
How many different tree shapes have you spotted?

Draw two trees you see!



UMBRELLA

Shape



CONE

Shape



WEeping

Shape



OVAl

Shape



ROUnD

Shape



PAlM

Shape

Height:
Observations:

Flowers: Yes / No
Fruits: Yes / No

Height:
Observations:

Flowers: Yes / No
Fruits: Yes / No

Date:

Time:

Location:

Weather:

TREE BARK



Fissured



Papery



Scaly



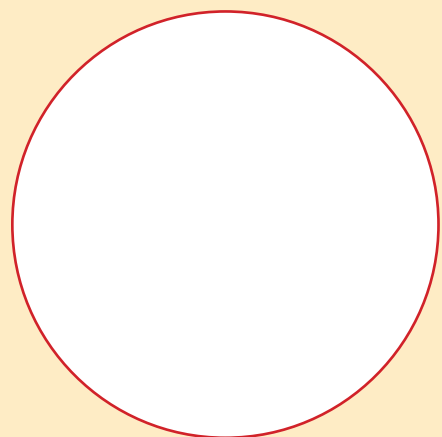
Smooth

FLOWERS & POLLINATORS

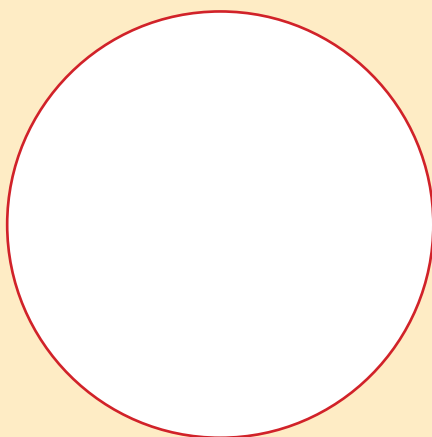
Pollinators such as bees, butterflies, birds, bats and wasps help to move pollen from one flower to another in a process called pollination. Without pollination, flowers will not develop into fruits with seeds that can grow into new plants.

Flower Hunt!

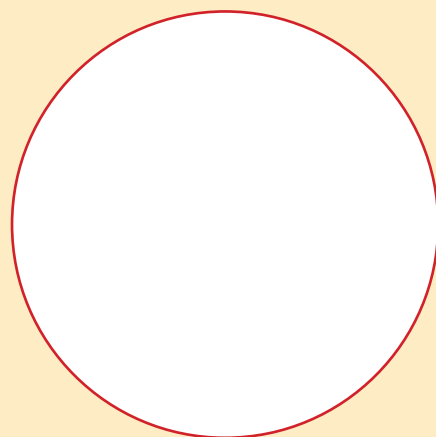
Look at the plants around you. Do you see any flowers? Are there any pollinators around them? Draw the flowers you find and record your observations below.



Colour:
Other observations:



Colour:
Other observations:



Colour:
Other observations:

Pollinators & Flowers

Pollinators like birds, butterflies and bees have cool adaptations to drink nectar from flowers and carry pollen from one flower to another.

The proboscis acts like a straw to drink up nectar from the flower



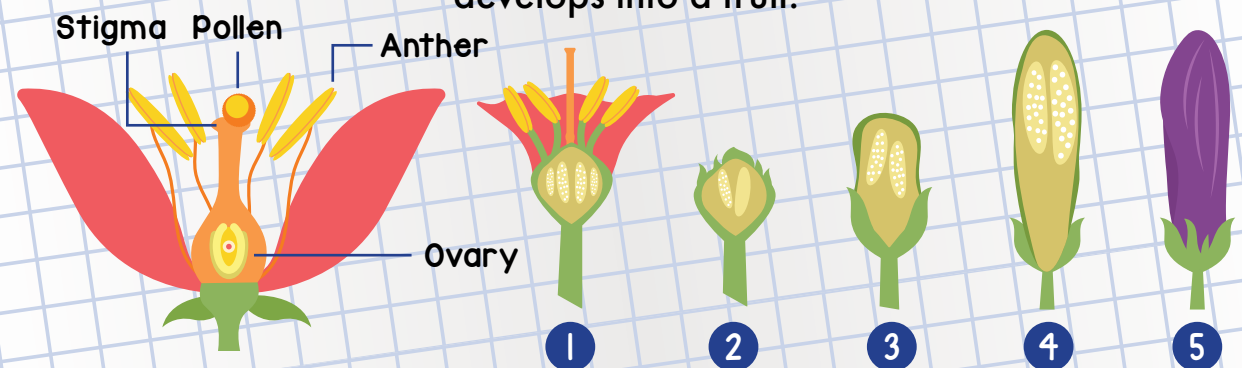
A feathery, straw-like tongue to lap up nectar

Pollen baskets to carry pollen from the flower back to their hive



From Flower to Fruit

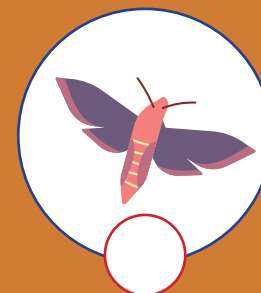
Pollen is carried and transferred by pollinators from the anthers to the stigma of a flower. After landing on the stigma, the pollen grain will start to germinate and grow a pollen tube towards the ovary. This fertilises the ovary and the flower develops into a fruit.



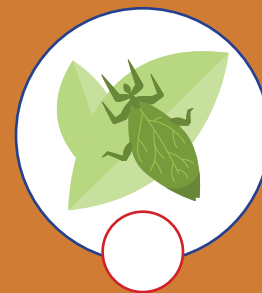
Have you spotted any pollinators or other animals around flowers?
What are they doing?
Check it off the list below.



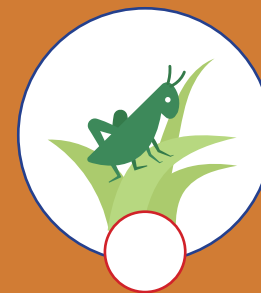
BUZZING



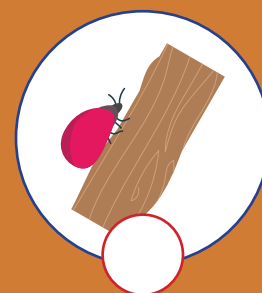
FLYING



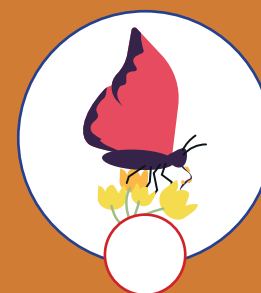
HIDING



SINGING



CLIMBING



DRINKING

Date:
Time:
Location:
Weather:

How many pollinators have you seen today?



BUTTERFLIES



BIRDS



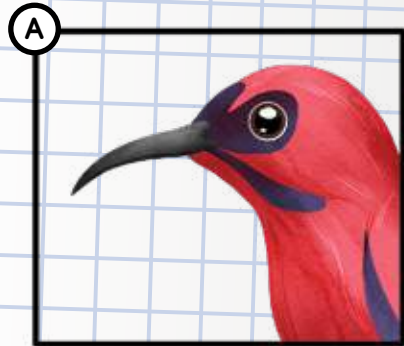
BEES

BIRDS

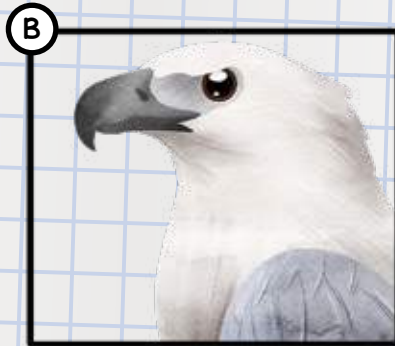
Singapore is home to over 400 different species of birds that can be found in many habitats. Can you spot any soaring high in the sky or looking for food near the ground?

Beaks and Bills

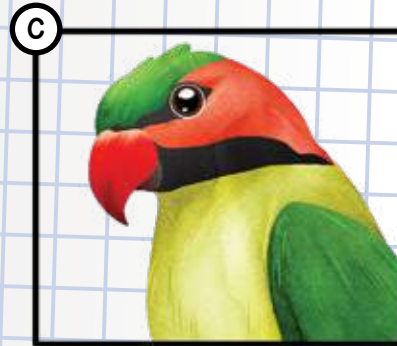
Birds use beaks for building nests, feeding their young, cleaning their feathers, defending themselves and eating! Can you tell what each of these birds likes to eat?



Crimson sunbird



White-bellied sea eagle



Long-tailed parakeet

Sunflower seeds



Heliconia nectar



Fish



Answers: A: Heliconia nectar, B: Fish, C: Sunflower seeds

Birds of a Feather

Did you know that birds have different types of feathers? Feathers help birds fly. They also keep birds waterproof and warm. Give these feathers colour!



Wing feathers are asymmetrical. They provide an upward thrust when birds flap their wings.

12



Tail flight feathers help the bird to steer and balance. They also act as a brake when the bird lands.



Down feathers are found under the exterior feathers. They are light, fluffy and help keep a bird warm.

Did you know?

Singapore is part of the East Asian-Australasian flyway that migratory birds use during winter to fly to countries with warmer weather. Many of these birds stop over in Singapore from September until March.

Have you seen us?



Olive-backed sunbird



Yellow-vented bulbul



Crimson sunbird



Oriental magpie-robin



Pink-necked green pigeon



Banded woodpecker



Black-naped oriole



Blue-throated bee-eater



Greater racket-tailed drongo



Stork-billed kingfisher



Yellow bittern



Grey heron

Bird Watching Tips

- Birds are the most active in the morning and evening and easier to spot.
- Listen first for bird calls and follow the call to its source.
- Wear dark green or brown clothes to blend into the surrounding vegetation. Some birds do not like bright colours.
- If you come across a bird's nest, do not touch the nest or shift any leaves or branches hiding it away. This will expose the nest to predators.
- Walking silently will allow you to see more birds.

Date:

Time:

Location:

Weather:

Draw a bird you see!



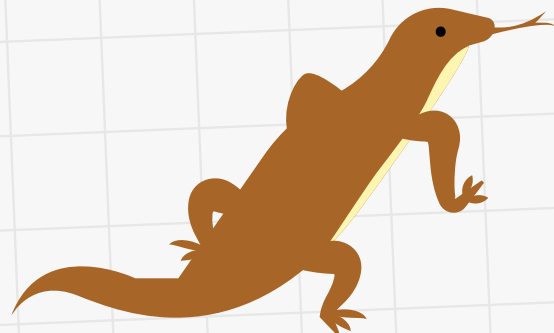
13

MOVE LIKE AN ANIMAL

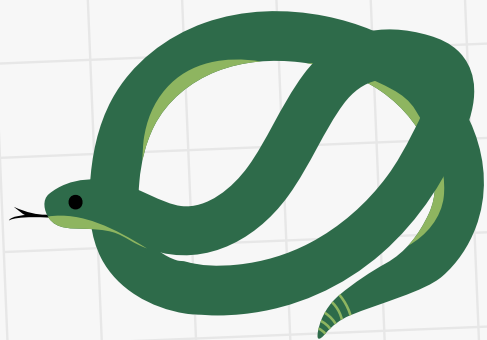
Animals move in many different ways, some crawl, some climb, some fly and some hop around. Let's try copying them.



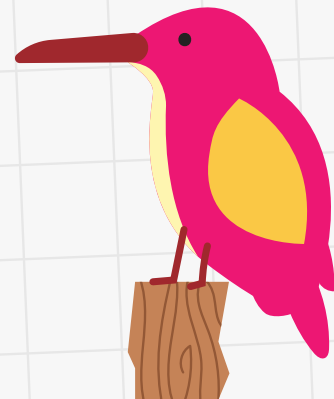
HOP like a frog!



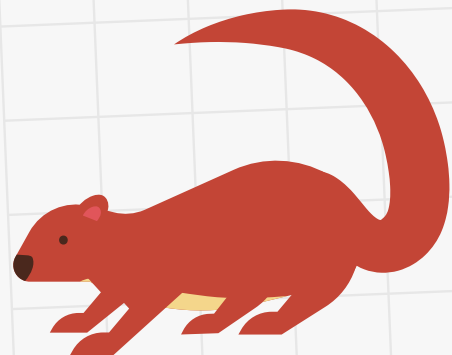
CRAWL like a monitor lizard!



SLITHER like a snake!



FLAP your wings like a bird!



LEAP like a squirrel!



BUZZ around like a bee!

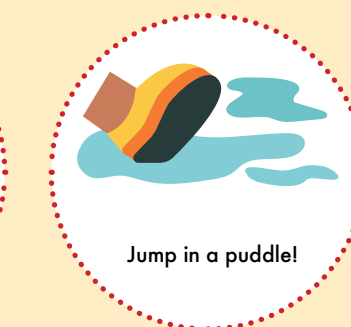
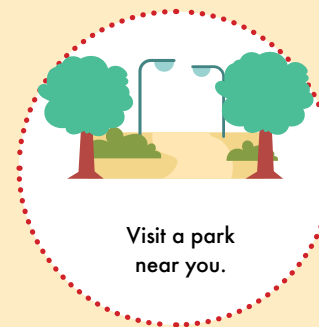
Move It!

How did the animals that you spotted today move?

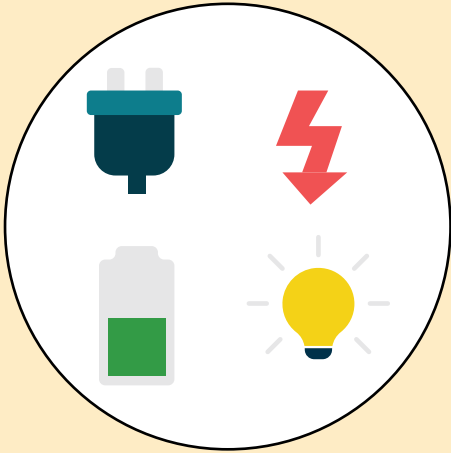
NATURE BINGO

Complete these activities with some friends!

Draw a **CIRCLE** around an activity when you've completed it, and try to complete **FOUR** continuous activities – vertically(–), horizontally(|), or diagonally(/) – to call **BINGO**! Have fun!



What can I do to help the environment?



Use energy wisely



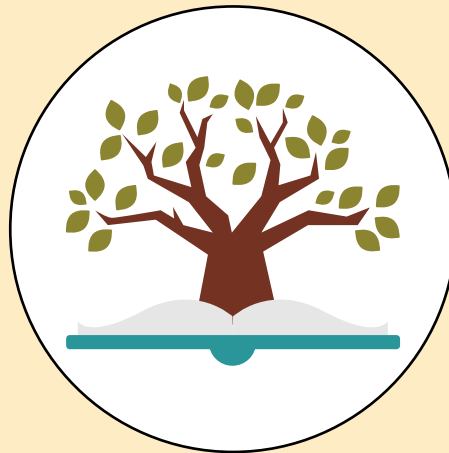
Think before you buy, use or throw



Save water



Take part in NParks biodiversity watches



Learn more about our local flora and fauna



Reduce food waste



Visit and explore nature areas



Plant a tree



Singapore Botanic Gardens

For more information on our Education Programmes, please visit:

www.nparks.gov.sg/sbg

For enquires, please email: nparks_sbg_edu@nparks.gov.sg