

Aim: To recognise that a tree can be a habitat and a host to many different organisms.

## **Procedure:**

- 1. As a family, visit a tree in your neighbourhood or a nearby park. Try to select an older tree for this activity because they tend to support a richer community of organisms.
- 2. Referring to the information provided in the table below, discuss how trees are habitats for many living things, providing them with shelter and food.
- 3. Spend 20–30 minutes observing the different organisms living on the tree. Also take note of any larger animals, like birds and lizards, in surrounding trees. Avoid touching and handling any animals as they might get injured in the process, and some of them, like ants and centipedes, may sting. Do not peel off the bark or otherwise damage the tree or any other plants.
- 4. In the spaces provided on the poster, record your observations.

## Common organisms found on trees and ways that they utilise tree habitats:

Organisms	Associations with Tree Habitats
Insects	<ul> <li>Ants live on or around trees. Weaver ants build leaf-nests on trees.</li> <li>Bees and butterflies are often seen collecting nectar from flowers. They are important pollinators of the flowers.</li> <li>Many insects depend on trees for food, including: Leaf-eating insects: caterpillars, grasshoppers. Wood-eating insects: termites, beetles and other wood-borers. Sap-sucking insects: cicadas, stink-bugs and scale insects.</li> </ul>
Spiders	• There may be orb-weaver spiders or hunting spiders living on the trunk or branches. Orb-weaver spiders build spiral, wheel-shaped webs which they use to catch their prey.
Reptiles	Reptiles such as snakes and lizards can be found living on trees.
Birds	<ul> <li>Some birds (orioles, bulbuls, koels, sparrows, mynas, kingfishers) eat the fruits of trees, while others eat insects that live on trees.</li> <li>Woodpeckers may be spotted pecking the surface of the tree trunk in search of insects and grubs in the wood.</li> <li>Sunbirds drink nectar from the flowers of some trees.</li> <li>Many birds may nest in the tree (e.g. crows, pink-necked green pigeons).</li> </ul>
Mammals	• Squirrels and fruit bats eat the fruits of trees. Some bats feed on nectar from flowers of trees.
Plants	<ul> <li>Common examples of plants which grow on trees are epiphytic ferns and orchids.</li> <li>Moss is often found at the base of tree trunks or on the roots.</li> <li>Vines and climbers, plants which generally have weak stems, use trees as support to reach the canopy for sunlight.</li> <li>Strangling figs, which start out as climbers, will gradually wrap themselves around their host tree and "strangle" it.</li> <li>Some parasitic plants like mistletoes tap water and nutrients from their host tree and can be spotted in the canopy as they have different leaves from those of their host.</li> </ul>
Lichens	<ul> <li>Lichens, which are composed of two organisms in a symbiotic relationship – an alga and a fungus – are commonly found growing on tree trunks and do not harm the tree. Lichen may give the branches a green, black or even orange colouration.</li> </ul>



## **Examples of Interesting Organisms that Utilise Tree Habitats**



**Cicada** Family Cicadidae Photo Credit: Cai Yixiong



**Orb-weaver spider** Family Araneidae Photo Credit: Cai Yixiong



**Asian Glossy Starling** Juvenile *Aplonis panayensis* Photo credit: Sheau Torng Lim



Common Chinese Mistletoe Macrosolens cochinchinensis Photo Credit: Ang Wee Foong



**Olive-backed Sunbird** Male *Nectarinia jugularis* Photo credit: Sheau Torng Lim



**Pigeon Orchid** Dendrobium crumenatum Photo Credit: Ang Wee Foong



**Common lora** Female *Aegithina tiphia* Photo credit: Sheau Torng Lim



Lichen

