## Nature Explorer: Botany for Beginners

Go for a hīkoi outside in your backyard, a nearby park, around your neighbourhood or even next time you visit the Zoo...

Try to spot different kinds of tipu or rākau - these could be trees, shrubs, grasses, vegetables, vines or moss. Choose a few to explore more closely.

Use the table on the next page to record information about different parts of the tipu or rākau you have chosen. Try drawing your own table if you need more space for gathering your plant observations. We have used the karaka tree as an example to help you.

#### Video links:

https://bit.ly/2WYfTOP https://bit.ly/2X2z9um



#### Remember:

Help keep our plant kingdom healthy by only taking samples of parts (e.g. leaves or flowers) that have already fallen onto the ground, rather than straight off the living tipu or rākau.

#### Seeds

# Most plants use a type of kākano to produce new, baby plants.

Some kākano will simply drop on the ground below the plant they come from and start to grow, but many kākano get spread to other places (dispersed) in different ways - by the wind, water or even animals.



You can learn more about kākano from this video:



#### Leaves

#### Ngā rau make kai for the plant using energy from the sun - photosynthesis.

What do you notice about ngā rau you can see? Are they all the same size, colour and texture? How are they different?



## Did you know?

80% of plants in Aotearoa are native. But these only cover 10-15% of our whenua.

Talk to your whānau about how you can encourage more native flora to grow in your local community.

#### Plants at the Zoo

### Plants are a vital part of any modern Zoo!

Our habitats and gardens are carefully planted to reflect natural environments around the world.

These tipu can be used for kai, shelter, nesting, enrichment or even as a source of water!



Join Hugo to see our horticulture team in action:



#### Te Reo Māori Kupu (Vocabulary):

tipu plant
ngā tipu plants
rau leaf
ngā rau leaves
kākano seed
ngā kākano seeds
putiputi flower
ngā putiputi flowers

rangahau research
hiako bark
hīkoi walk
whānau family
whenua land
kai food
tuhituhi kitenga
observation notes

Rau (leaf)	<b>Hiako</b> (bark)	Kākano (seed)	Putiputi (flower)	Tuhituhi kitenga (observation notes)	Rangahau (research)
Sketch, etch or sample	Rubbing & description	Photo, sketch or sample	Photo, sketch or sample	Nearby animals or fun facts	Species name, status, uses
Karaka leaf	Karaka rubbing	Karaka seed	Karaka flower	Kererū (NZ wood Pigeon) seen in the tree.	Karaka (Corunocarpus Iaevigatus)

#### Challenge:

Once you have completed your gatherings and tuhituhi kitenga (observation notes), do some rangahau (research) about local tipu and try to identify the species you have found!

