

SCIENCE•3D

THE BLACK PANTHER

In this packet, sample student answers are provided in **red** and notes to teacher are in **blue**.

In this **Explore Your Backyard** activity, students will explore traits that help organisms survive in their environments. They will identify traits that are similar in different organisms.

This activity can be conducted in the field (ideal) or online.

- Have students observe the different organisms in the ecosystem.
- Encourage them to take notes about the organisms they see and the traits passed on from their parents.
- Then have them choose three different organisms to focus on.
- Have them take additional notes in the field about those organisms.
- Finally, have them use their notes to fill out the tables in the packet.



The ecosystem I studied was: _____

List the organisms you observed in the ecosystem:



Organisms of the same type are similar in many ways. They are different in other ways.

Complete the tables below. List at least three shared traits and three differences between individuals of an organism.

Table 1: My first organism is a Tree

| Traits that individuals share | Traits that are different |
|--|---------------------------|
| Leaf shape | Height |
| Bark | Number of leaves |
| Leaf color (in fall this could be different too) | Size of trunk |
| | |
| | |
| | |

Choose one trait from the table. **Describe** how this helps the organism survive.

Leaves help the tree get sunlight so it can make food.

Roots help the tree get water. The bark protects the tree.

Table 2: My second organism is a Squirrel

| Traits that individuals share | Traits that are different |
|-------------------------------|---------------------------|
| Same shape - Bushy tail | Size |
| Claws for climbing | Body color |
| Short legs | How bushy their tail is |
| Big front teeth | Speed |
| Big ears | |
| | |

Choose one trait from the table. **Describe** how this helps the organism survive.

Their claws help them climb trees to get food and stay safe.

Their teeth help them bite nuts. Their ears help them hear danger.

Table 3: My third organism is a Duck

| Traits that individuals share | Traits that are different |
|-------------------------------|---------------------------|
| Bill | Size |
| Wings | Feather color |
| Short legs | |
| Webbed feet | |
| | |
| | |

Choose one trait from the table. **Describe** how this helps the organism survive.

Webbed feet help ducks swim in ponds. They help them eat and move around in water.