Rain Forest Exploration Lesson Guide

Overview:
By participating in Rainforest Exploration program, children will become familiar with the diverse characteristics of various animals by comparing their physical characteristics, habitats and diet. They will also learn the important role of plants and animals working together to keep the rainforest growing.

Background:
We begin at the forest floor where little light reaches. The vegetation is sparse. Less rain penetrates this far. It is hot, humid and windless. The animals that live here use camouflage to blend in to the brownish environment. As we move upwards, we come to the understory where smaller trees and shrubs are shaded and do not receive as much of the rain, but the humidity is high. Moving up, we arrive at the canopy layer which is dominated by tall trees that have mosses, ferns and bromeliads growing over them as well as vines hanging down. The trees act like a giant sun and rain umbrella by catching the sun’s rays and absorbing much of the impact of the rain. Leaves of the trees are pointed causing water to run off. In the emergent layer there are only one or two giant trees in an area as big as a football field. Life here gets plenty of sun and rain, but is exposed to high winds.

Student Objectives:
1. Discuss the plant and animal diversity that lives in the rainforest.
2. Understand that the rainforest is made up of four layers.
3. Observe different animals in our rainforest exhibit.

Assessment
1. Children will have identified and investigated the physical qualities of living and non-living things in the rainforest.
2. After seeking information through conversations and interactions in the exhibit children will have experienced how the rainforest survives on interdependence.
3. At hands-on activity stations in the classroom, children will apply knowledge and skills that was discussed and observed during the program.

Program Vocabulary:
Canopy Layer: the second tallest layer of the rainforest that provides a “ceiling” effect covering the forest below
Emergent Layer: the tallest layer of the rainforest
Environment: all the external factors influencing the life and activities of people, plants, and animals
Forest Floor: the ground level of the rainforest that does not get much sun or rainfall
Habitat: the natural conditions and environment in which a plant or animal lives
Rainforest: a thick evergreen tropical forest found in areas of heavy rainfall and containing trees with broad leaves that form a continuous canopy

Understory Layer: the layer of small trees and bushes below the level of the canopy

**Enrichment Vocabulary:**

<table>
<thead>
<tr>
<th>Animal</th>
<th>Camouflage</th>
<th>Green</th>
<th>Migration</th>
<th>Non-living</th>
<th>Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predator</td>
<td>Prey</td>
<td>Small</td>
<td>Soil</td>
<td>Water</td>
<td>Wet</td>
</tr>
</tbody>
</table>

**Procedure:**

Meet your Museum educator at the bottom of the grand staircase on the ground level five minutes before your scheduled program start time.