# Tropical Rainforests: Animal-Plant Relationships and Biodiversity (grades 3-5)

## **Field Trip Logistics**

If your program is scheduled at 9:30 am, your instructor will meet you at the entrance lobby. If your program is scheduled at 11:30 am, your class will meet their instructor at the classroom on the 3<sup>rd</sup> floor next to the Naturalist Center. *This program can be delivered simultaneously in Spanish and English.* For more information, please contact rockprogram@calacademy.org.

### **Length of the Program:**

70 minutes

## **Program Objectives:**

- Students understand flowering plants depend on animals for survival (pollinators and seed dispersers).
- > Students understand biodiversity in a rainforest is a sign of a healthy rainforest ecosystem.
- > Students will be able to identify how their daily actions influence the ecology of rainforests and become inspired to act on conservation through their choices.



## **Program Summary**

Students are led through a series of slides and asked to imagine life as residents of the rainforest. They compare their daily lives to the world they're exploring on-screen and are introduced to all the resources the rainforest provides us such as bananas and coffee. Students are then shown an image of deforestation and informed that their forest, like many others in the world, has been clear-cut. Reasons for this deforestation such as cattle ranching are introduced.

In table groups, students are asked to predict what rainforest regeneration would look like, by sorting their flash cards and keeping the plant cycle in mind. The cards represent key players in the plant life cycle. A flip book of how cacao relies on the midge fly for survival is then introduced to help students picture a real-life example.

Next, the students check their predictions through a lively rainforest regeneration skit. This prop-based activity cements student learning and within minutes the entire class builds a rainforest full of biodiversity. Students participate as either an actor or member of the sound effect crew. The skit culminates in an explanation of biodiversity as a sign of a healthy rainforest.

To further understand rainforest regeneration, students predict the timeline of the stages of rainforest growth. The idea that can take 4,000 years to fully re-grow a rainforest comes as a surprise to most students. Through facilitated discussion, the class revisits the issue of deforestation and cattle ranching. To conclude, students then brainstorm ways to conserve existing forests and use rainforest resources sustainably.



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# Grade 3

#### **Life Sciences**

- **3a.** Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.
- **3d.** Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.

# Grade 4

#### **Life Sciences**

- **3a.** Students know ecosystems can be characterized by their living and nonliving components.
- **3c.** Students know many plants depend on animals for pollination and seed dispersal, and animals depend on plants for food and shelter.

## **Investigation and Experimentation**

**6c.** Formulate and justify predictions based on cause-and-effect relationships.

