



Madagascar Lesson Plan

Grade Level: K-2 **Activity Time:** 20-30 Minutes

Materials

- Madagascar Brochure
- Chameleon Cutout
- Pictures of chameleons with various colors
- Crayons, Markers, Color Pencils

Introduction

Madagascar is home to over half of the world's chameleons. Chameleons belong to the lizard branch of reptiles. They range in size from half an inch to 27 inches. Their tails and long toes help them cling to branches in the rainforest. They are famous for their ability to change color. Chameleons are often seen with the colors brown, green, blue, yellow, red, black and white. The main reason chameleons change color is communication. You may have seen movies or tv shows where chameleons change color to camouflage or blend into every surface they sit or lie down on. However, chameleons do not change colors in response to their surroundings. They change colors by responding to changes in temperature, light, or even their mood. Ask students, "Do you know of any other animals or insects that use their colors to communicate?" (Butterflies, snakes, etc.)

How do they change colors?

A chameleon's outer skin is transparent or clear. Under the clear skin are two layers that contain red and yellow skin crystal pigments (colors). Below the yellow and red are cell layers that reflect blue and white light. Even deeper down, is a layer of brown melanin (melanin gives humans various shades of skin too). When light and/or heat hit a chameleon's skin, a chemical reaction makes the cells change color. An angry chameleon is usually yellow, and a calm chameleon is green. Here is a list of chameleon colors and what they mean:

Light Green or Light Brown = Calm

Brown = Depressed or the chameleon is cold

Very Dark Brown, Blue, Black = Fear

Red with light blue stripes or Red and Black with White Stripes = Trying to attract a mate

Dark Green/Yellow= Excited

Light Blue, Red= The chameleon is warm and using bright colors to absorb the sunshine

Ask students, how do others know what you're feeling? What do you do when you are cold or warm? How is it the same or different from what a chameleon does?

Activity

1. Give students a copy of the Madagascar Brochure and the chameleon worksheet.
2. Share background information with students and show them pictures of chameleons. Post the colors and their meaning on the board
3. Have children color the chameleon including drawing a background/story. Encourage students to fill in the questions on the worksheet to help develop ideas about how the chameleon is feeling, what made the chameleon feel that way, and what the day is like on Madagascar (sunny, cold, etc.)
4. Have students share their chameleon stories with others in the classroom and hang them as a display.

Follow Up Questions

1. Were you surprised to learn that chameleons show their emotions and body temperature through color?
2. What is your chameleon feeling? What do you think made your chameleon feel that way?
3. How do you show another person your feelings? (happy, sad, angry, etc.)