

Flamingo Colors



Engage and Reflect

Watch *Virtual Vitamin Z - Zoo Educational Lesson: Learn About Chilean flamingos and their Amazing Adaptations*, https://www.youtube.com/watch?v=7XGqTx_3Kb8



Skills

- Predicting
- Observing



NGSS Science and Engineering Practices

- Interdependent Relationships in Ecosystems
- Chemical Reactions



Experience

- 5-10 minutes
- 1 or more people

Flamingos get their bright pink and red coloration from what they eat, including crustaceans and algae. Algae contains pigments, or colors, called beta-carotene, part of the carotenoid family. If flamingos don't eat a diet high in beta-carotene, their feathers would be white and a dull gray color, similar to their coloration when they are young. Humans eat several vegetables that contain beta-carotene, such as carrots, squash, grapefruit, oranges and apricots. To explore what pigments are in plants, try this activity!



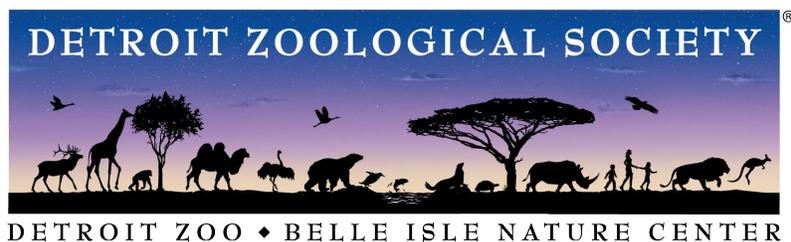
Celebrating and Saving Wildlife

In January of 2019, Detroit Zoological Society animal care staff stepped in to help when droughts in South Africa caused thousands of flamingo nests to be abandoned. A coordinated effort of wildlife experts from across the world saved many of the chicks, releasing them once they were old enough to care for themselves.



Take Action

Droughts, major rainfall events and other weather-related events are becoming more common as our global climate changes. You can help mitigate the causes of climate change by eating more plant-based meals. Livestock raised for humans to eat release methane gas as they digest their food. Methane is a gas that acts like a heat-trapping blanket in our atmosphere, causing the world's climate to change. Try including plants that are rich in beta-carotene to your diet!



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Tools

Solid surface, like a table or floor

White piece of fabric or paper

Flowers and/or leaves

Piece of cardboard or folded newspaper or coupon mailer

Hammer or rubber mallet

1 or more people

Directions

- Place the cardboard or folded newspaper or mailer on the solid surface.
- Place the flowers or leaves on top of it, in a pattern that you like.
- Place the fabric or paper on top of the flowers and/or leaves.
- Tape the corners of your fabric or paper to keep it in place while you do the next step.
- Using the hammer or mallet, pound the paper on top of the flowers and/or leaves until the pigment shows through the paper.

Notes - Try this activity in different seasons, in spring when leaves are just starting to come out, in the summer when plants are fully leafed out, and in the fall when they start to turn color before they fall. Note what pigments come out of different colored leaves, is there more than one color that shows through?

