

Flight Patterns

Lesson One

Objectives:

1. Students will be able to identify native birds and describe how they are adapted to live in their environments.
2. Students will be able to analyze various types of patterns.

Visual Arts Standard

CONNECTING ANCHOR STANDARD 10: Synthesize and relate knowledge and personal experiences to make art.

Preparation

- Preview *Birds of a Feather* Exhibition Preview PowerPoint and the *Flight Patterns* PowerPoint.
- Consider whether you might be able to collaborate with another teacher (classroom teacher in elementary grades or science teacher in high school) to integrate science (biology) and art instruction.
- If possible, assemble a collection of various (down, contour, and flight) feathers collected on a walk, purchased at a craft store, or acquired from a pet store.
- *For a more extensive explanation of regular and irregular patterns, see the *Patterns within Patterns* PowerPoint in *Twenty Questions* unit, available on the TCA Gallery website.

Resources

[Birds of a Feather Exhibition Preview PowerPoint](#)

[Flight Patterns PowerPoint](#)

[Bird Research \(pdf\)](#)

Sample down, contour, and flight feathers, if available

OPTIONAL: [Patterns within Patterns PowerPoint](#) (from *Twenty Questions* unit)

Activities

Unit Preview: Introduce the theme in life, that "All around the world and in our own backyards, we share our living space with birds" by asking students to describe birds they have seen in their neighborhood, a zoo and elsewhere.

Introduce the theme in art, that "Artists are inspired by their avian neighbors, from majestic eagles to comical penguins, from circling vultures to hovering hummingbirds" by displaying the *Birds of a Feather* Exhibition Preview PowerPoint, noting different ways artists have used birds as their inspiration.

Introduce the key questions students will be working with in the unit:

1. SEEK: How can I relate scientific research to art making?

2. LOOK: How are shapes and colors organized into patterns?
3. LOOK: How do negative spaces complement positive shapes in artworks?
4. CHOOSE: How can I enhance my artwork with patterns?
5. CHOOSE: How can I organize positive shapes and negative spaces to complement each other in my art?

Introduction:

Display slides 1-7 in *Flight Patterns* PowerPoint to initiate a discussion about how various birds have adapted to live in different environments, focusing on the geographical region where your students live.

Definition and Examples:

Display slides 8-10 in *Flight Patterns* PowerPoint to illustrate the defining characteristics and functions of various types of feathers. If possible, pass around examples of down, contour, and flight feathers.

Definition and Guided Practice:

Display slides 11-13 in *Flight Patterns* PowerPoint to define "pattern" and ask students to analyze a variety of feather patterns.

Transfer to Follow-Up Studio Project:

Display slide 14 in *Flight Patterns* PowerPoint to introduce the follow-up art project. Lesson 3 introduces and provides step-by step illustrated instructions for a ceramic tile project appropriate for elementary students. Lesson 4 introduces and provides step-by step illustrated instructions for a drawing or painting project appropriate for high school students.

Transfer to TCA:

Slide 15 invites students to visit the *Birds of a Feather* exhibition at the Tempe Center for the Arts.

NOTE: Many of the works in the exhibition are also viewable on the *Birds of a Feather* Exhibition Preview PowerPoint.

Vocabulary

Environment

Avian

Down feather

Contour feather

Flight feather

Art Vocabulary

Pattern

Interdisciplinary Activities

BIOLOGY: Consider collaborating with your students' classroom teachers at the elementary level or with a high school science teacher to build connections between your students' study of local native birds and the natural environment where they live.

Assessment Checklist

__ Students will be able to identify native birds and describe how they have adapted to live in their environments.

(Contributions to questions during *Flight Patterns* PowerPoint presentation slides 1-7)

__ Students will be able to analyze various types of patterns.

(Contributions to questions during *Flight Patterns* PowerPoint presentation slides 11-14)