A Bird in Space
Lesson Four

Lesson Four: A Bird in Space is appropriate for high school students.
Lesson Three: Backyard Birds is appropriate for upper elementary students.

Art Objectives
1. Students will be able to generate ideas for their art from another discipline (science).
2. Students will be able to organize positive shape and negative space to complement each other in an artwork.
3. Students will be able to use drawing/painting techniques.
   OPTIONAL: Students will be able to collaborate to organize and exhibit their work.

Visual Arts Standards
CONNECTING ANCHOR STANDARD 10: Synthesize and relate knowledge and personal experiences to make art.
RESPONDING ANCHOR STANDARD 7: Perceive and analyze artistic work.
CREATING ANCHOR STANDARD 2: Organize and develop artistic ideas and work.

Common Core Standard (Arizona College and Career Readiness Standard)
READING STANDARD 9-10.RI.10. By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical subjects, in the 9-10 text complexity band proficiency, with scaffolding as needed at the high end of the range.
WRITING STANDARD W.2: Write informative/explanatory text to examine a topic and convey ideas, concepts, and information clearly and accurately through the selection, organization, and analysis of content.

Preparation
• Consider collaborating with a science/biology teacher to plan students' research about native birds and how they adapt to their environments.
• Preview A Bird in Space PowerPoint.
• Consider making a teacher sample drawing or painting that the meets the requirements of the lesson's assignment using the media you will have available for students.

Resources and Supplies
A Bird in Space PowerPoint
Computer lab/library
Pencils and sketch paper
Selected drawing and/or painting supplies

Activities
Review:
Review the theme in life that “All around the world and in our own backyards, we share our living space with birds” and the theme in art that “Artists are inspired by their avian neighbors, from majestic eagles to comical penguins, from circling vultures to hovering hummingbirds.”

Also review the unit’s three key questions:
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?

Definition and Examples:
Display A Bird in Space PowerPoint slides 1-9 to define and illustrate ways positive shapes and negative spaces can complement each other.

Guided Practice:
Display A Bird in Space PowerPoint slides 10 & 11 to analyze painting and/or drawing techniques used to make patterns (introduced in Lesson 1: Flight Patterns).

Assignment:
Display A Bird in Space slide 12 to introduce the project objectives.

Research:
Display A Bird in Space PowerPoint slides 13 & 14 to illustrate research of a native bird species.

Step-by-Step Process:
Display A Bird in Space PowerPoint slides 15-21 to illustrate:
- Thumbnail sketches exploring alternative relationships between positive shape and negative space.
- Transferring positive and negative space to working surface.
- Use of fine markers and watercolor techniques to make patterns.
- Divide students into 4-6 groups, each with a cleared workspace, such as a table or counter.
- Ask them to collaborate in creating an exhibition design for their drawings/paintings.
- Ask students to take turns in their groups sharing their artworks as well as information they've learned about the birds they drew/painted.
- Ask each group to design a text panel to be displayed with the work.
- Distribute graph paper so students can sketch plans for their exhibition.
- Rotate groups to view all exhibition plans and read all text panels.
Art Vocabulary
Positive shape
Negative space
Thumbnail sketches
Grid lines
Wash
Dry brush
Serigraph

Other Vocabulary
Featureless

Interdisciplinary Activities: Collaborate with a science/biology teacher to install an exhibition of the students' artwork with accompanying text panels in an appropriate location (school, local business, community, etc.).

Assessment Guides
OBJECTIVE 1: Students will be able to generate ideas for their art from another discipline (science).

Exceeds Expectations: Drawing/painting shows an accurate overall shape of a researched bird and more than one of its feather patterns.

Meets Expectations: Drawing/painting shows overall shape of a researched bird and at least one of its feather patterns.

Approaches Expectations: Drawing/painting shows overall shape of a researched bird or at least one feather pattern.

Fails to Meet Expectations: Drawing/painting shows a bird.

OBJECTIVE 2: Students will be able organize positive shape and negative space to complement each other in an artwork.

Exceeds Expectations: The relationship of positive shape and negative shape is exceptionally complementary, and/or the choice of bird's profile (positive shape) is unusual and well-presented in the surrounding negative space.

Meets Expectations: The placement of bird in the negative space brings attention to the bird's profile (positive shape)
Approaches Expectations: The bird is centered within a well-proportioned amount of negative space.

Fails to Meet Expectations: The bird is placed awkwardly within the negative space or in the center with a great deal of uninvolved negative space.

OBJECTIVE 3: Students will be able to use drawing/painting techniques.

Exceeds Expectations: The drawing/painting shows highly skilled use of at least two techniques.

Meets Expectations: The drawing/painting shows well-controlled use of one technique.

Approaches Expectations: The drawing/painting shows competent use of basic technique/s.

Fails to Meet Expectations: The drawing/painting shows little to control of drawing/painting materials.