AFRICA + BIODIVERSITY



Mosaic Project

Grades: 3-5

Background: This art project will help students extend and reflect on their learning about biodiversity .

Objective: Students will create a piece of art representing their individual interpretation of biodiversity and reflect on the completed project's symbolism to efforts around the world to restore biodiversity.

Source: World Wildlife Fund







https://www.worldwildlife.org/teaching-resources/toolkits/biodiversity-toolkit

Learning Activity:

Biodiversity Mosaic

Activity Type	Visual arts
Focus Areas	Art education
Time Required	30–45 minutes

Overview

In a mosaic, individual pieces are combined in order to reveal the bigger picture. Similarly, in order for nature to be able to support and provide for our ever-growing world, we need all the components that comprise its foundation—biodiversity—to be strong and healthy. To represent a similar collective effort, students will design individual squares that reflect what biodiversity means to them and then assemble all the squares in a mosaic to raise awareness about the bigger picture: the importance of protecting biodiversity.

Objective

At the completion of the activity, students should be able to:

- Define biodiversity.
- Create a piece of art representing their individual interpretation of biodiversity.
- Reflect on the completed project's symbolism to efforts around the world to restore biodiversity.



Water lilies on marshes along the Danube River near Wilkowo, Ukraine.



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Subject and Standards

National Core Arts Standards

- Creating
 - Anchor Standard #1: Generate and conceptualize artistic ideas and work.
 - Anchor Standard #3: Refine and complete artistic work.
- Responding
 - Anchor Standard #8: Interpret intent and meaning in artistic work.
- Connecting
 - Anchor Standard #10: Synthesize and relate knowledge and personal experiences to make art.
 - Anchor Standard #11: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding.

Materials Needed

- Cardstock (or medium of choice)
- Coloring utensils
- Clear tape
- <u>Biodiversity Educator's Resource Guide</u>

Vocabulary

- **Biodiversity:** all of the different kinds of life you will find in one area, including animals, plants, fungi, bacteria, and genetic material
- **Ecosystem:** the living (plants, animals, other organisms) and nonliving (air, water, soil) components of an area that interact with each other in an interconnected way
- **Mosaic:** a decoration on a surface made by setting small pieces of variously colored material to form pictures or patterns



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Activity Procedure

Part 1: Introduction and Preparation

• Ask students to define biodiversity and why it is important to humans and nature. Ask volunteers to list key terms on the board, but do not reveal the correct answer. Working together, students should reach a consensus on one definition. This will be used as a reference during their activity.

Part 2: Activity

Students will work together to create a large art display that represents healthy biodiversity on Earth.

- Distribute cardstock and coloring utensils. Each student should have their own piece of cardstock, which will be their contribution to the larger mosaic the class is creating together.
- Provide limited instruction for what to include in their design; the only direction the students should be given is to decorate their piece with what Earth's biodiversity means to them. This should be based on the pre-discussion for the activity.
- When the students are finished, find an open area to assemble all their pieces to create one large class project. Tape the mosaic together and display it in the room or hallway.



Galápagos sea lion swimming near mangroves, Floreana Island, Galápagos, Ecuador.

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Part 3: Discussion and Assessment

- Reflect on what students included in their biodiversity representation. Did most students draw animals?
 - Biodiversity does not include just animals; it refers to all of the different kinds of life found in an area, from genes to ecosystems and everything in between. Each of these components work together to maintain balance and support life.
 - An area is considered to have healthy biodiversity when there is a wide variety of these components (plants, animals, bacteria, habitats, etc.). Does the group mosaic adequately depict this?
- Ask students why biodiversity is important. Have a discussion with your students on why biodiversity is often referred to as the "web of life."
 - Every plant/animal/bacteria/genetic makeup/habitat is a thread in the "web of life." The more threads there are, the stronger the web. However, as threads are removed, the web becomes weaker and eventually falls apart. Biodiversity is the framework for nature, which provides all the things we need to survive. Without biodiversity, there is no nature. And without nature, there is no humanity. In nature, everything is connected. The ripple effect of any change touches every part of our planet. Have students select one component found in the artwork and reflect on how its disappearance would affect other components.
- Biodiversity across our planet has declined dramatically. Human activity has caused populations of fish, birds, mammals, amphibians, and reptiles to fall by 60% over the past 50 years. In order to reverse this trend and bring about real change, we have to work together. This includes action at every level—governments, companies, communities, and individuals. Using the "What kids can do" section of the <u>Biodiversity Basics Educator's Resource Guide</u>, discuss with students how they can do their part to help restore nature and biodiversity.

Extended Learning

- Perform this activity using different mediums (if materials allow) to display different art forms.
- Assign students to research human impacts on biodiversity.
- Use a tablet or smartphone (if available) to download the <u>WWF Together App</u>. Encourage students to explore the Planet Earth segment to learn more about how to protect life on our planet.
- Start a class fundraiser to protect biodiversity using WWF's online fundraising tool, Panda Nation. Learn more at <u>pandanation.org</u>.



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Additional Background Info

You can use the information found at the links below to enhance your discussion with the class, or you may want to share some links directly with students if you determine they are grade-level appropriate.

- Web story: <u>What is biodiversity?</u>—explains why biodiversity is important and what is at risk if we don't change our behaviors
- **Report:** *Living Planet Report 2020*—published every two years, the Living Planet Report assesses the state of our planet's biodiversity and ecosystem health
- **Report:** *Living Planet Report 2020: Youth Edition*—a condensed, young-reader friendly summary of the *Living Planet Report 2020*

For more fun classroom activities with a focus on wild species and conservation, visit wildclassroom.org.



Tiger, Ussuriyrsk, Russia.

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