



Teacher	
Grade/Subject	Elementary Science
Lesson Title	From Earth to Art: The Art & Engineering of African Masks

Lesson Overview

Students will analyze images and typology of traditional African masks and their use of natural materials, identify locally available resources based on the biomes of Africa, and explore engineering and design principals used to create functional masks.

Suggested Standards

- LS2: Ecosystems: Interactions, Energy, and Dynamics
- ESS3: Earth and Human Activity
- ETS1: Engineering Design

Objectives	Assessment
 Understand how traditional African Art uses natural materials and design principals. Identify materials in their natural forms and how they are transformed into art. Explore engineering and design through mask making. 	 Pre-Instruction guided recall questions Strategic questioning as a group during instruction Present and reflect on choices made during their activity (group talk or exit ticket)
 Create a 3D African-inspired mask using STEAM concepts. 	

Materials

Images and typology of African Masks, Map of Africa highlighting different biomes, list of natural resources found in specific biomes, examples of mask design and structures, misc. natural and recycled materials, tools for construction of a mask (scissors, glue, tape, etc.)



Introduction

- Begin with a brief discussion:
 - "Have you ever made something with natural materials?"
 - "What materials did you use, and why?"
- Show photos of traditional African masks, try to include examples of many different natural materials.
- Ask some questions to gauge students prior knowledge:
 - "What do you think these masks are made of?"
 - "Why do you think certain materials were chosen?"
 - "What do you notice about the patterns, colors, or shapes?"
- Introduce the importance of masks and masquerades to African culture.
 - "What do you think the masks are used for?"
 - Masks are more than just static objects. They are worn by skilled performers in masquerade ceremonies as a means of spiritual, social, and artistic expression.
- Introduce the idea that works of art are made using design thinking. Artists are engineers of culture!

Explain how different ecosystems (forests, savannas, deserts) in Africa contain different kinds of natural materials. Explain how different ecosystems (forests, savannas, deserts) in Africa contain using natural and recycled materials. Encourage students to:

- "If groups of people settle in different biomes, will they have the same natural materials to make masks with? Or will their creations change based on where they've settled?"
- Define locally available materials.
- Resources found within the immediate vicinity of a person's location.
- Talk about the structure of masks and how people engineer with locally available materials.

Encourage students to:Use materials that are personally

symbolic

- Create a sketch before working on final product
- As they work, prompt them to think about:
 - What natural/recycled material did you use?
 - o What does that symbolize?

Reflection

- Have students present their masks and describe their material choices.
 - "What inspired your design?"



○ "How were you able to solve problems like an engineer?"

Additional Resou	urces