

Unit: African Ecology and Art

Time Period: 8 weeks

Lesson Submitted by: Elisabeth Gambino

VSC Vis Art 1.2.1. **b.** Use **color, line, shape, texture, form,** and **space** to represent ideas visually from **observation, memory,** and **imagination.** 2.2.1. **b.** Select and use **works of art** as inspiration to express ideas visually and verbally about people, places, and events VSC: **2.3. Differentiate among works by artists representative of different times and cultures** **a.** Compare selected **artworks** to determine similarities and differences in **theme, content, form,** and **style**
b. Categorize attributes of **theme, style,** and **form** that convey meaning in artworks **4. Compare similarities and differences in the processes used to interpret and express ideas in the visual arts and other disciplines** **a.** Identify **themes** in art that relate to content explored in other content areas **b.** Describe **processes** used in art and other content areas to express ideas **c.** Demonstrate how visual arts **processes** are used to **interpret** and express ideas in the visual arts and other content areas

| Objectives | Tasks |
|---|---|
| Students will learn aspects of Samburu culture and tie them into visual elements of design. (RHYTHM/PATTERN) | <ol style="list-style-type: none">1. Slideshow of Kenyan images. Vocab review/elements of design.2. Map of Kenya – build from clay. Add important landforms Mt Kenya and Kilimanjaro3. Colored tape/construction paper beaded chest beads/necklaces/bracelets. And collars (use mosaic chips. (hats?) try having students WEAR the costumes while in the art room. Real beaded bracelets – fishing line and beads.4. weaving (making from nature) – twisteez baskets, paper weaving5. Masai warrior shields out of cut and painted cardboard6. build a manyatta7. “make fire” (tissue paper) and tell stories8. sculpt and “herd” the sheep9. optional – African textiles resist pattern.10. self portrait as a moran, include drawing and photography with all of your costume elements |
| Artmaking skills learned: | weaving, beading, cardboard sculpture; Silhouette, observational drawing, comic strip making, bookmaking; mural painting |

| | |
|---|---|
| <p>Students will identify the key players in the Kenyan ecosystem and their roles</p> | <ol style="list-style-type: none"> 1. sculpture – lion masks, bravery 2. zebra “working together” to camouflage 3. adaptation – invent a bird, invent a plant 4. Crocodile – hibernating/adapting to environment (egg cartons!!) 5. snakes – pattern.scale . . . mongoose 6. elephants - working on an armature, largest sculpture 7. Food Chain mobiles – use papercraft to make small models of different animals and assemble in order |
| <p>Students will demonstrate key conflicts in the environment such as competition for food and water resources and</p> | <ol style="list-style-type: none"> 1. Identify what each animal eats and draw in silhouette – African sunset with watercolor over black crayon or ink/scratchboard option, cut paper – ie, zebra, antelope, warthog. 2. storytelling – read a picture book about Kenya, talk about sequential images telling stories, create a small comic strip/storytelling image 3. puppets and watering hole story – start with a script for conflict at the watering hole, have the students try to find a solution. 4. altered book/journal assessment – create documentation of your understanding of the unit 1) human life in Kenya 2) animal life/food chain in Kenya 3) competition/scarcity of resources in Kenya |
| <p>Students will demonstrate their understanding of the unit by creating a mural . Students will share artwork with the community</p> | <ol style="list-style-type: none"> 1. design (look at other artist’s work for inspiration, ie,). Student drawing competition. 2. project/use grid to transfer to wall 3. outlines 4. paint in 5. highlights/shadows 6. refresh outlines. 7. optional extension – rehearse and perform play “watering hole” |

Use a Lab School style methodology?

- 1) Provide an enriched environment – transform the room, hallway BEFORE SCHOOL STARTS
- 2) Include language – word of the week in Swahili
- 3) Teach culture/ecology/conservation – idea of passing through stages like evolution club. Stages are: birth, o, first the person has to pass several basic knowledge steps to prove they are ready to be initiated into the tribe. Can this be design principles elements? Use African style crafts to prove you have mastered color vocab, rhythm/pattern, weaving, warrior shields and masks, some sort of DANCE LESSON to go with this, passing the torch type ceremony - include building or designing a house?
- 4) Now that you are part of the tribe, you need to learn how to recognize animals! Use this to teach shape ID, MONART drawing method, introduce silhouette with warm and cool color backgrounds (village at night, village in the day time murals). This is how we get our food –
- 5) Final stage – custodian of the environment. How do Samburu take CARE of the environment around them. Demonstrate knowledge/teach others what you know. This can be done through a large format project and also Making a Book of African Experience to teach others. Structure 4 or 5 drawing assignments, have a making a book day, take sketchbooks with us to go to the zoo and do observational drawings.
- 6) At the end can we have an African drumming/dancing troupe visiting for the mural unveiling? If not I can do pull out drumming lessons of some sort and

Elements of culture – language, houses, dress, livelihood, customs

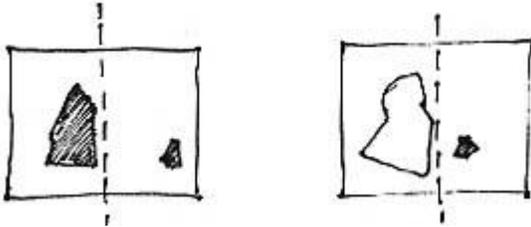
Elements of art – line, shape, form, space, texture, color, value

Principles of Design – ways to arrange the elements so they look better.

THE PRINCIPLES OF DESIGN

BALANCE

Balance in design is similar to balance in physics



A large shape close to the center can be balanced by a small shape close to the edge. A large light toned shape will be balanced by a small dark toned shape (the darker the shape the heavier it appears to be)

GRADATION

Gradation of size and direction produce linear perspective. Gradation of colour from warm to cool and tone from dark to light produce aerial perspective. Gradation can add interest and movement to a shape. A gradation from dark to light will cause the eye to move along a shape.



REPETITION

Repetition with variation is interesting, without variation repetition can become monotonous
[see notes on repetition](#)

CONTRAST

Contrast is the juxtaposition of opposing elements eg. opposite colours on the colour wheel - red / green, blue / orange etc. Contrast in tone or value - light / dark. Contrast in direction - horizontal / vertical.

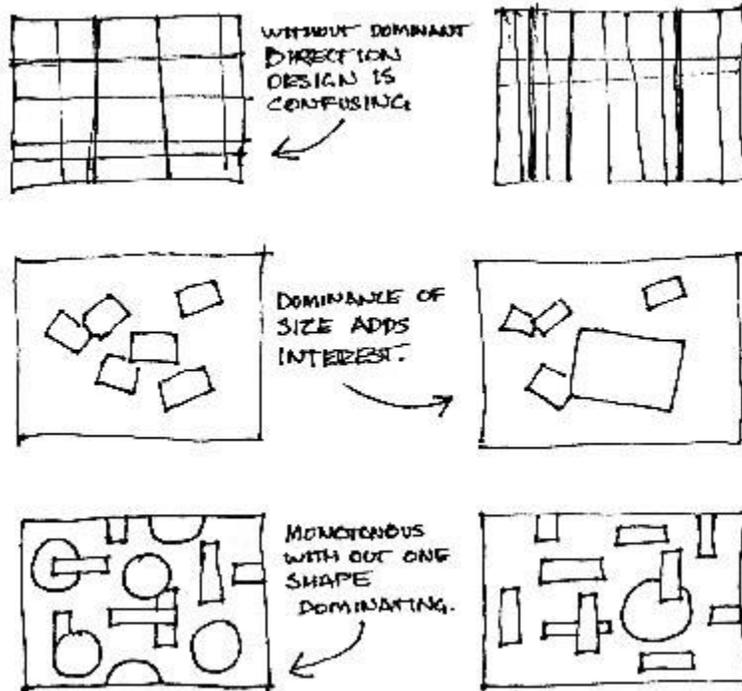
The major contrast in a painting should be located at the center of interest. Too much contrast scattered throughout a painting can destroy unity and make a work difficult to look at. Unless a feeling of chaos and confusion are what you are seeking, it is a good idea to carefully consider where to place your areas of maximum contrast.

HARMONY

Harmony in painting is the visually satisfying effect of combining similar, related elements. eg. adjacent colours on the colour wheel, similar shapes etc.

DOMINANCE

Dominance gives a painting interest, counteracting confusion and monotony. Dominance can be applied to one or more of the elements to give emphasis



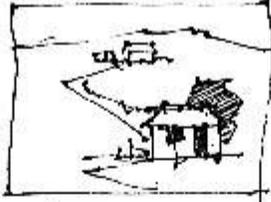
UNITY

Relating the design elements to the the idea being expressed in a painting reinforces the principal of unity.eg. a painting with an active aggressive subject would work better with a dominant oblique direction, course, rough texture, angular lines etc. whereas a quiet passive subject would benefit from horizontal lines, soft texture and less tonal contrast.

Unity in a painting also refers to the visual linking of various elements of the work.



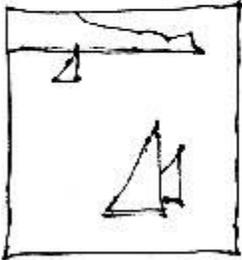
IN THIS EXAMPLE THE EYE HAS TO MAKE AN UNCOMFORTABLE JUMP TO LINK THE TWO GROUPS OR BUILDINGS.



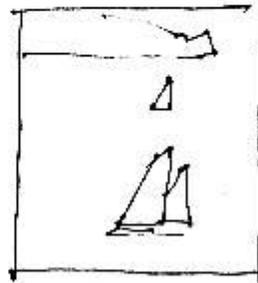
BY INCLUDING A ROAD THE LINK IS MORE COMFORTABLE: THE PICTURE HAS BETTER UNITY.



THE LINK COULD ALSO BE MADE WITH A DARK MASS OF TREES.



WHERE THERE IS NO LINEAR OR TONAL LINK BETWEEN TWO SHAPES, THEIR PLACEMENT & SIZE RELATIONSHIP IS VITALLY IMPORTANT FOR A COMFORTABLE VISUAL LINK TO BE MADE.



AVOID MAKING A VERTICAL VISUAL LINK. IT ALWAYS FEELS AWKWARD.

Elements of Kenyan Landscape – elephants, zebras, giraffes, antelope, birds (go-away bird, flamingo – build-a-bird project? Then try to identify?) – Nile crocodiles, cattle, grasslands – acacia tree, grasses, mountains (build a map of your village) – warthogs, monkeys,

Elements of culture - self portrait with face painting/jewelry (as Samburu), jumping dance, importance of WATER, (clay map of your village)

Great site: <http://www.v-liz.com/safari/samburu/village/vilthums.htm>

Elements of ecological conservation – 1) What is a habitat? Identify what animals need to survive. 2) Food chains/webs 3) How do people fit in to the web? 4) What is extinction?

Standard 3.0 Life Science

TOPIC

A. DIVERSITY OF LIFE

INDICATOR

- **1.** Compare and explain how external features of plants and animals help them survive in different environments.
- **OBJECTIVES**

1. Use the senses and magnifying instruments to examine a variety of plants and animals to describe external features and what they do.
2. Compare similar features in some animals and plants and explain how each of these enables the **organism** to satisfy basic needs.
3. Use the information collected to ask and compare answers to questions about how an **organism's** external features contribute to its ability to survive in an **environment**.

Classify **organisms** according to one selected feature, such as body covering, and identify other similarities shared by **organisms** within each group formed. **Standard 6.0**

Environmental Science

TOPIC

B. ENVIRONMENTAL ISSUES

INDICATOR

- **1.** Recognize that caring about the **environment** is an important human activity.

OBJECTIVES

1. Recognize and describe that individual and group actions, such as recycling, help the **environment**.
2. Recognize and describe that individual and group actions, such as littering, harm the **environment**.
3. Give reasons why people should take care of their environments.
3. Given pictures of stages in the life cycle of a plant or an animal, determine the sequence of the stages in the life cycle.
- 4.
5. Provide examples, using observations and information from readings that life cycles differ from **species** to **species**.

Standard 3.0 Life Science

TOPIC

A. DIVERSITY OF LIFE

INDICATOR

- 1. Explain how animals and plants can be grouped according to observable features.

OBJECTIVES

1. **Observe** and compile a list of a variety of animals or plants in both familiar and unfamiliar environments.
2. Classify a variety of animals and plants according to their observable features and provide reasons for placing them into different groups.
3. Given a list of additional animals or plants, decide whether or not they could be placed within the established groups or does a new group have to be added.
4. Describe what classifying tells us about the relatedness among the animals or plants placed within any group.

Grade 4.3.F. ECOLOGY

INDICATOR

- 1. Explain ways that individuals and groups of **organisms** interact with each other and their **environment**.

OBJECTIVES

1. Identify and describe the interactions of **organisms** present in a **habitat**.
 - **Competition** for space, food, and water
 - Beneficial interactions: nesting, pollination, seed dispersal, oysters filtering as in the Chesapeake Bay, etc.
 - Roles within **food** chains and webs: scavengers, decomposers, producers, consumers.

Explain that changes in an **organism's habitat** are sometimes beneficial to it and sometimes harmful.

Grade 5. B. ENVIRONMENTAL ISSUES

INDICATOR

- 1. Recognize and explain that decisions influencing the use of **natural resources** may have benefits, drawbacks, unexpected consequences, and tradeoffs.

OBJECTIVES

1. Identify and describe personal and **community behaviors** that waste **natural resources** and/or cause environmental harm and those **behaviors** that maintain or improve the **environment**.

2. Identify and describe that individuals and groups assess and manage risk to the **environment** differently.

INDICATOR

- 2. Recognize and describe that consequences may occur when Earth's **natural resources** are used.

OBJECTIVES

1. Explain how human activities may have positive consequences on the **natural environment**.
 - Recycling centers
 - Native plantings
 - Good farming practice
2. Explain how human activities may have a negative consequence on the **natural environment**.
 - Damage or destruction done to **habitats**
 - Air, water, and land **pollution**
3. Identify and describe that an environmental issue affects individual people and groups of people differently.

Science Based Activities:

1. Build-a-bird – students assemble birds from precut/stenciled shapes of bodies, legs and beaks. Students examine a bird ID guide to try and identify which real African bird their bird most resembles, and then use the internet to find out what their bird eats and where it lives. Mount them in the appropriate place in our room, which will have savannah, tree top, watering hole, and cave.
2. Zebra stripes – reading about the function of the stripes (camouflage/predation protection) and create a zebra family that has its own pattern – vary the thickness and number and angle of lines. Families include a mother, father and one zebra foal. Make a larger scale model of the family. Mount them in a searchable display – can you find the zebras who match?
<http://www.lpzoo.org/education/zebra/student/formfunction/h.html>
3. food chain – plan out African food chain that can be circular. Use paper clay to make tiny model animals ; create a mobile of animals eating each other – this can be
4. lion masks, elephant masks, antelope masks. Use masks to act out food chain. Create artificial trees/grass?