Garden of Grasses

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Grade: 7-12 grades
Subject(s): Science, Art
Duration: Three class periods.
Description: To open the eyes of students to the wonders of the natural grasslands.
Goals: To combine science and art by creating a scientific illustration.

Objective:

1. Be able to conduct a line transect.
2. Be able to identify plants and grasses found on the transect line.
3. Be able to group plants according to height.
4. Be able to draw and paint each plant groupings.

Materials: (field)

1. Transcent Line (See attached)
2. Nails
3. Pencil and paper
4. Organizational Chart (See attached)
5. Weed and grass journal
6. Plastic bag for plant samples

Materials: (classroom)

1. Pencil and paper
2. Watercolors and palettes
3. Pen and ink

Procedure:

1. Show the class an example.(See attached)
2. Discuss the different plants and grasses found native to our area.
3. Discuss how to use the line transect to identify plants found every foot along the tape.
4. Discuss composition for final painting. Composition for this project should be arranging the plants with the shortest in the front and the tallest in the back.
5. After discussion review field steps and painting steps.

Assessment:

Science

1. Teacher checks the correct identification of all plants.

Art

1. Teacher grades on neatness, proper use of media, effort, and final composition.

Montana Content Standards:

Science: Content Standard 1, 3, & 5.
Art: Content Standard 1, 2, 4, & 6

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Plant Name	Height (cm)	Sample Gathered(X)	Additional Observation

Transect Line

Students use transects to collect detailed data about the variety of living things in the study area. A transect is a 50 foot straight line across the study area. At one foot intervals, whatever plant is under the tagged mark is recorded. For example, at the start of the transect line, there is grass; at one foot, there is soil; at two feet there is a flower, so on. Using transect allows you to collect random data about the distribution and abundance of living things in an area.