I Spy Environments

Summary
This activity is an opportunity for students to use their knowledge of environments in an activity that will also allow them to explore fine art paintings from the Springville Art Museum. In small groups, students will investigate a variety of paintings of places in Utah in different seasons and different environments using different mediums. They will then decide on physical characteristics of these using a graphic organizer.

Main Core Tie
Science - 4th Grade
**Standard 5 Objective 1**

Group Size
Small Groups

Materials
- Four to six postcards for each group of four to six students (see Additional Resources)
  - Utah Art Graphic Organizer (pdf)
  - Suggestions for Adjectives List (pdf)
- Art posters from Springville Art Museum
- Brown construction paper
- Chalk (optional)
- Literature books to model information about environments written in poetic language

Additional Resources
Springville Art Museum will visit schools throughout the state and conduct day-long art presentations for the whole school, as well as provide teachers with sets of artist postcards for classroom use.

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Books
Examples of environmental pictures and models for narrative language:
- *Mountain Dance*, by Thomas Locker; ISBN 0-15-202622-3 "Mountains rise through the clouds in a slow dance that goes on and on..."

Background for Teachers
You will need photos of the postcards that contain paintings of landscapes from the museum. These can be easily downloaded from the museum's Web site. Directions for Creating Your Own Postcards (pdf) are included. You can also obtain sets of postcards from the museum and use only the ones containing landscapes. Many of the pictures are also available from your school library in the Utah art prints.

Intended Learning Outcomes
1. Use Science Process and Thinking Skills
4. Communicate Effectively Using Science Language and Reasoning

**Instructional Procedures**

**Invitation to Learn**
Several days ahead of time, hang a variety of the Springville Art Museum art posters around the classroom. Use posters that show landscapes, specifically of deserts, wetlands, or forests from Utah. As you begin this lesson, mentally choose one of the landscapes. Then play a game of 20 questions where students may only ask questions with yes/no answers. For example, you might choose the painting, *Moonrise in the Canyon Moab*, by Birger Sandzen. Students might ask, “Does the painting have lots of trees? (No) “Are there mountains in the painting?” (Yes) When the teacher’s painting has been guessed, let a few students try it. Then respond, “Some of the observations that identify physical characteristics of environments are the same things that were in the questions you asked. You have good eyes!”

**Instructional Procedures**
- Distribute postcards to the groups and have the students talk with each other about the artwork. Post a list of suggested questions that they can discuss among the group.
  - What environment, or environments, do you see?
  - What time of year is it?
  - What might the temperature be?
  - Is there any evidence of precipitation?
  - Do any of the paintings have common characteristics?
  - What clues (inferences) were used to decide any information?
  - Can you see any geometric shapes in the paintings? Name them.

As a class, share discoveries about the paintings. If you are able to display the reprint posters from the Springville Art Museum, use these to help students discover additional information located on the back (e.g., artist name, location, media used, etc.). Have students take one specific painting and fill out the *Utah Art Graphic Organizer* to record information that will help classify the painting for a specific environment. The graphic organizer asks students to identify shapes, common lines, and colors in their paintings. This will use some of their math skills to find parallel and perpendicular lines, as well as geometric shapes. Have them list the common colors they see in the paintings. (The next steps can be another lesson or a continuation for this one.)

If you live in an area where there are mountains, forests, or deserts, take the class outside and have them look around and quickly sketch what they see. Observe the colors and common lines and shapes. If there are mountains, be sure they observe the line where Earth meets the sky. Brainstorm a list of adjectives students would use to describe what they see and tell someone else how the painting, or the outside observations, made them feel. Use the list of *Suggestions for Adjectives List* as a resource for the mountain writing activity.

Create a *Mountain Journal*.

**Extensions**

**Language Arts**

*Mountain Journals*
Students need a piece of paper that is long and skinny--the size can vary. It can be as simple as brown construction paper cut to 4 1/2” x 18”.
- Fold the paper into thirds so the ends of the sheet overlap each other. (Each student can decide how much of an overlap s/he wants to have.) Unfold back to a long skinny line.
- Sketch ideas for a mountain silhouette on scratch paper. This is the line where land meets sky.
- Choose one for the journal.
Lightly draw the silhouette of mountains on the top of the paper. Remind students that they can always cut more off it they need to, but they can't put paper back on. This can also be done as a "torn" paper activity, giving a nice texture to the top of the book. After cutting out the silhouette, students can check the shapes and make any adjustments needed.

An option that adds a nice touch to the book is to use chalk to add highlights or details to the mountains. The book can either be a science journal with data collected about physical characteristics of mountains or a poem that describes these characteristics. If descriptive or narrative poetry is done, encourage students to use the Suggestions for Adjectives List to enhance their writing.

Art Connections
If possible, allow students to choose the medium they want to use. If necessary, review some of the art principles about space such as:
- Objects get smaller as they recede into the distance.
- Objects are higher in a picture as they get further away.
- Objects lose detail as they get farther away.
- Objects get bluer or grayer as they get farther away.
- Objects in front overlap objects that are behind them.

Have students create a landscape that shows an environment from Utah and try to use some of the physical characteristics they have identified. Display and discuss the paintings while evaluating not only art targets for fourth grade but the science concepts studied.

Additional Extensions
- Place an overhead on top of the pictures and outline the geometric shapes in the paintings. Any parallel or intersecting lines? Any quadrilaterals? Cylinders? Rectangular prisms? What about angles? What about flips or slides?
- Find the painting locations on a map of Utah. Do the locations validate their inferences?
- Trip to the Springville Art Museum, or another exhibit near your school that will help students practice learned skills.
- Springville Art Museum visit to school.
- Create another folded book with a shape that represents another environment.

Family Connections
During a week (include a weekend) have students, along with family members, keep a tally of how many different environments the family observes. Discuss together the physical characteristics, or clues, they observed and used to classify them.

Assessment Plan
- Share the mountain books with another class.
- Conduct "tours" of the art posters for younger students to explain the physical characteristics of the painting they study. Then share the mountain books in small readers' circles. Observe students dialogue to assess comprehension and application of information.
- If students create their own landscape paintings, do the activity above with their original art. Have students evaluate their landscapes and find ways in which they are similar to the artists' paintings. Do they use color blends, lightening and darkening colors, shades and tones?

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