

SCESTA Earth Science Share- a- Thon

2002 South Carolina Science Council Conference

Myrtle Beach Convention Center

Friday, November 8, 2002

PAINTING WITH ROCKS

(third grade)

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From earliest times, most human cultures have practiced the art of painting or drawing on parts of their bodies, usually their hands or faces. Sometimes, body paint was used like a modern-day cosmetic, to make a person more beautiful. Other times it was used to frighten or impress others, like the facial war paint used by Native Americans about to go into battle or by religious leaders to mark a special cultural ritual. Today, we buy cosmetics or body paint at the store. Where and how did early cultures acquire these materials and learn to use them?

Science Standards Addressed by this Activity:

Grade 3 - III A 1 g = Observe and describe the unique physical characteristics of a variety of rock types.

Grade 3 - III A 1 h = Give examples of how humans obtain and use earth materials as resources (P, T).

Inquiry Questions for Class Discussion:

1. Who uses make-up and/or body paint and why - and when - do they use it?
2. Where do we get make-up and body paint today? How do you think it is made?
3. Early cultures used make-up and body paint also - what were their reasons?
4. How do you think early cultures found - or made - make-up and body paint?

Materials Needed for Activity:

- small containers (plastic lids work well) in which to mix powder and water
- containers to hold water
- unglazed porcelain tiles (streak plates) on which to powder the rock samples
- rock samples of various colors (hematite, limonite, kaolinite work well)
- blank paper appropriate for finger-painting activity (alternate to body painting)
- paper towels and sink available so kids can clean themselves up

Procedure:

1. Use inquiry questions to begin class discussion of topic.
2. Discussion should lead to realization that the only inorganic resource available to early cultures for cosmetic purposes was rock and soil.
3. Demonstrate that rubbing rock on hand (gently) doesn't mark the skin very well.
4. Demonstrate that rubbing rock on porcelain plate creates powder that, when mixed with water, produces a very vivid and easy to apply body paint.
5. Ask students to try 'paint-making' with three different kinds of rock. Ask them to determine the best ratio of water and rock powder to get the best results.
6. Students may use their fingers to paint their faces - or fingernails - or, alternately, they can fingerpaint on the blank paper using their powders.
7. Clean up the mess, then discuss as a class what made the best paint.