Waxed Paper Watersheds

Purpose: introduction of watersheds

Materials:
Square of waxed paper for each participant or group
Spray bottles with water
(optional)
   Cocoa powder in a sieve
   Map showing topographic features of watershed
   Paper toweling or towels to dry water or do activity outside

Alignment:
CA Science Standards:
4th grade 5.c,
5th grade 5.b-d,
6th grade 2.a,b,
High School earth science 9.c

Ocean Literacy Principle and concepts: 1g

Procedures:

1. Give each participant a piece of waxed paper and ask him/her to crumple it into a ball.
2. Ask the participants to then uncrumple the paper to form a mountain or hill.
3. Notice how there are valleys or canyons leading down the sides of the mountain.
4. Predict where you think the water will flow if you spray the mountain with water.
5. Spray the waxed paper with water representing rain, and identify the watersheds.
6. Ask the students: how many large watersheds do they see? What are the features that separate the watersheds?
7. Have students write their own definition of a watershed and share their work with others to come up with a common definition.
8. Pass out topographic maps of watersheds and have teams form their paper into the same shape as the watershed represented in the map.
9. Apply water and discuss how the watersheds’ flows are similar or different from one another.
10. Sprinkle cocoa powder on the waxed paper to represent dirt and spray it again with water. Have students realize what happens to soil when there aren’t plants to hold it in place.

Evaluation:
Have students give a tour of the watershed that they constructed.