Out and About with Preschoolers: Sunshine Science

It's a beautiful day to be outdoors with the children. But is there any way to help them meet science benchmarks while outdoors? Yes, there is! Go ahead—make the outdoors your science lab! In any season, preschoolers can study characteristics of the sun, the moon, and the clouds in the sky. (See Illinois Early Learning and Development Benchmarks 11.A.ECa, 11.A.ECd, 12.E.ECa, 12.F.ECa, and 13.A.ECa.) Just help them dress for the weather and put on their sunscreen.

Everyday sky activities

- Talk with children about things they have noticed about the sky before taking them outside. Share books with them that mention the sky, such as Carolyn Lesser's *What a Wonderful Day to Be a Cow.*
- When the sun is not overhead, invite the children to lie down on a cloth large enough for everybody and observe the sky above them. **Remind them to never look straight at the sun!** Then ask them to tell what they noticed. Record their comments for later discussion. Repeat the activity on overcast, partly cloudy, misty, and snowy days. Invite children to make sketches of clouds while lying down.
- Help them create a chart to show what the sky looked like each time they observed it.

Sunny day activities

- Invite children to look at the shapes of shadows cast by trees and other objects. Show them how to make chalk outlines of shadows. Half an hour later, suggest that they revisit their outlines. They can make new outlines in a different color. After 30 more minutes, check again. Each time, ask them to notice where the sun is in the sky. Record their comments and questions about sun and shadows to discuss later. Talk about possible explanations for the changes they see.
- Let small groups of children create pictures with their own shadows. Suggest challenges: "Without really touching hands, how might you make your shadows hold hands?"
- Introduce acrylic prisms, colored acetate film, and other clear or translucent objects. Invite children to see what happens when the sun shines through these items onto the ground. Do the same with objects that block the sun, too (umbrellas, papers with holes cut out, etc.).
- Provide buckets of water and large paintbrushes or rollers. Invite children to "paint" sidewalks, bricks, trees, etc. After a few minutes, ask them to notice which of the places they painted have begun to dry. They will probably see that sunny areas dry faster than shaded areas. Help them record their findings and discuss their ideas about what happened.
- Encourage children to try their own sunlight/shadow experiments.

Some of the above activities were adapted from *Active Experiences for Active Children: Social Studies* by C. Seefeldt & A. Galper (Upper Saddle River, NJ: Merrill, 2000) and the September 2002 *Young Children* article "Science in the Preschool Classroom: Capitalizing on Children's Fascination with the Everyday World to Foster Language and Literacy Development" by K. Conezio & L. French (volume 57, number 5, pp. 12-18).

For related Web resources, see "Out and About with Preschoolers: Sunshine Science" at http://illinoisearlylearning.org/tips.htm.

Illinois Early Learning Project

29 Children's Research Center
University of Illinois at Urbana-Champaign
51 Gerty Dr. ● Champaign, IL 61820-7469
Telephone: 217-333-1386 ● Fax: 217-244-7732
Toll-free: 877-275-3227
Email: iel@illinois.edu
Internet: http://illinoisearlylearning.org

Illinois State Board of Education