Out and About with Preschoolers: Sunshine Science

It's a beautiful day to be outdoors with the children. Take the opportunity to make the outdoors your science lab! In any season, preschoolers can study characteristics of the sun, the moon, and the clouds in the sky. Just help them dress for the weather.

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. Including photographs and captions on the chart will help children recall what they noticed.

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 shadows. Suggest challenges: "Without really touching hands, how might you make your shadows hold hands?" "Can you trace your friend's shadow, or is your shadow blocking your view? What could you do differently to solve that problem?"
- 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. For example, they can look outside each day and predict whether there is enough sun to see shadows. Or, they can stand on a line and project a shadow, predicting what will happen to their shadow when they step forward, backward, or to the side.

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