Sunny Day Painting

*Explore properties of water and watch evaporation happen by “painting” with water in the sun.*

**Big Idea**

Water can change the appearance of some materials. Heat from the sun can change water from a liquid to a vapor.

**Illinois Early Learning Standards**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>11.A.ECc</strong></td>
<td>Plan and carry out simple investigations. Children will make predictions and observations about the speed of evaporation due to the sun on various surfaces.</td>
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<tr>
<td><strong>12.D.ECa</strong></td>
<td>Describe the effects of forces in nature. Children will describe the impact of the sun on their outdoor paintings.</td>
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<tr>
<td><strong>12.E.ECa</strong></td>
<td>Observe and describe characteristics of earth, water, and air. Children will experiment with wind, water and air, noticing which changes the evaporation time of the water.</td>
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**Materials**

- Buckets
- Water
- Painting tools
- The sun!

**Setup**

One bucket of water placed outside with painting tools.

**Directions**

1. On a sunny day, have children go outside where there are many flat surfaces (the sidewalk, patio surface, outdoor patio table, side of the house/building, fences, etc.)
2. Have children use the bucket of water provided and test the different paint brushes and tools, painting with water on the various surfaces.
3. Observe the differences in the way water moves across the different surfaces and how the painting tools impact and change the application. Watch the liquid evaporate from the various surfaces.
Indoor alternative:
1. To replicate the lessons of this activity indoors, have children try to paint on a shower curtain or towel in the bathtub, or paint on a cookie sheet with cups of water. With grown-up help, when children are finished painting and water has been removed from the area, heat sources such as hair dryers can be brought out as a testing mode for drying the water up.

Investigation Questions:

- What happened to the different surfaces when they were painted with water? Even though water is clear, what happened to the color?
- Did the surface stay dark and wet?
- What made the water disappear and dry up?
- Would this experiment work the same way on a cloudy day?
- What else did you observe?
- Which surface had the water evaporate the quickest? Why?