Objective: Children explore color, light and shadow by creating their own puppets to hold in front of a light source.

Age Range: 2 ½ & up

<table>
<thead>
<tr>
<th>CONTENT TOPICS</th>
<th>PROCESS SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light &amp; Shadow</td>
<td>Observing&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Matter&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Finding Patterns &amp; Relationships&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Energy&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Designing &amp; Making&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>1</sup> Science Process Skills  <sup>2</sup> Head Start Child Outcomes  <sup>3</sup> Oregon Early Childhood Foundations

TIME REQUIRED

<table>
<thead>
<tr>
<th>Advance Preparation</th>
<th>Set Up</th>
<th>Activity</th>
<th>Clean Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>About 60min.</td>
<td>About 10 min.</td>
<td>About 30 min.</td>
<td>About 10 min.</td>
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</tbody>
</table>

MATERIALS

Scissors, black construction paper, tissue paper, colored cellophane*, Popsicle sticks, glue sticks, flashlights or projector

*available from www.discountschool supply.com

ADVANCE PREPARATION

- Cut out shapes from the black construction paper.
- Cut spaces out of the shapes for tissue paper and/or cellophane. (Ex. Teddy bear with eyes, nose, and tummy cut out. Star with the middle cut out.)
- Cut the tissue paper and cellophane into manageable pieces that are sized so that they will fit over the spaces in the cut-outs.

EXPLANATION

The following is a sample of some scientific explanations behind this subject. For more information see the books in the Discovery Box.

- The dark space created when an object blocks the path of light is called a **shadow**.
- An object you can see right through is called **transparent**. Ex. cellophane
- An object you can see light through is called **translucent**. Ex. tissue paper
- An object you cannot see through at all is called **opaque**. Ex. black construction paper

ACTIVITY PROCEDURE

1. Set out the construction paper cut outs, tissue paper and cellophane, Popsicle sticks, and glue sticks.
2. Ask the children to glue the cellophane and tissue paper pieces to the spaces in the cutouts.
3. Children can glue a Popsicle stick onto their creation.
4. Allow children to experiment and play with their puppets in front of a light source.
DISCUSSION

To discuss the topic, explore the children’s knowledge on the subject through open–ended questions.

Ask:
- Does the cellophane and tissue paper look different when there is light shining through them?
- Which kind of paper looks most colorful with light shining through it?
- Which kind of paper can you see through the most easily?
- Which kind of paper can you not see through?