## WEEK 3



## Science and Engineering: Light Play 3: Transparent Materials and Sorting

Children play with light. This week, children investigate how light interacts with transparent materials. They sort materials by opaque, translucent, and transparent qualities.

Continued from Weeks 1-2.

Vocabulary	transparent: letting all light through
Additional Materials	<ul> <li>reintroduce some of the opaque materials from the previous week</li> <li>reintroduce some of the translucent materials from the previous week</li> <li>various small, transparent materials from around the classroom (e.g., glass, clear plastic cups, transparencies, zip-lock bags, etc.)</li> <li>Light Play recording sheets</li> <li>3 bins/tubs/baskets to categorize the materials by property Use the light play labels to create a bin for each property. As an alternative, masking tape can be used to create sections on the light table itself to sort the materials.</li> <li>light play labels (opaque, translucent, transparent) for bins</li> </ul> Store all of the materials (opaque, translucent, transparent) in a large basket/bin. Bring to the Intro to Centers: the light table, large basket of materials, Light Play recording sheet, "opaque" bin, " translucent" bin, " transparent" bin
Intro to Centers	Last week in Science and Engineering, we experimented with translucent materials at the light table, materials that allow some light to come through. This week, you will find more materials! Some of these materials will be transparent. An item that is transparent lets all of the light through. Show a transparent item.

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	<ul> <li>If I put this transparent cup on the light table, what do you think will happen?</li> <li>Show and pass around the cup for children to see and feel. Invite predictions.</li> <li>This plastic cup is transparent. When I put it on the light table, all of the light passes through the plastic.</li> <li>In this large bin, you will find an assortment of materials. Some will be opaque, some will be translucent, and some will be transparent. As you test the materials on the light table, you can place them in the matching box.</li> <li>Show the bins and their labels. Model how to use the Light Play recording sheet (if appropriate to the group) and placing the items in the correct bin.</li> </ul>
Standards	<b>PreK-PS4-2(MA).</b> Connect daily experiences and investigations to demonstrate the relationships between the size and shape of shadows, the objects creating the shadow, and the light source.

## Image Citations from Center Language Supports:

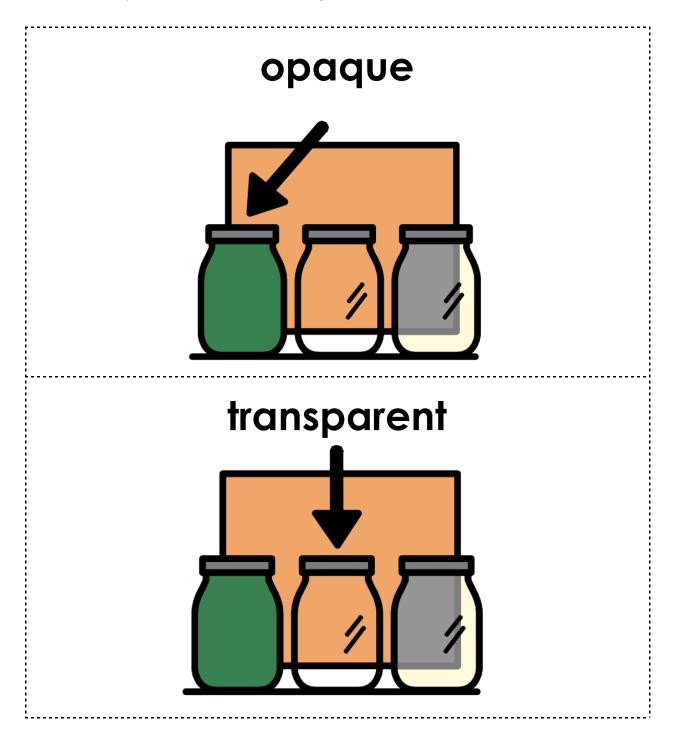
transparent: https://www.mornglass.com/how-to-make-the-glass-frosted-glass.html

Notes

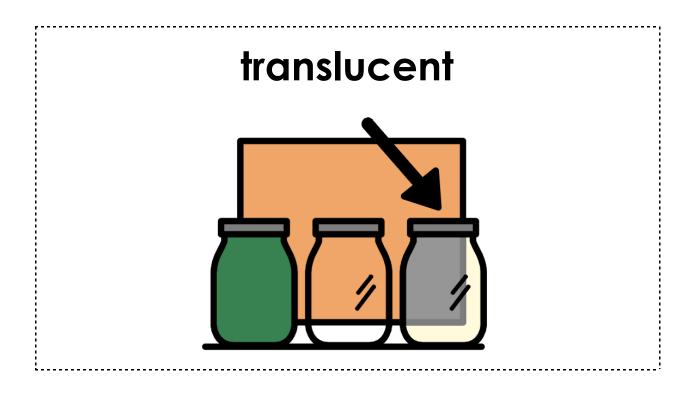
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## Opaque, Transparent, Translucent labels

Cut out the images and attach them to tubs. After testing the objects, children place the objects in the corresponding tub.



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Light Recording sheet

**Prediction:** 

opaque





transparent



**Observational Drawing:** 

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