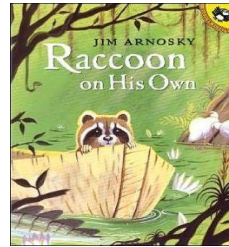
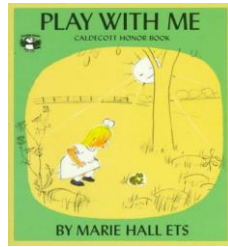




Sorting Reflective and Non-Reflective Materials

**Materials:**

- *Raccoon On His Own*
- *Play With Me*
- reflective and non-reflective materials (e.g., foil, mirrors)
- flashlights
- trays
- containers for sorting materials
- labels: “reflective”/ “non-reflective”

Vocabulary:

- reflective
- non-reflective
- shiny
- dull
- surface
- sort

Preparation: Gather reflective materials such as foil, mirrors, and magnifying glasses from around the classroom. Gather non-reflective materials. Label trays with “reflective” and “non-reflective.” Set up materials in the Art Studio.

Intro to Centers:

“In *Raccoon On His Own* and *Play With Me*, the **raccoon** and the girl saw their **reflections** in water. What do you notice?”

“When the **sunlight** shone on the **shiny surface** of the water a **reflection** was created.”

“I want to create a **reflection** with these materials. What do you notice?”

“The ____ is **shiny**, like the **surface** of water. The ____ is **dull**--not shiny. If I shine a light on the ____ and the ____, where do you predict would be a **reflection**?”

“Today in Puzzles and Manipulatives, you can shine the flashlight (or hold up to a light source, i.e., lamp) on the materials. If you see a **reflection** on the material, **sort** it into the tray labelled ‘**reflective**.’ If you don’t see a **reflection** on the material, sort it into the tray labelled, ‘**non-reflective**.’”

Show illustrations.

Children respond.

Show materials. Children respond.

Model. Children respond.

Model.

During Centers:

Support children in using light sources, i.e., flashlights, lamps, etc. to test materials. Encourage children to collaborate, i.e., one child shines the light source, another sorts into the tray. Compare and contrast the reflections on the materials to the reflections in *Play With Me* and *Raccoon On His Own*. Encourage children to count the objects in the groups, record the data, and/or compare which has more/less.

Guiding Questions during Centers:

- How did you sort the materials?
- How can you make the number of items in the two groups equal/the same?
- How are the reflective materials similar to or different from a mirror?
- What do you predict would happen if we hung the reflective materials in the window like when we did the *Color Fading* experiment?

Thinking & Feedback: Invite children to share their processes. Encourage children to describe the challenges they might have encountered.

Documentation: Collect samples of the children’s work as well as photographs and/or video of their process; use the documentation to launch a discussion during Thinking and Feedback.

Provocation: Encourage children to label ‘reflective’ and ‘non-reflective’ groups with other names, i.e., shiny, dull, sparkly, matte, etc. Encourage children to list other materials in the classroom/around the school into the groups, i.e., draw a picture of the front door to add to the ‘non-reflective’ group.

