# Transparent, Translucent, and Opaque Lesson Plan

**Teacher**

**School**

**Date**

**SLE #** PS.7.5.4: Design and conduct investigations of transparent, translucent, and opaque as applied to light

## Objectives:

**Content:** I will design and conduct investigations of transparent, translucent, and opaque as applied to light.

**Language:** I will use the terms transparent, translucent, and opaque while working with my group.

## Assessment:

Students will be assessed on their completed activity sheet and their completed closure questions.

## Technology/Materials:

Flashlights, different materials to test (wax paper, aluminum foil, white copy paper, colored construction paper, balloons, pieces of cloth, etc), activity sheet, extra batteries, pencil

## Vocabulary:

Transparent, translucent, opaque

## Bloom’s:

- X Remembering
- X Understanding
- X Applying
- X Analyzing
- X Evaluating
- X Creating

## Questions:

What does it mean when something is translucent? Transparent? Opaque?

Describe an object that is translucent, transparent, or opaque. Tell me how you would investigate an object to determine if it was transparent, translucent, or opaque.

## High Yield Strategies:

- X Identifying similarities & Differences
- X Summarizing & Note Taking
- X Cooperative Learning
- X Reinforcing Effort & Providing Recognition
- X Setting Objectives & Providing Feedback
- X Generating & Testing Hypotheses
- X Cues, Questions & Advanced Organizers
- ☐ Homework & Practice
- ☐ Nonlinguistic Representations

## Instructional Strategies:

### Engagement:

Activate prior knowledge by asking questions above. Show the students the materials in their boxes/bags.

**NOTE:** Before the activity, I would set up boxes or bags with all of the materials in them. This will make it easier to distribute materials once lesson begins.

Show a few of the objects and have students predict if the objects will be transparent, translucent, or opaque.

### Exploration:

Allow students to explore the various materials using their flashlight to complete the activity sheet.

### Explanation:

Throughout the activity, walk around the room asking students to explain their prediction and the reasoning behind it. Also ask students about their results and to defend their reasoning.

### Elaboration:

Allow students to find other objects in the room to test.

**Intervention Strategies:** Remodel as needed. Walk around room to facilitate learning.

**Accommodations & Modifications (IEPs)** See individual IEPs, shorten assignment, group as needed.

### Evaluation:

Allow students to share their results with the class.

### Closure:

Instruct students to complete activity sheet and answer the following questions;
- Were there any materials that you had difficulty classifying as translucent, transparent, or opaque? What was the difficulty?
- Can objects be classified as more than one? Could something be translucent and opaque?
- Compare and contrast transparent, translucent, and opaque.
| Homework: | NA |