

Do science from home: TRANSPARENCY!

Materials needed to do science

- Flashlight or a lamp in a dark/semi dark room
- Objects to shine the light at: a thin sheet, a thick blanket, a piece of paper, aluminum foil, plastic wrap, a shirt, a book, a glass of water, paper towel, a leaf, etc.

1 Begin doing science by introducing our new concept

Discuss light by talking about where light comes from. Have child try to come up with different sources of light (the sun, a lamp, a flashlight, a candle, etc.). Then explain that light travels from the source, like a lightbulb, and hits objects that we see. Transparency has to do with light. Sometimes light goes through an object and sometimes light can't go through the object so it bounces off of it. Objects that light can go through are transparent. If something is not transparent, then not very much light can go through it, or none at all!

2 Let's do science by OBSERVING!

Have your child observe the first object/material with their eyes and hands. Is it thick or thin? Is it solid or does it have holes for light to go through?

3 Let's do science by PREDICTING!

Objects that light can pass through are transparent. If something is not transparent, then not very much light can go through it. Have your child guess if the light will go through the first object or not. Will light be able to pass through? Is the object transparent or not transparent?

4 Let's do science by CHECKING our guesses

This activity works best in a dimly lit room, so if appropriate, turn the lights off before the next step. Have your child do science and test their predictions by shining the light on the first object. Does any light go through the object? Is the object transparent or not transparent? Why does your child think that is? Was their prediction correct?

5 OBSERVE, PREDICT, and CHECK with more objects

Let your child continue to do science by testing out different objects with the flashlight. As you introduce each new object, continue going through the steps of **observing**, **predicting** and **checking**!