

CLOUD CLUES

Materials have lots of different properties; one is called visual opacity, which means how much light passes through the material. There are three different ways to describe visual opacity:

Transparent – light passes through the material/object; things on the other side can be seen clearly. (Example: plastic wrap)

Translucent – light passes through the materials/object; things on the other side can't be seen clearly. (Example: wax paper)

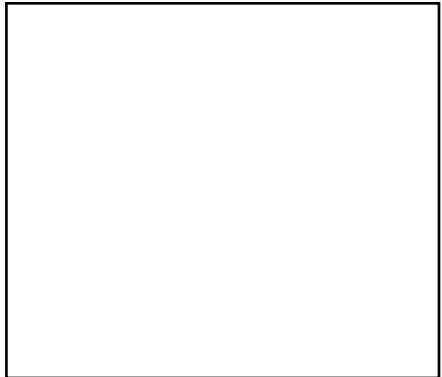
Opaque – little or no light passes through the materials/object. (Example: paper bag)

Here's how:

1. Come up with a way to test the visual opacity of different everyday items.
2. Describe your test. You can draw your setup if needed.

Describe:

Draw:



3. Test your materials and sort them. List the results below:

Transparent	Translucent	Opaque

CLOUD CLUES

Clouds are often described by their opacity. Knowing whether they are transparent, translucent, or opaque tells scientists how much sunlight (energy) they allow in.

Go outside
and look at the
clouds!



Remember not to look
directly at the sun.

Sketch your observations
of the clouds:



The clouds today
were (circle one):

transparent

translucent

opaque



Watch **SciGirls** collect data about
clouds on pbskids.org/scigirls.
Select the **SkyGirls** episode.