

Curious about Cloud Cover?

Clouds play an important role in maintaining Earth's temperature. One of the ways they regulate the amount of light (energy) coming from the sun is their opacity. The terms transparent, translucent and opaque describe how much light gets through a cloud and helps us understand why clouds make shadows.

Visual Opacity

Transparent – light passes through.

Transparent skies would make crisp, shadows with clear edges

Translucent – less light passes though.

Translucent skies would make fuzzy shadows

Opaque – little to no light passes through.

Opaque skies would make very dim or no shadows.



Procedures:

1. You will need a couple different covers, a flashlight and a small figurine to make a shadow. The covers should allow different amounts of light through, i.e. solid dark paper or fabric and wax or light-colored tissue paper and plastic wrap or no cover on your flashlight.
2. Cover the end of your flashlight with one cover and lay it down with the light pointing toward your figurine. Look at the shadow!
3. Decide if this cover is transparent, translucent or opaque
4. Switch the cover on your flashlight and try again. Try as many different covers as you would like.

