Shadow Puppets

A shadow is a dark area that appears behind an opaque object that is blocking light. Shadows can be very useful. They give us shade on hot sunny days, and can create great hiding spots for hide and seek! But did you know that you can also tell stories with shadows?

1. Shine a strong light directly onto a blank wall. You can use a lamp or a flashlight for this step.
2. Place your hands halfway between your light source and the wall.
3. Follow the hand placements you see in the photos to make your shadow puppets!

To a computer, the world is understood in **binary**: everything must be broken down to either an "on" or an "off" state (or sometimes "true" vs. "false", or "yes" vs. "no"). You can think of light and shadow in this way. Places with light can be described by a 1 (on) and places with shadows as a 0 (off).

**TRY THIS:**

What happens to your shadow when you move your hands closer to the wall?

What happens when you move your hands closer to the light?

Can you make up a story to go with your shadow characters?

Can you make up any new shadow characters?

Can you trace your shadow character on a piece of paper? Try getting a friend or parent to help you!