

Light and Shadows



Talk together about what you already know about light and shadows. What makes light? What is the source of the light? What makes a shadow?

Here are some things we learn when we explore light and shadows:

- Most things don't make their own light.
- Light travels in a straight line.
- Light comes from natural and human-made things.
- We see things when light bounces off them into our eyes.
- A shadow is made when an object blocks the light.
- A shadow shows the shape of an object.
- You can change the size of a shadow by moving your body or an object closer to or farther from the light.

Indoor Shadows

How many different-shaped shadows can you make with one object while keeping the light source in the same place?

What are the different ways you can make a shadow larger or smaller but not change its shape?

What shadow shapes or creatures can you create with your fingers and hands?

What happens when you make shadows with many different light sources?

Talking and Exploring Together



Outdoor Shadows

Play shadow games by calling out different shapes, letters or numbers and creating them in shadows. Or call out movements like standing on one foot, reaching up high to touch the sky, and walking on all fours.

How did the shadow change? (Did it move, rotate, grow, shrink, etc.?)

Where can you see your shadow? Where *can't* you see your shadow?

Can you find other outside shadows?

Go outside and find a sunny place. Use chalk to mark where your child's toes are so she can stand in the exact same place later on. Place a pebble on the ground in the shadow of your child's head. Go back an hour later and have your child stand where her feet were when you traced them and place another pebble where the shadow of her head is now. What happened? Why do you think the shadow changes? What's different about where the sun was this morning and where it is now?



Vermont Early Literacy Initiative

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