

# SHRINKING SHADOWS

## ACTIVITY TO DO AT HOME



### **EXPLORE WAYS TO MAKE A SHADOW.**

What happens when we make shadows?

**TIME** 15 minutes

### **MATERIALS**

- Flashlight (or another light you can use to make shadows, such as a cell phone)
- Shape Templates
- Cardstock or heavy paper
- Scissors
- Tape
- Wooden or plastic sticks (craft sticks, stir sticks, etc.)
- Access to a printer to print Shape Templates (optional)

### **DIRECTIONS**

#### **1 SET UP**

- Print the shape templates on heavy paper and cut them out, or make and cut out your own simple shapes (circle, square, triangle, star, heart, etc.). Or, have your child make and cut out their own shapes.
- Tape each shape to a stick.

#### **2 GOAL**

Your child will **observe** and describe shadows. They will **try out** ways to make different shapes and sizes of shadows.

#### **3 EXPLORE**

You and your child can make shadows with the flashlight and your hands. Use these safety rules:

- Only point the flashlight at the wall.
- Turn the flashlight off when you are not making a shadow.

When you shine the flashlight at the wall, your child can put their hand into the beam of light. Ask your child what shape the shadow is. Take turns with your child to make different shadows with your hands. Talk with your child about what they notice about the shadows.



# 4

## EXPLORE

Ask your child how they could change the size of the shadow. Let your child **investigate** bigger and smaller shadows. Your child can **try** to make the shadow bigger. They can try to make it smaller. *Hint:* Move the hand closer to the flashlight to make a bigger shadow. Move the hand away from the flashlight to make a smaller shadow.

# 5

## EXPLORE

Give your child the cut-out shapes. Your child can put a shape into the light beam to make a shadow. Ask your child what shape the shadow is. As your child **tests** different shapes, ask them to describe each shadow. Your child may **observe** that the shadow is the same shape as the cut-out shape.

# 6

## EXPLORE

Ask your child how they could change the shape of a shadow. Your child can use one of the cut-out shapes to investigate. Remember to use the safety rules and to take turns! *Hint:* Turn the shape so it is sideways to the beam of light.

# 7

## SHARE

Encourage your child to **share** what they **noticed** about shadows. How did they make shadows? How did they change the size of the shadows? What did they **find out** about the shape of a shadow?



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