

# HOME/SCHOOL CONNECTION

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## Investigation: The Sun

### **Focus Question: How are shadows made?**

Find out more about shadows and have fun making shadow images!

### **Materials:**

- Darkened room
- Flashlight
- Interesting objects to make shadows
- Your hands
- Science notebook
- Computer with Internet access

### **Instructions:**

1. Collect some interesting objects in your home that you think will make interesting shadows.
2. Place the objects one at a time in front of the flashlight beam.  
What does the shadow look like?  
Be sure to rotate the object in front of the beam as the shadow may change depending on how the light is shining on it.
3. Record your observations in your notebook. You should include a picture of the object and then drawings of the shadow that you created.
4. Write a description under your shadow drawing to explain why the shadow looks like it does.
5. Do an Internet search on "hand shadow puppets."
6. Try to make the shadow puppets at home.
7. Record your shadow puppets in a notebook or on paper.  
What is the shadow (rabbit, dog, etc.)?  
How did you need to hold your hands to create the shadow?
8. Why does the shadow look like the puppet you were making?