

JR-SCIENTISTS

SHADOW SCIENCE

Kids love their shadows, love to chase shadows, and love to make shadows do silly things!

INSTRUCTIONS:

STEP 1: Print out your animal silhouettes.

STEP 2: Cut them out and tape them to the ends of your straws.

STEP 3: You are going to need a nice beam of sunlight or a bright lamp. Have your kids figure out where the best shadows are going to be located in the house or classroom by experimenting and testing! Can you find a way to make a shadow without light (hint: flashlight). There are so many great questions to ask your kids to spark a little creative thinking.

SUPPLIES

**Animal Silhouettes
Straws or Craft Sticks or
Skewers
Tape and Scissors**

THE SCIENCE

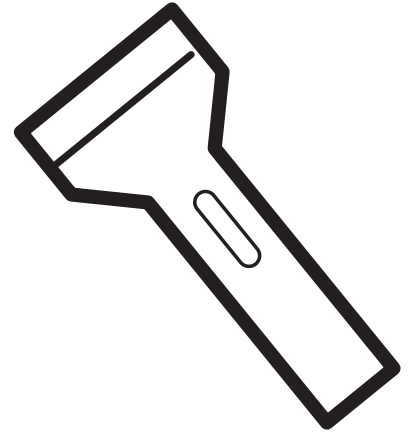
Shadows are all about physics and light. You need a source of light for there to be a shadow. When an object is in front of the light source it blocks the light and creates the shadow. Since the light can't pass through our paper, it creates a shadow on the wall.

You can also play around with the angle you hold your stick shadow puppets or how close or far from the wall you hold them. What happens?



Shadow Observations

Use this worksheet to process and evaluate your work.



What is involved in making a shadow?

Try to find the best way to make a shadow indoors. Now try outside.

Try making shadows at different times of the day.

What did you notice?

Can you find a way to make a shadow without room or sun light?
