

Light and Shadow Play

Best for Ages 4+ Workspace

Flat indoor surface, dark room

Is electricity required? No

Description

Explore the wonder of shadows and lights in this activity!

Materials

- Backdrop: white sheet, white tablecloth, or blank wall
- Stage: table or flat surface you can set in front of your backdrop
- Shadow Makers: hand cut shapes or lace, perforated materials, origami paper, a variety of fabric pieces, small blocks, loose parts, anything that casts a fun shadow
- Light Sources: flashlights, colored lights, mirrors, holiday lights, any reflective materials

Concepts Explored

- Reflection and Refraction
- Design and Perspective

What to Do

- Set up a table or another flat surface to be your stage. Behind the stage, set up a backdrop by hanging a white tablecloth or similar material. You can also use a light colored wall or table on it's side.
- 2. Turn off the room lights and turn on the flashlights. Shine them across your stage, change the angles, and cover the lens part of the way with your fingers, a cloth, or similar object.
- 3. Observe and notice the shadows you create. Test out other light sources.
- 4. Now, begin to add objects to your stage to create a scene. Set up plastic flowers, action figures, a crystal glass, mirrors, aluminium foil, or anything that inspires you.
- 5. Tell a story with your scene. Move the pieces around. Change the lighting. Change the backdrop. The possibilities are endless!













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Troubleshooting Tips

- Make sure your flashlights have fresh batteries.
- Don't be afraid to try any object that will cast a shadow or reflect/refract light.
- Start out in a room with thick curtains or no windows for optimal shadow creation.



What happens if you change the angle of the light? Do lights and shadows make you feel happy, sad, or scared? Do shadows look bigger or smaller than the objects that make them?

What is Happening?

- A shadow is the dark area created when an object blocks light.
- When you use a mirror, the light is **reflected** and scattered in a different direction. When you shine a light through a prism or something made of glass, the light is bent or **refracted.**
- **Design and Perspective** lighting is one of the strongest design elements. It is used in theater to create a mood, and by changing the angle of light you can shift perspective. Shadows become long or short, they can make us think about places or times of day.

Taking it Forward

- Create a large scale shadow on the side of your house with a powerful flashlight!
- If you like this activity, you'll also like these <u>Amazeum You</u> activities:
 - Light Painting
 - Chalk Shadows
- Learn more by checking out this book at your local library:
 - Shadow by Suzy Lee
 - Shadow by Marcia Brown



