

# **Paper Lanterns**

Best for Ages 6+ Workspace Flat indoor surface Is electricity required?

No

Description

Explore light and shadow using materials you have around the house. Paper Lanterns bring ambience to a space in a creative way!

### Materials

- Structural Material: straws, craft sticks, chopsticks, plastic cutlery, dowels, pens
- Adhesive: Glue stick, sticky tack, blue tape, masking tape, hot glue, gum
- **Translucent Material:** Tissue paper, colored paper, copy paper, styrofoam packaging, plastic wrap, milk carton
- **Light:** Phone light, flameless tea light, flashlight
- Scissors

#### **Concepts Explored**

- Light and Shadow
- 3D Shapes and 2D Shapes

Share your experience with us.

### What to Do

- Show kids materials and examples. A lantern can be made of many different materials and in many different shapes.
- 2. Have kids sketch out their lantern design or describe their lantern to you.
- 3. Encourage kids to test out different translucent materials. Ask questions like: "Which material lets light in the best? What look do you want- a muted lantern or a bright lantern?
- 4. If using hot glue, talk through hot glue safety. Show how to use the tool and point out which parts are hot and which are not.
- 5. Make a skeleton for your lantern using your structural materials and adhesives. Be sure to include a base so that the light has somewhere to sit!
- 6. Cover the skeleton with their chosen translucent material.
- 7. Place your light inside and turn off the lights to see how it glows!
- 8. Tweak design if desired effect is not achieved.













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## **Troubleshooting Tips**

- The translucent material and adhesive you chose may or may not stick together. Try your materials and adhesives out in different combinations to see what works well together and what does not.
- Candles with a flame should not be used for this activity! The materials we are using are flammable.



What would happen if we put a different kind of light in our lantern?

What is the best place to put your lantern to make it glow the brightest? What happens if you use a colored light in your lantern?

### What is Happening?

- To put the light inside of the lantern, you will need to make a **3D shape,** or a shape that has length, width, AND height. A **2D shape** is flat because it only has length and width.
- Light and Shadow is explored in this activity. The translucent material allows light to pass through it. Some of the light is absorbed into the material and reflected inside of the lantern, and some is transmitted through it so that we can see it. Paper, for instance, absorbs a different amount of light than a milk carton, which is why the light looks differently going through them!



## **Taking it Forward**

- Can you find things throughout your home that were designed to let light transmit through them? What about objects that absorb all of the light?
- If you like this activity, you'll also like trying Ice Balloons in the dark! See our Amazeum YOU page for the Ice Balloons YOU Guide.
- Learning more about this activity at local library):
  - Experiments with Light and Mirrors, by Robert Gardner
  - Dazzling Science Projects with Light and Color, by Robert Gardner



