

## Shadow Scenes

Shared by: MIT K-12 Maker Lab Team

| Specialized tools and materials used:                                                   | Experience level required: |
|-----------------------------------------------------------------------------------------|----------------------------|
| 2D graphics tools (Google Draw, <a href="https://vectr.com">Vectr.com</a> , or similar) | Beginner                   |
| Laser cutter or craft/vinyl cutter                                                      | Beginner                   |

**Grade Level and Subject** (of this example): 6th Grade English

**Topic/Content Standards** (for this example): Writing narratives [\[W.6.3\]](#)



### Summary of Project:

Create a fascinating shadow scene by designing and fabricating expressive screens and backdrops to surround an electric tealight. The examples above were created as an extension of a creative writing activity, depicting settings or characters from a story in which motives, actions, or truths are concealed in shadow. The screens and backdrops can be made from a variety of materials, such as cardstock, acrylic, or plywood, using a craft or vinyl cutter, or a laser cutter. Designs may also include housing or holders for the tealight, in addition to the expressive elements.

Begin by brainstorming scenes that meet the prompt and would cast an interesting shadow. Prototype several options using scrap paper. Determine which design is most expressive, and will hold together when cut out of the final material. Create the design in a 2D graphics tool such as Google Draw, or Vectr ([Vectr.com](https://vectr.com)), depending on your intended file format. Source silhouette images from online resources like [The Noun Project](#), or hand-draw designs and digitize them using a tool like PICSVG ([picsvg.com](https://picsvg.com)). Fabricate the screens, backdrops, and tealight holders using the appropriate tools and materials. Then, illuminate the designs and observe their mesmerizing shadows.



### Suggested resources

- For royalty-free images: The Noun Project ([thenounproject.com](https://thenounproject.com))
- For removing backgrounds of images: [RemoveBG.com](https://removebg.com) or similar tool
- To convert images from JPG and PNG to SVG: [PicSVG.com](https://picsvg.com)
- Graphic editors: Google Draw, [Canva.com](https://canva.com), [Cuttle.xyz](https://cuttle.xyz), [Vectr.com](https://vectr.com)

### Possible Content explorations [example MA Content Standards]

- **History and Social Science:** Influence of Ancient and Classical Rome, the Roman Republic, and the Roman Empire on arts, architecture, engineering, and technology [[7.T4c](#)]