

Custom Laser Cut Mirrors

Shared by: MIT K-12 Maker Lab Team

Specialized tools and materials used:	Experience level required:
2D graphics tools (Vectr.com , Cuttle.xyz, or similar)	Beginner - Intermediate
Laser cutter	Beginner - Intermediate

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

Topic/Content Standards (for this example): Demonstrate strategies for supporting healthy body image in youth and adolescents [[6.7.MH-3](#)]



Summary of Project:

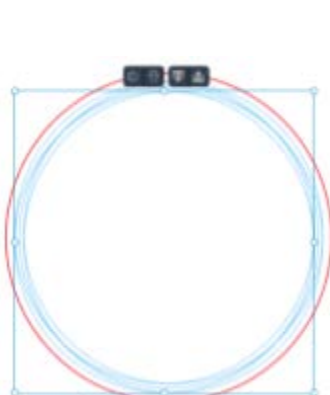
Students design, engrave and cut a personalized mirror from acrylic using 2D graphics tools and a laser cutter. The examples above were created as part of a Sixth Grade Health class unit on healthy body image and positive outlooks.

Begin by brainstorming ideas to meet the prompt, then create an outline shape and design for the mirror. For best results, use a vector graphic editor such as Vectr (Vectr.com) or Cuttle (Cuttle.xyz) and upload designs as SVG files to the laser cutter. Find detailed instructions for this project in this K12 Maker Lab [Laser Cut Mirror Project Tutorial](#) slideshow.

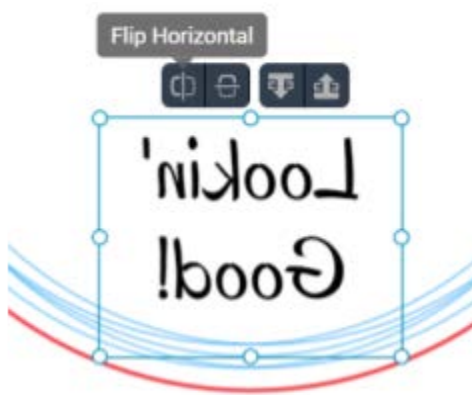
This project is an excellent medium for community building, collaborative art, and self expression, and lends itself easily to metaphors such as “See Yourself [Doing Math]”.



Examples of a Cut, Score, and Engrave: the three types of operations available on laser cutters



Sample design with CUT lines in red, and SCORE lines in blue



Text and designs must be flipped before being engraved into the back of mirrored acrylic



Suggested resources

- [Laser Cut Mirror Project Tutorial slides](#) with step by step instructions and photos
- For royalty-free images: The Noun Project (thenounproject.com)
- For removing backgrounds of images: RemoveBG.com or similar tool
- To convert images from JPG and PNG to SVG: PicSVG.com
- Graphic editors: Vectr.com, Cuttle.xyz, or similar

Possible Content explorations [example MA Content Standards]

- **ELA:** Themes in literature, interpretations of poetry, lyrics, or drama. Analyze how particular elements of a story, poem, or drama interact (e.g., how setting shapes the characters or plot) [[RL.7.3](#)]
- **SEL:** Setting personal and collective goals [[Self Management](#)]