

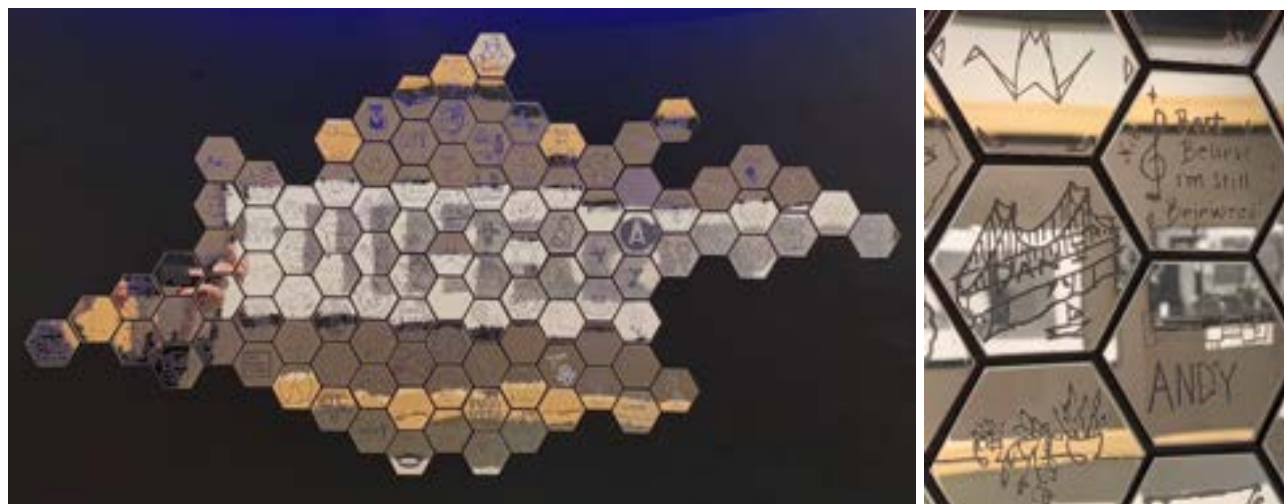
Collaborative Mirror Display

Shared by: K-12 Maker Lab Team

Specialized tools and materials used:	Experience level required:
Laser cutter (GlowForge) and software	Beginner
Backing material (i.e. corrugated plastic)	Beginner
Mirrored acrylic	Beginner

Grade Level and Subject (of this example): K-12

Topic/Content Standards (for this example): SEL + Community Building - incoming students fabricate expressive tiles to create a display reflecting the identities they bring to the school community.



Collaborative Mirror Display created by First Year students at MIT. Dimensions: 4' x 3'

Summary of Project:

Students create an expressive mirrored tile as part of a collaborative display. Hand-drawn or digitally created designs are laser cut into the back of a pre-cut mirrored acrylic tile. The majority of tiles on the display above were hand-drawn, and digitized directly through the Glowforge camera and web interface. The mirrors are mounted using double sided tape and a Y-shaped guide to ensure even spacing between each tile. The mirrored tiles can be displayed on any surface, and look especially festive on a white or colorful background. The size of the tiles, as well as their frame can be adjusted to the needs of any setting.

The back of the display shown above is corrugated plastic. Our display measures 4' X 3', and the photo above features about 110 hexagons that measure 1.5" per side.



Laser cut spacer used to evenly arrange tiles



Handout for activity



Laser cut tiles featuring student designs

Suggested resources

- GlowForge: Trace and Print a Sketch (<https://support.glowforge.com/hc/en-us/articles/360034142413-Trace-and-Print-a-Sketch>)

Possible Content explorations

- **Literacy:** Community Summer reading review; engrave symbols or key quotations from literature studied
- **Music:** engrave a note, chord, or expressive symbol to create a collaborative study tool
- **Math:** engrave and arrange tiles that alternate between numbers and mathematical symbols to create a “choose your own adventure” math maze across the display