Laser Cut Frames

Shared by: MIT K-12 Maker Lab Team

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

Grade Level and Subject (of this example): 5th Grade Social Studies

Topic/Content Standards (for this example): Maker skills, cultural awareness

Summary of Project:

Students use 2D graphics tools to design a custom picture frame. The example shown above celebrates the winter holiday season.

Students use a vector editing program like Vectr (vectr.com) or Cuttle (cuttle.xyz) to design a custom picture frame to celebrate a season, a special occasion, or personal growth and achievements. Add images to an existing frame design, or start from scratch. Use graphics from online libraries like The Noun Project, or digitize hand-drawn designs using a tool like picsvg.com, or the Glowforge laser cutter. Glue cut triangles to the back of the frame for it to stand on its own, or design a stand that attaches to the bottom with notches. Frames can be cut from wood or acrylic using a

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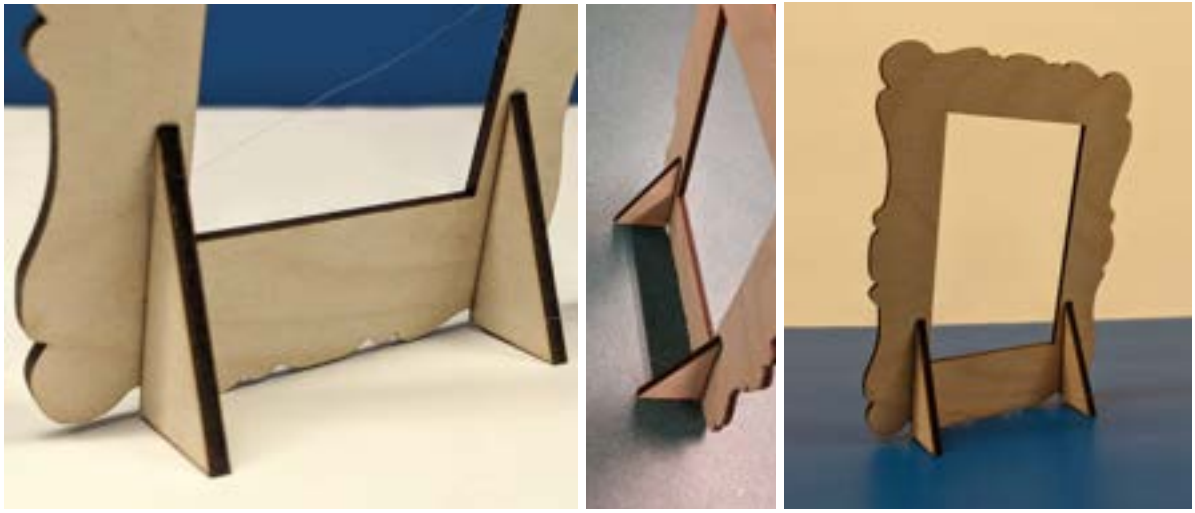
laser cutter, or from heavy-duty cardstock using a vinyl cutter. This project provides students an opportunity to be expressive while learning or honing their graphics and fabrication skills, as well as create a special memento of their learning or growth.



Suggested resources

- Icon library such as The Noun Project (thenounproject.com)
- Graphic design tools such as Vectr (vectr.com), Cuttle (cuttle.xyz), or Canva (canva.com)
- Image processing tools such as a Background Remover (remove.bg), and PICSVG (picsvg.com)

Possible Content explorations [example MA Content Standards]

- **History & Social Science:** Shared traditions [K.T3]
- **SEL:** Frame of mind - growth mindsets, envisioning success [Self-Awareness]
- **ELA:** Range of writing - Framed by Poetry: compose a poem about a given subject, create a custom frame, and display the subject in the frame. [W.6.10]

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