

 PROJECT #2 PROPOSAL

**Name(s): Grace Steeves**

**Project: Rotating Lithophane Box**

**Part A: Brainstorming...**

**A 3D printed box that features 4 different lithophanes. Lithophanes are 3D printed photos that are only seen with a light from behind. the Box rotates using the mechanism from the inside of a clock, so that it rotates clockwise. On the inside of the box, it’s illuminated using a LED strip that changes color by a remote control.**

* **List your learning objectives**

**Learning how to 3D print**

**Creating 4 Lithophane pictures with 3D printing using Cura (75mm x 100mm)**

**LED light strip**

**Assembly of the box, so that it rotates using the clock**

* **State the goal(s) of your project**

**Being able to take out pictures whenever by just popping off the top of the box and also being able to have the light customizable just by using the remote control. Having the box rotate is another very important part of the project. I’d like have photos of potentially my friends from Drama.**

**Part B: Electronic Resources…List active hyperlinks to any relevant online resources**

[**http://www.instructables.com/id/Rotating-Lithophane-Box/**](http://www.instructables.com/id/Rotating-Lithophane-Box/)

[**http://www.instructables.com/id/Lithophane-Box-With-Remote/**](http://www.instructables.com/id/Lithophane-Box-With-Remote/)

[**http://www.instructables.com/id/Litophanes-How-to-3D-Print-your-photos/**](http://www.instructables.com/id/Litophanes-How-to-3D-Print-your-photos/)

[**https://www.thingiverse.com/thing:2358406**](https://www.thingiverse.com/thing%3A2358406)

[**https://www.thingiverse.com/thing:1894226**](https://www.thingiverse.com/thing%3A1894226)

[**https://www.thingiverse.com/thing:2121431**](https://www.thingiverse.com/thing%3A2121431)

**Part C: Planning…**

* **Materials list [NOTE: if we do not have it, include link to purchase from Amazon.ca]**

 **2 AA Batteries**

**Clock Mechanism** [**https://www.amazon.ca/dp/B079GQ8Z2P/ref=cm\_sw\_r\_cp\_ep\_dp\_sDcUAbXR8PHKK**](https://www.amazon.ca/dp/B079GQ8Z2P/ref%3Dcm_sw_r_cp_ep_dp_sDcUAbXR8PHKK)

**LED Lightstrip** [**https://www.amazon.ca/dp/B01FH80V9Y/ref=cm\_sw\_r\_cp\_ep\_dp\_wHcUAb55H49XD**](https://www.amazon.ca/dp/B01FH80V9Y/ref%3Dcm_sw_r_cp_ep_dp_wHcUAb55H49XD)

**Filament for the 3D printing.**

* **Designs…Include any sketches/pictures and/or links to videos**

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