Printing Practices

Follow all practices below to ensure machine safety and project turnout.

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| Prioritize projects for classes and organizations; then research; then personal projects. |
| Prioritize shop settings over requested settings. Default print settings are 20% infill and support for any angles over 45°. |
| Resin prints can be expensive - Objet and Formlabs printers are to be reserved for highly detailed parts, or on request. If parts are large, check-in with Gabriel before printing. |
| Maximize build plate volume. Fit multiple parts from one submitter onto one plate if possible. |
| Always watch the first layer to make sure it prints flat and adheres to the build plate. |
| Always preheat the bed for 10 minutes before starting a print on an unused printer. |
| Always double-check material requests. Match all parts of one submission to the same color when possible. |

Slicing Tips

Balance below guidelines to improve print quality.

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| Holes print better facing up, but if they are facing sideways, it may be best to block supports inside them. |
| Try to point detailed portions and text face up - printing them face down or facing sideways with supports will make these details less accurate. |
| Place objects in orientation that produces minimal overhanging sections but keeping in mind detailed sections such as cavities and lettering. |
| When printing hollow objects or cylinders, stand them up instead of laying them down and supporting the insides. This will ensure a straighter print and uses less filament. |
| Fusion supports are super solid, when possible, try to minimize supports for these printers. |

Pre-Print Check

Double check below questions to prevent reprinting projects and to save time.

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| Is the object printed in the requested color/settings? |
| Are there any other objects that could be printed with it? |
| Is the object a personal project? |
| If slicing for the Fusions - have you selected the correct nozzle size for the printer this file will be on? |