



Project code:
2019-1-EL01-KA201-062914

Erasmus+ Call: 2019 - KA2 -



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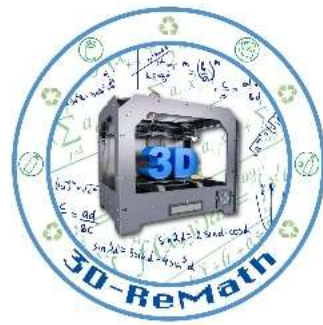
This project is funded by the European Union.



3D printing technology aims students understanding maths and recycling procedure

*Curricula 3: Open Source S/W for Digital Files
"3D Printing & Math: Alphabet"*

Output 3 (O3) - 3D Printing and Maths



Overview (1/2)

In this lesson we learn how to create Alphabet letters in SketchUp Software. We also learn how to find similar 3D models on Thingiverse. Additionally, we import the models into the Slicing Software and present their 3D printing preparation.



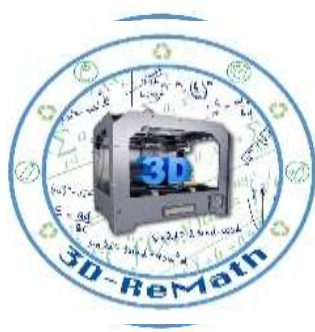
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Overview (2/2)

- Designing alphabet letters in SketchUp Software
- Finding alphabet letters in Thingiverse
- Importing alphabet letters in XYZ slicer
- Preparing 3D models for printing

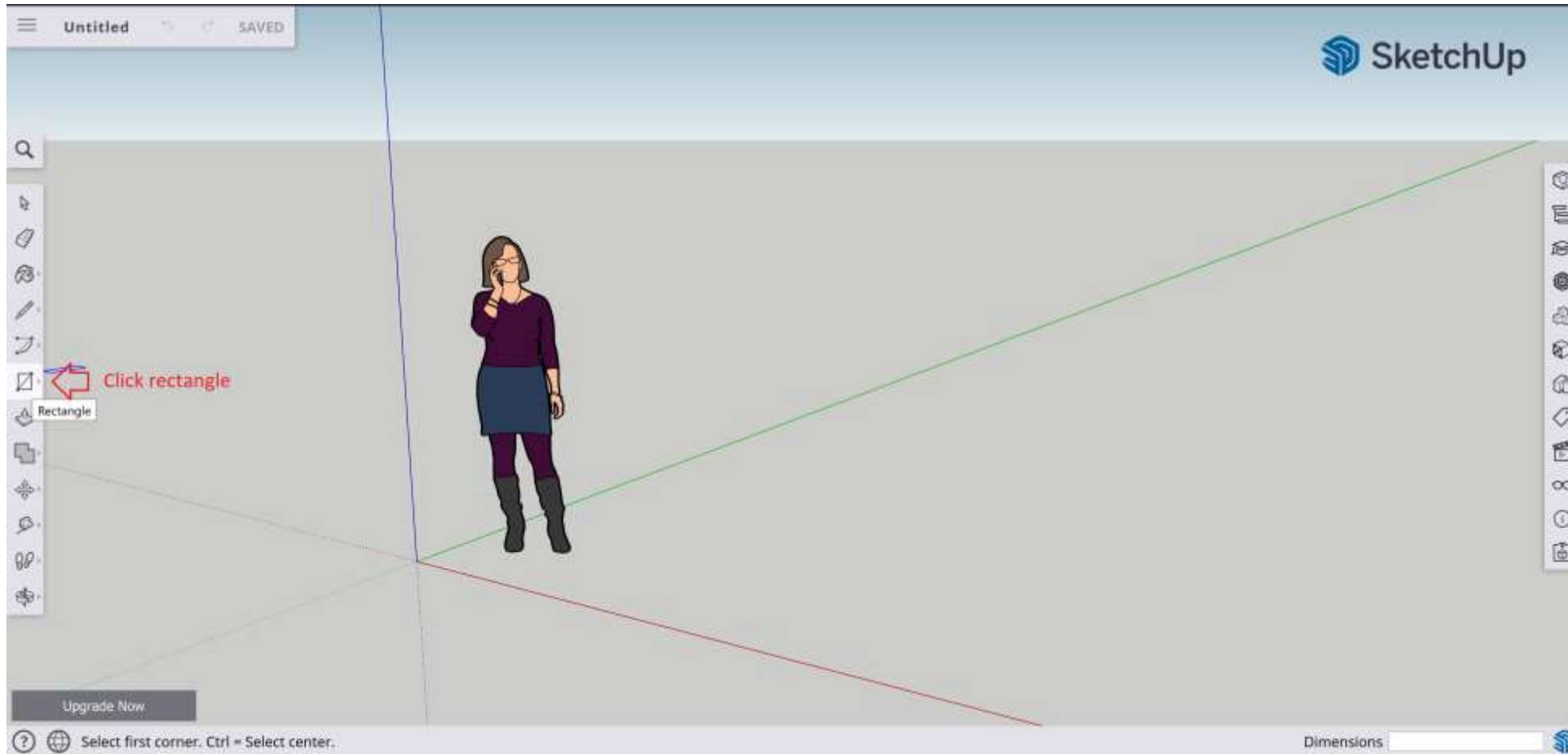
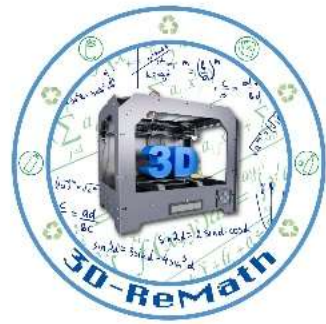


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Designing alphabet letters in SketchUp Software (1/13)

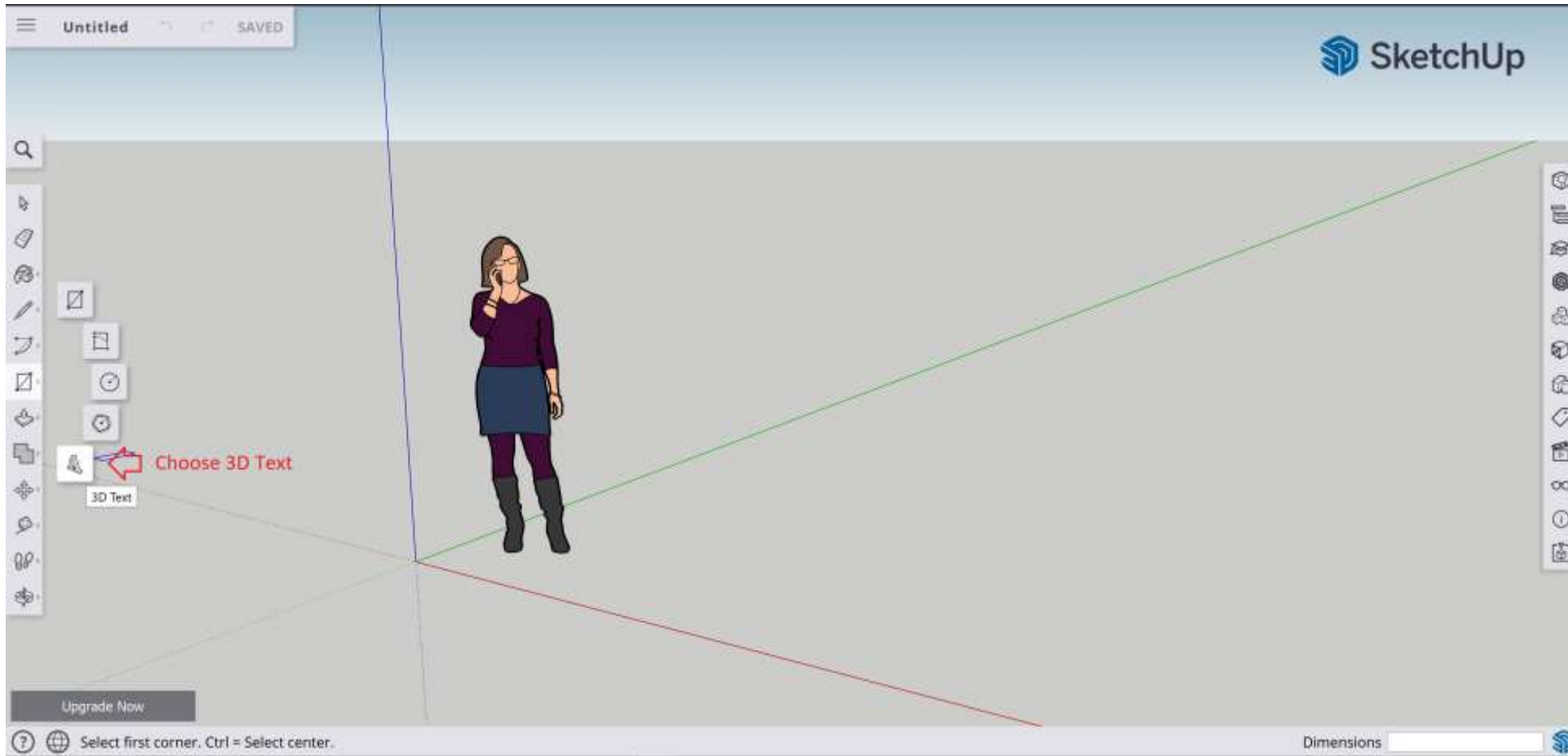
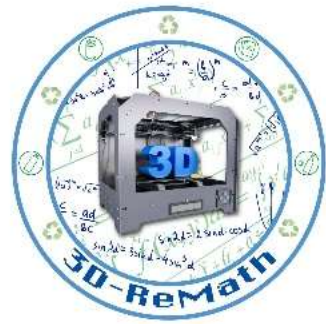


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Designing alphabet letters in SketchUp Software (2/13)

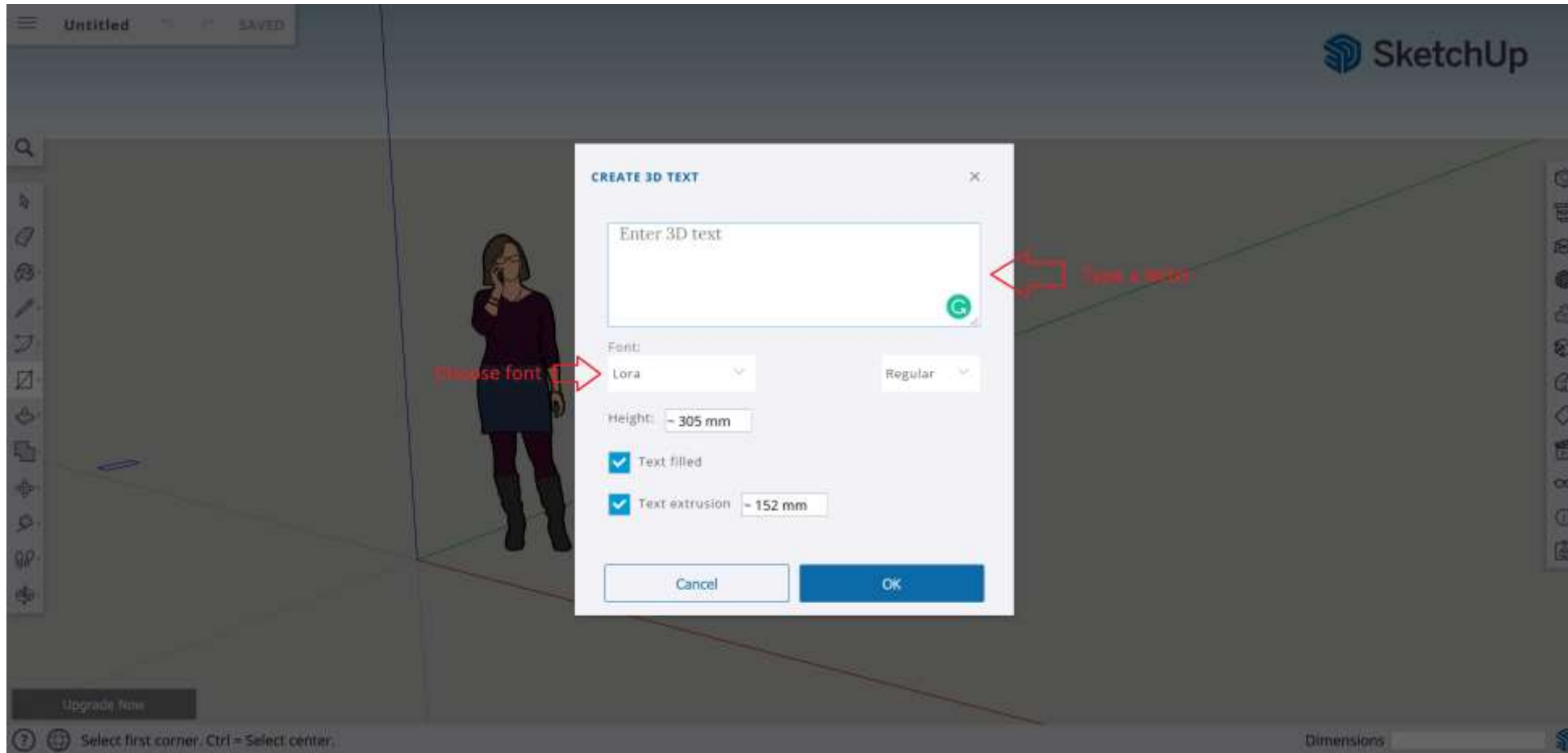
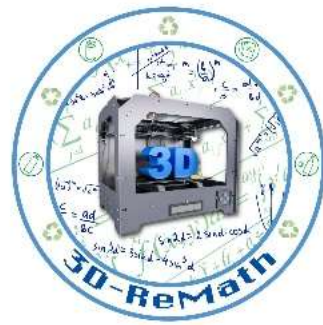


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Designing alphabet letters in SketchUp Software (3/13)

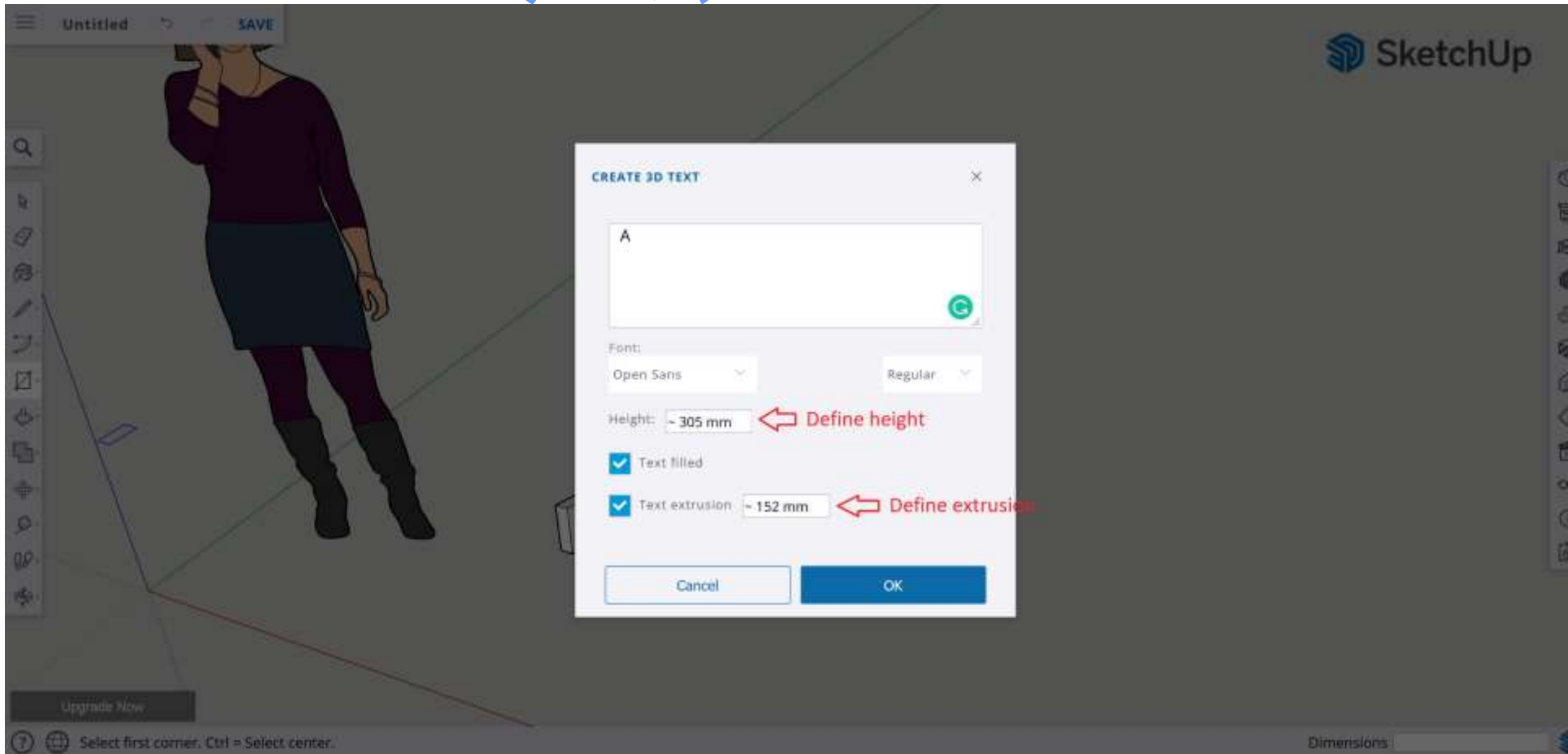
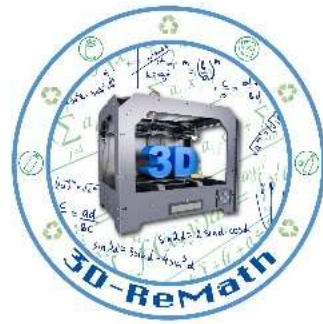


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Designing alphabet letters in SketchUp Software (4/13)

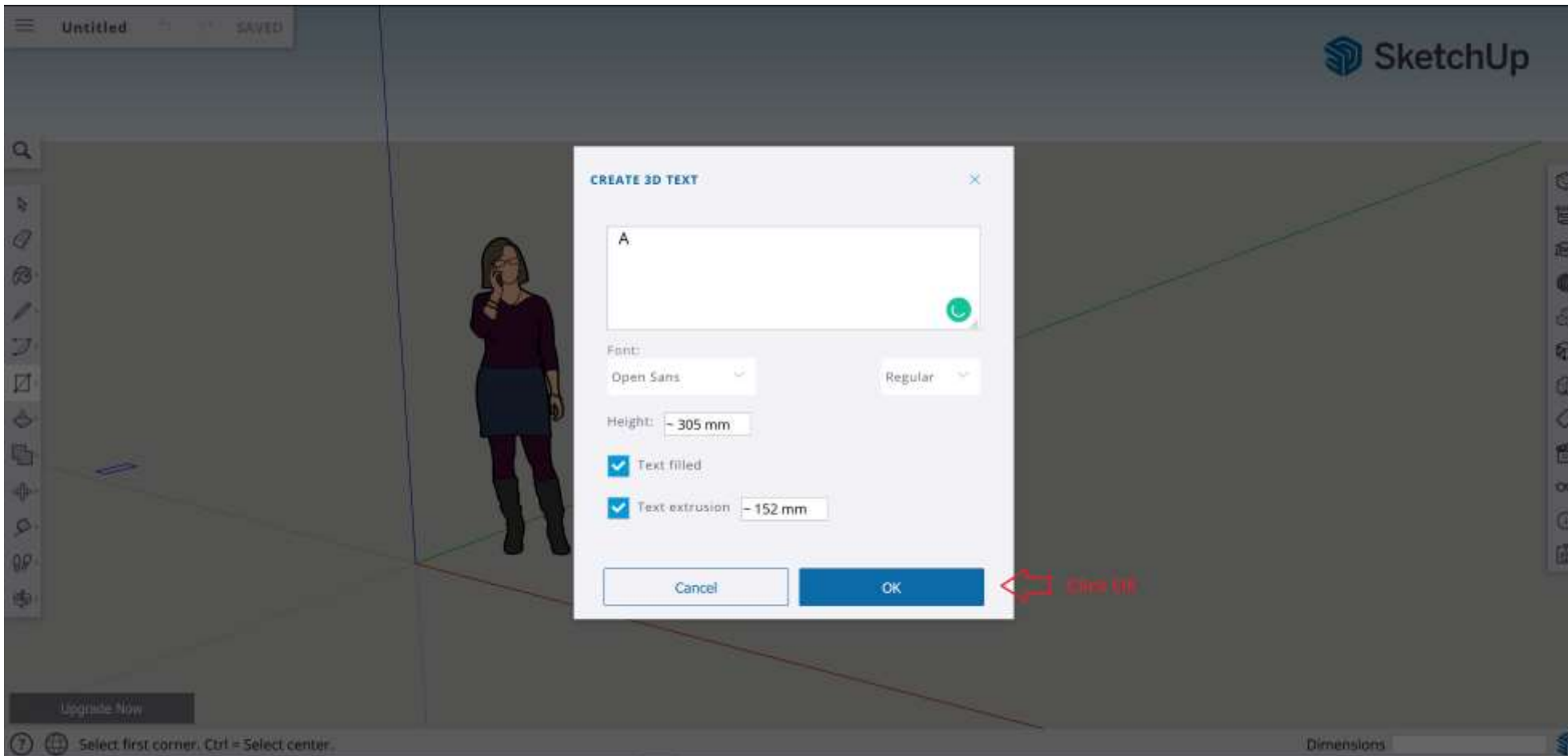
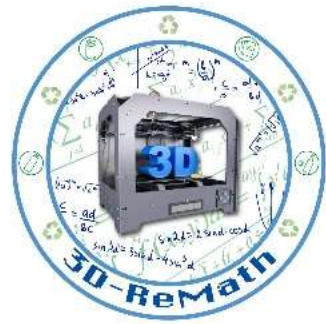


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Designing alphabet letters in SketchUp Software (5/13)

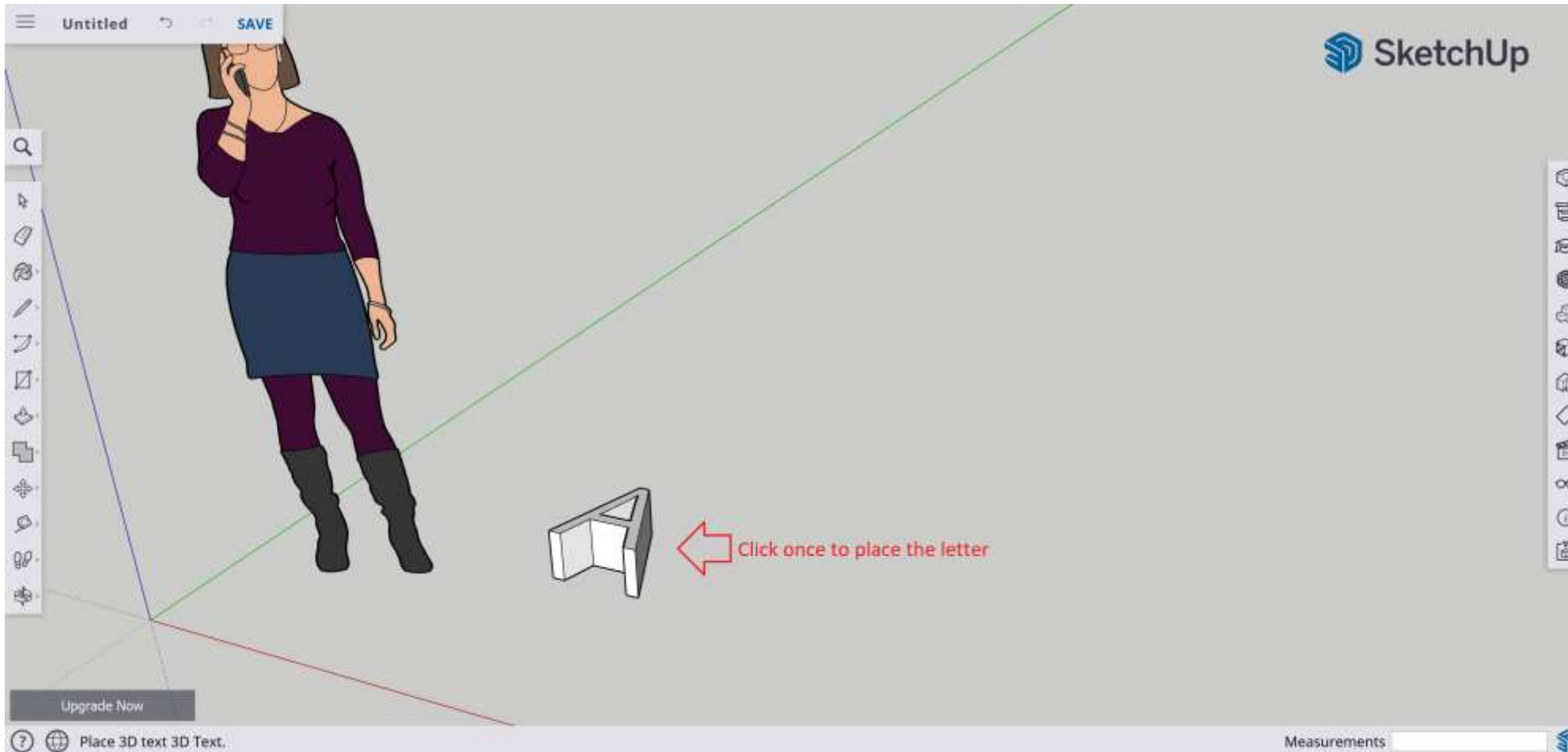


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Designing alphabet letters in SketchUp Software (6/13)

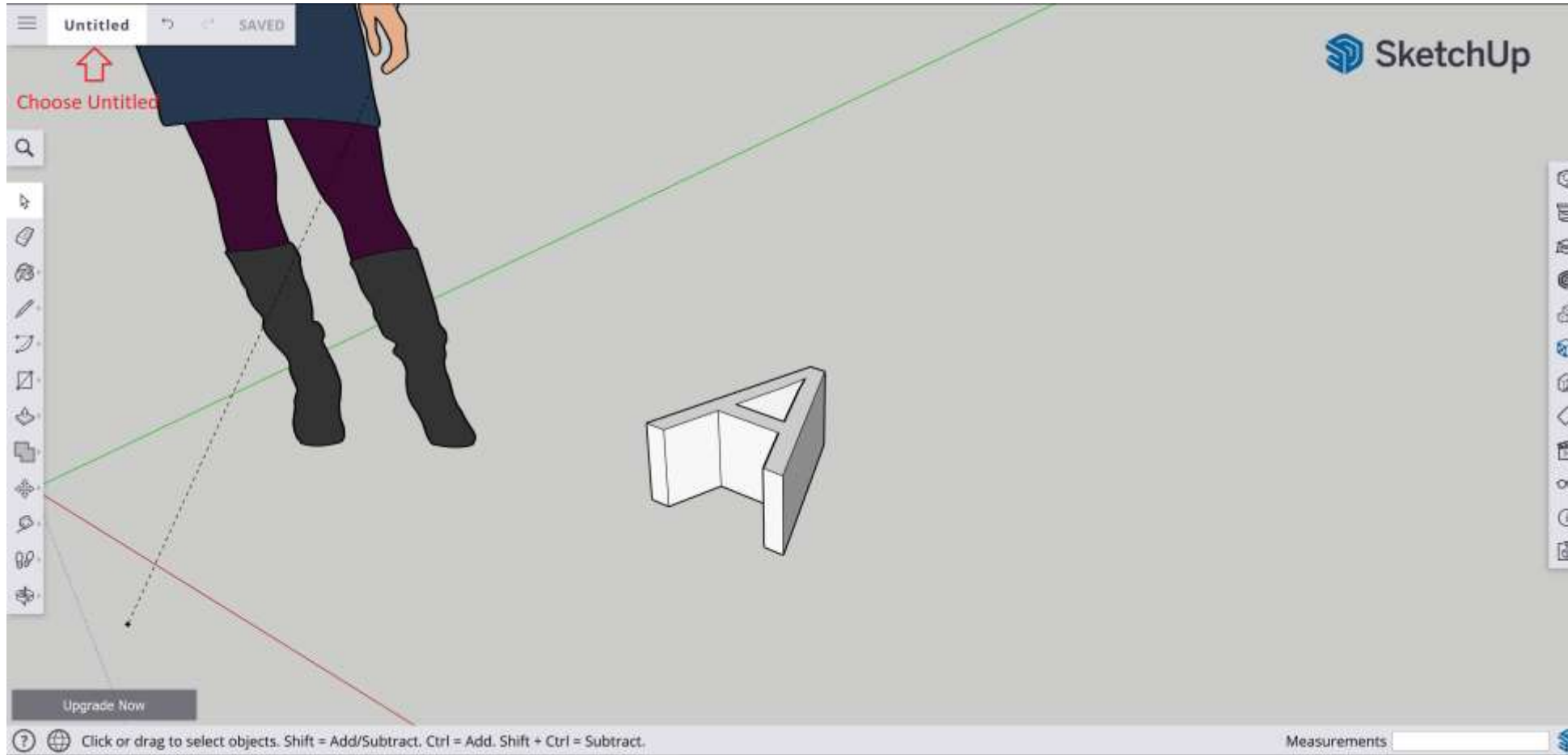
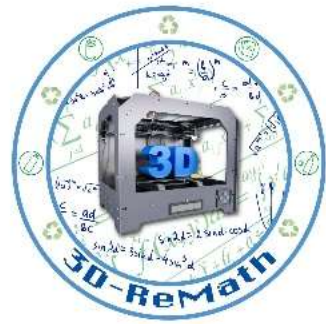


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Designing alphabet letters in SketchUp Software (7/13)

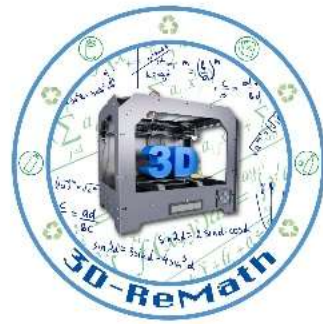


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Designing alphabet letters in SketchUp Software (8/13)

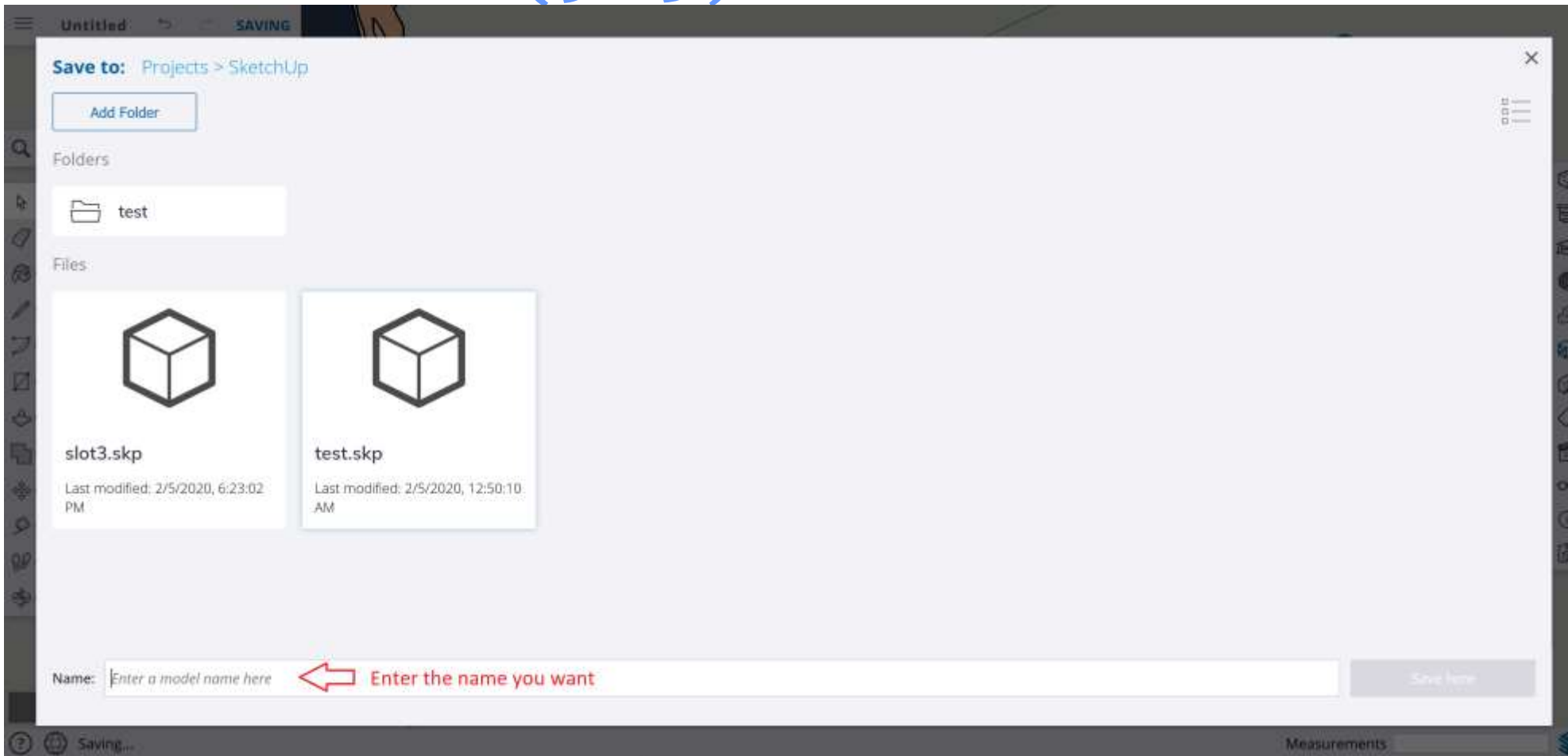
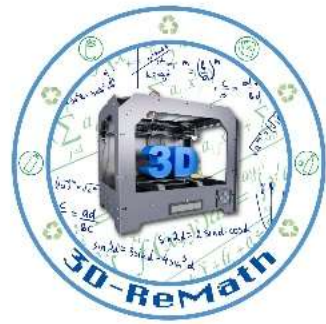


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Designing alphabet letters in SketchUp Software (9/13)



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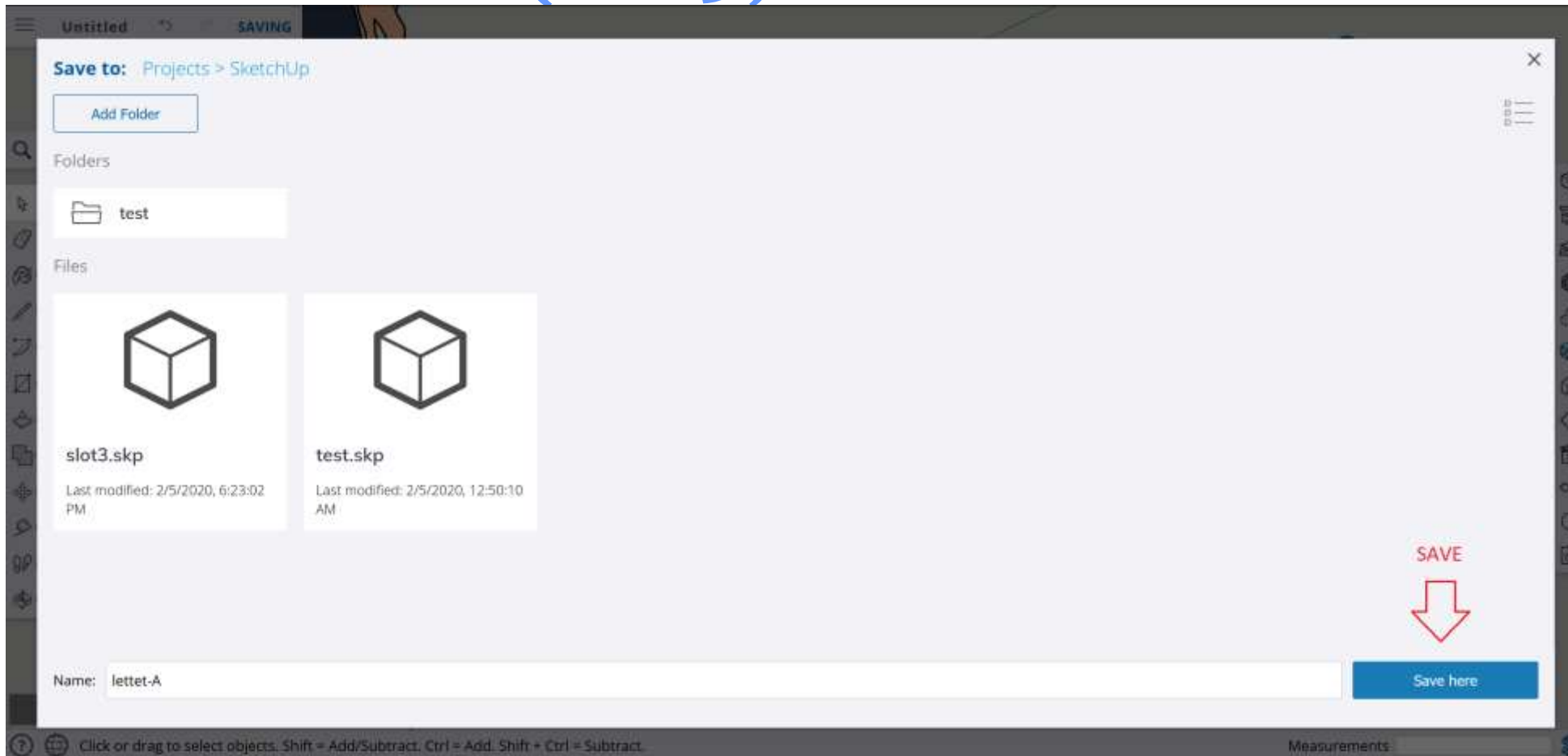
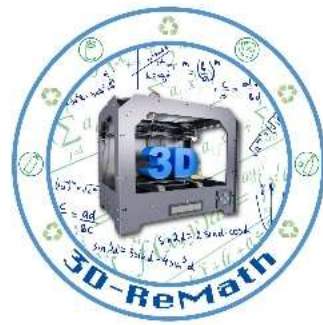
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Designing alphabet letters in SketchUp Software (10/13)

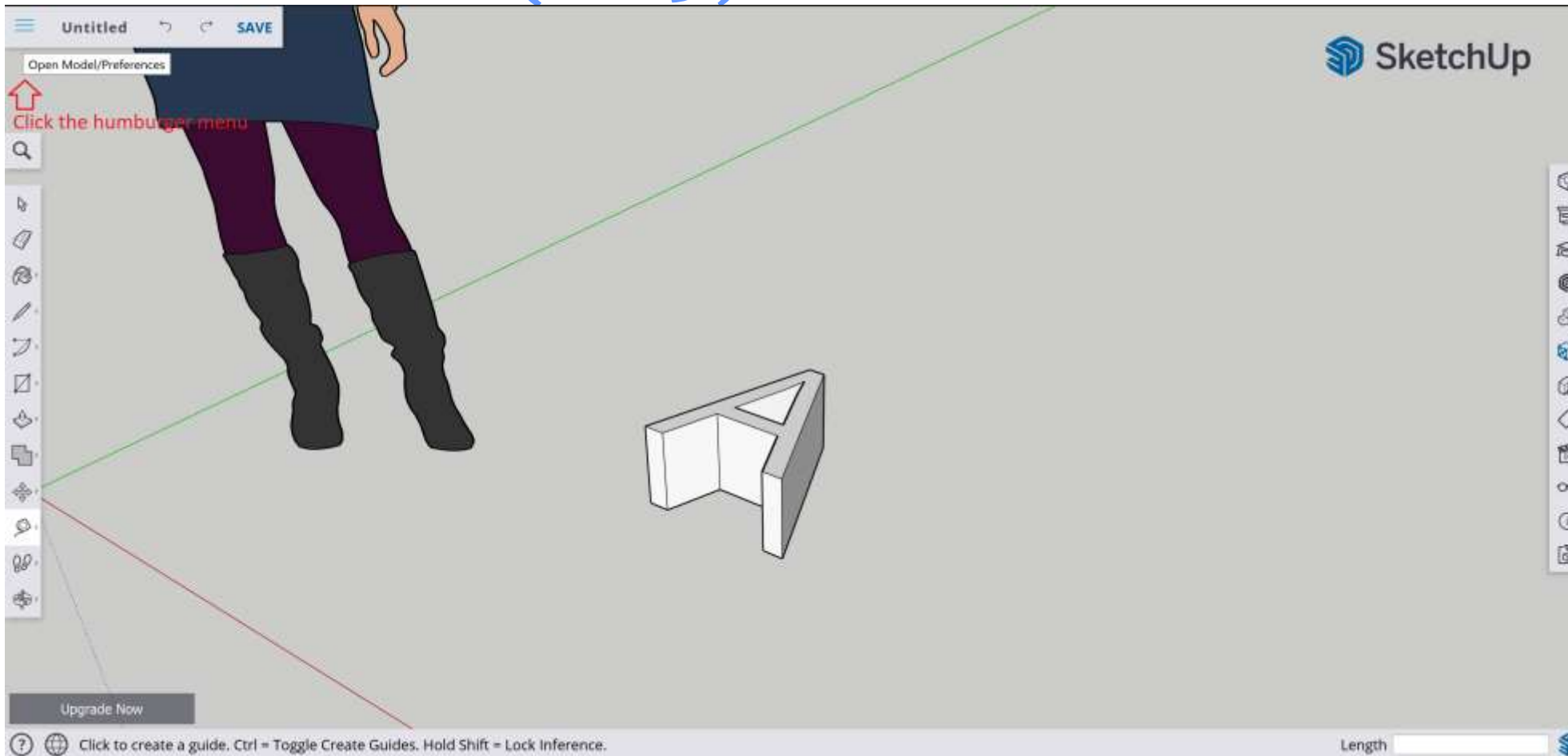


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Designing alphabet letters in SketchUp Software (11/13)

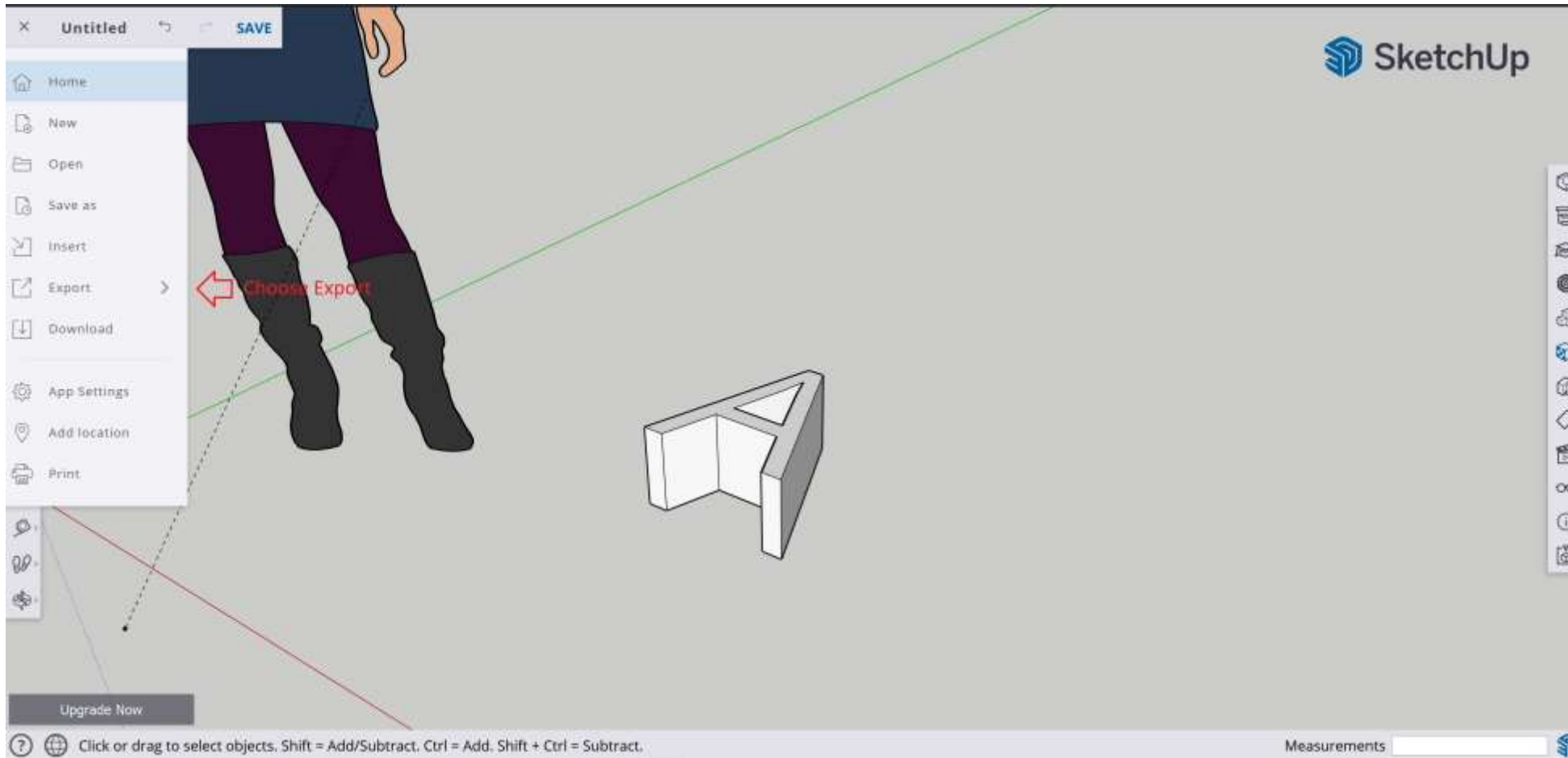
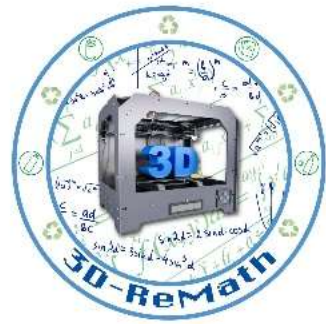


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Designing alphabet letters in SketchUp Software (12/13)

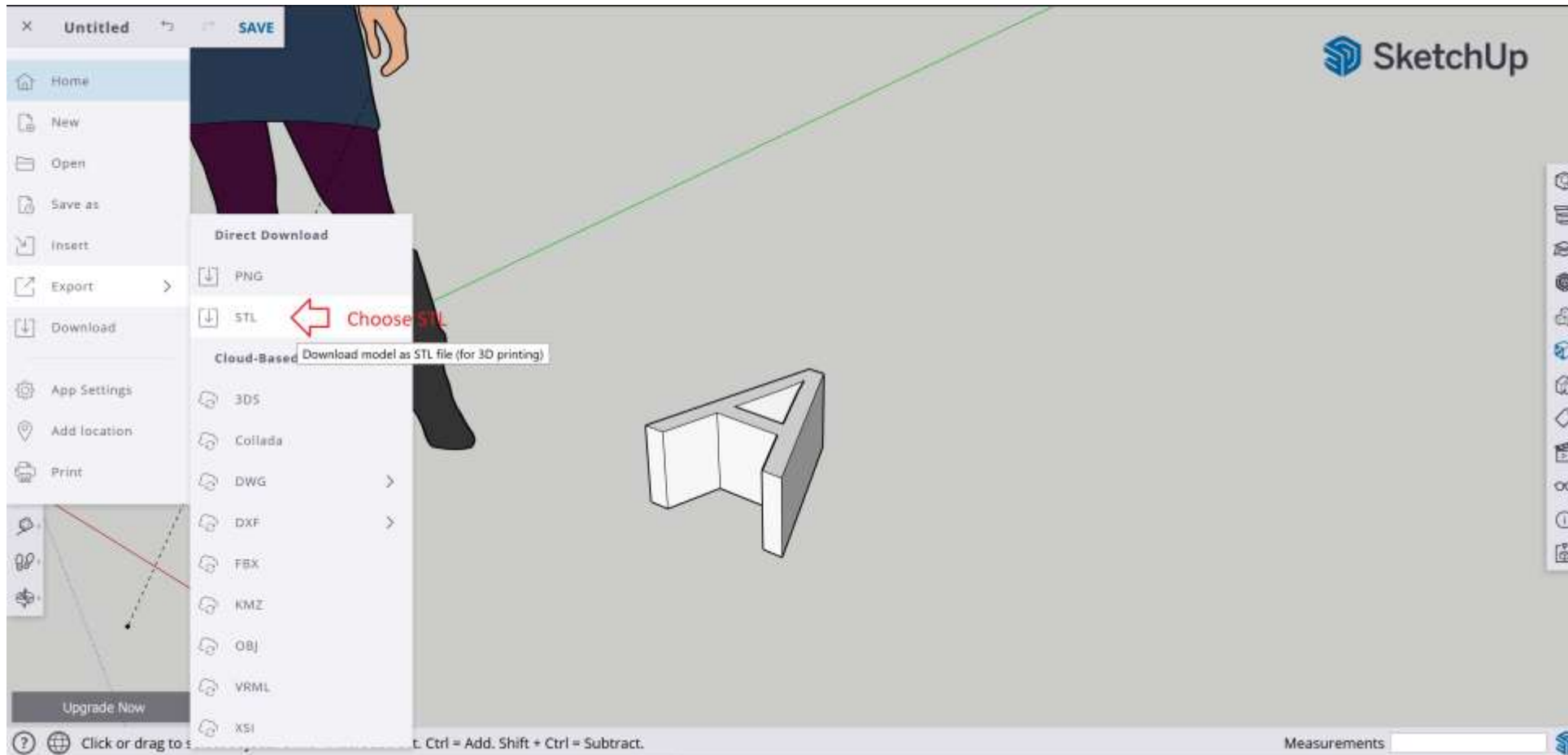
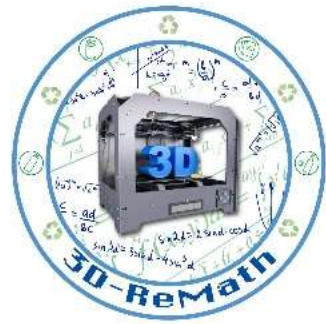


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Designing alphabet letters in SketchUp Software (13/13)

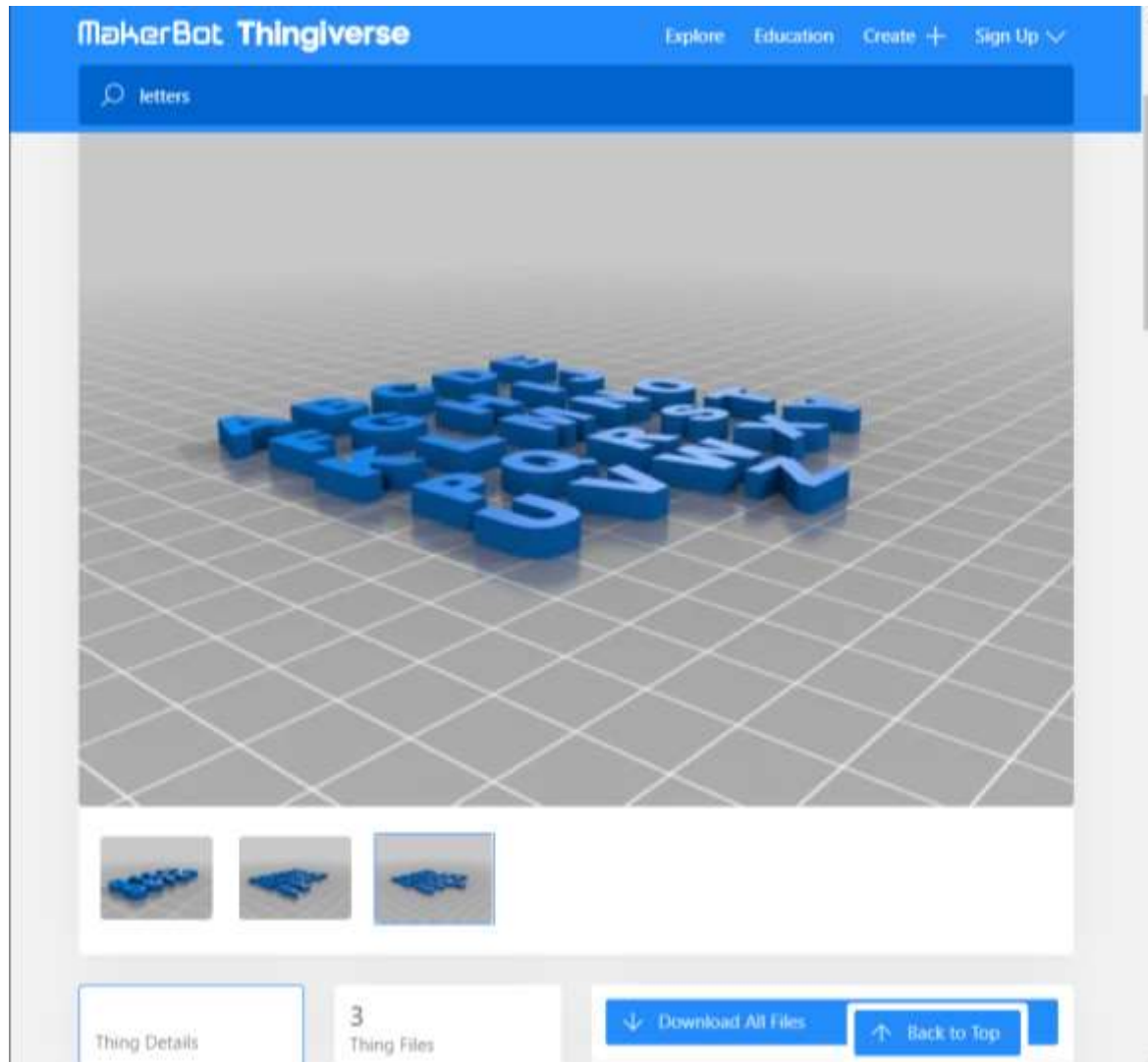
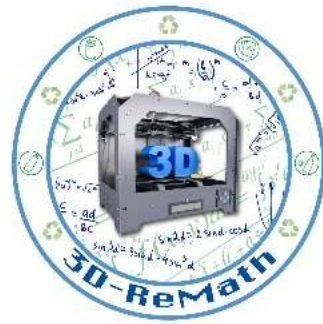


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Finding alphabet letters in Thingiverse (1/2)

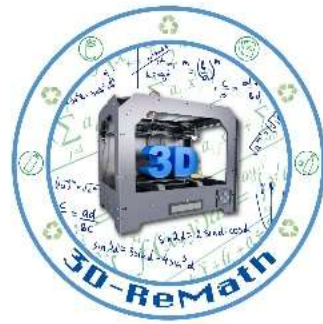


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Finding alphabet letters in Thingiverse (2/2)

A screenshot of the MakerBot Thingiverse website. The top navigation bar is blue with the text 'MakerBot Thingiverse' on the left and 'letters' in a search bar. To the right of the search bar are links for 'Explore', 'Education', 'Create +', and 'Sign Up'. Below the navigation bar is a large image of a 3D printed object on a grid. To the right of this image is a 'Share this thing' section with social media icons for Facebook, Twitter, Messenger, and Email. Below the main image are three small thumbnails of the 3D model. A horizontal bar contains statistics: '3 Thing Files', '2 Comments', '1 Makes', '0 Remixes', and '3 Apps'. Below this bar is a section titled 'Letters & Numbers' with a 'Download All' button. It lists two files: 'ABCcapital.stl' (106 kb, Updated 06-15-2017, 6701 Downloads) and 'ABClowercase.stl' (1 mb, Updated 06-15-2017, 6616 Downloads). Each file has a 'Download' button. To the right of the file list is a 'License' section with Creative Commons icons and text: 'Letters & Numbers by Bishop3DPainter is licensed under the Creative Commons - Attribution license. By downloading this thing, you agree to abide by the license: Creative Commons Attribution-NonCommercial-NoDerivs. Back to Top'. A red arrow points to the '3 Thing Files' button, and another red arrow points to the 'Download' button for 'ABCcapital.stl'. At the bottom left, there is a URL: <https://creativecommons.org/licenses/by/4.0/>.

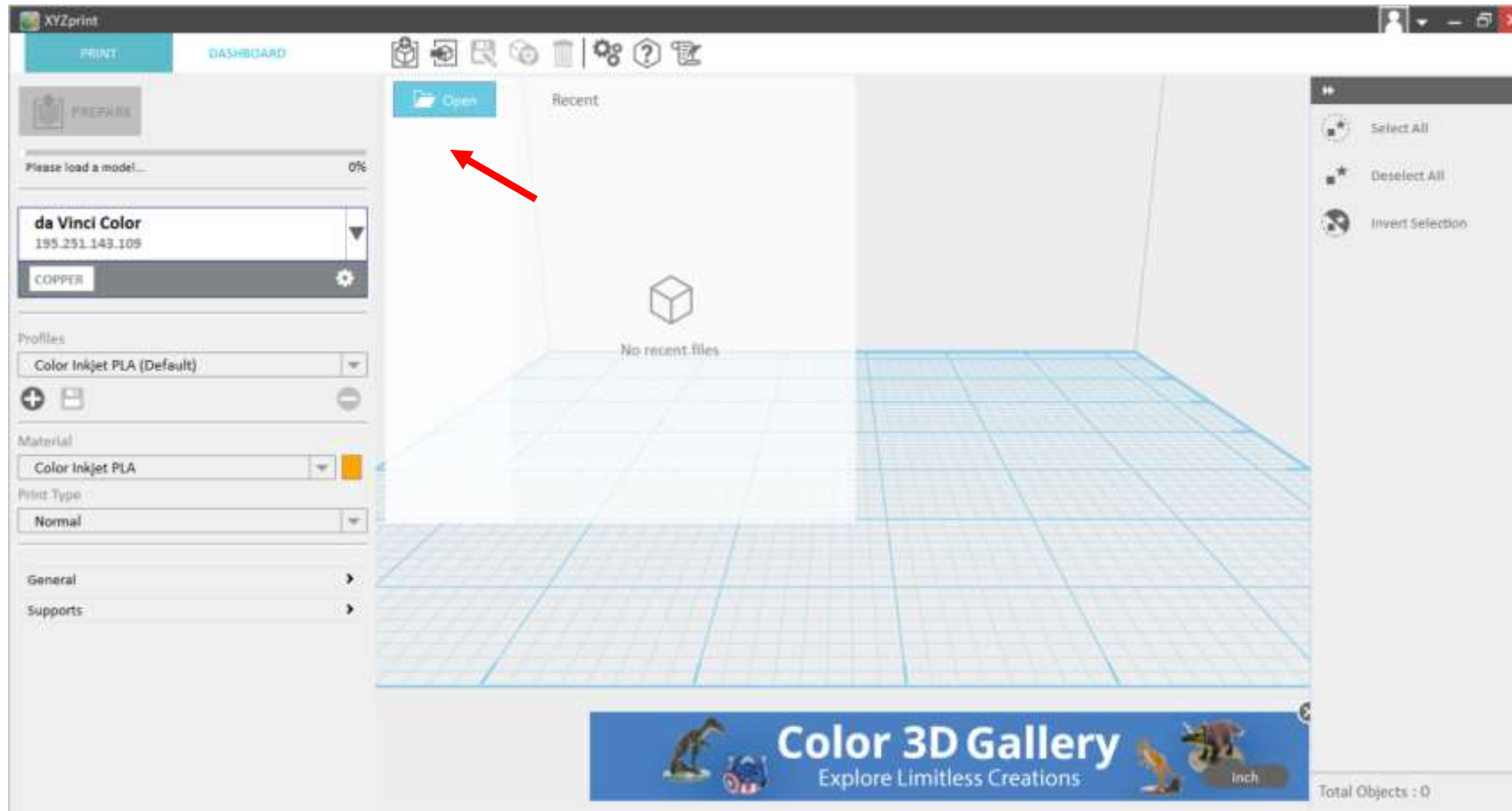
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Importing alphabet letters in XYZ slicer (1/3)

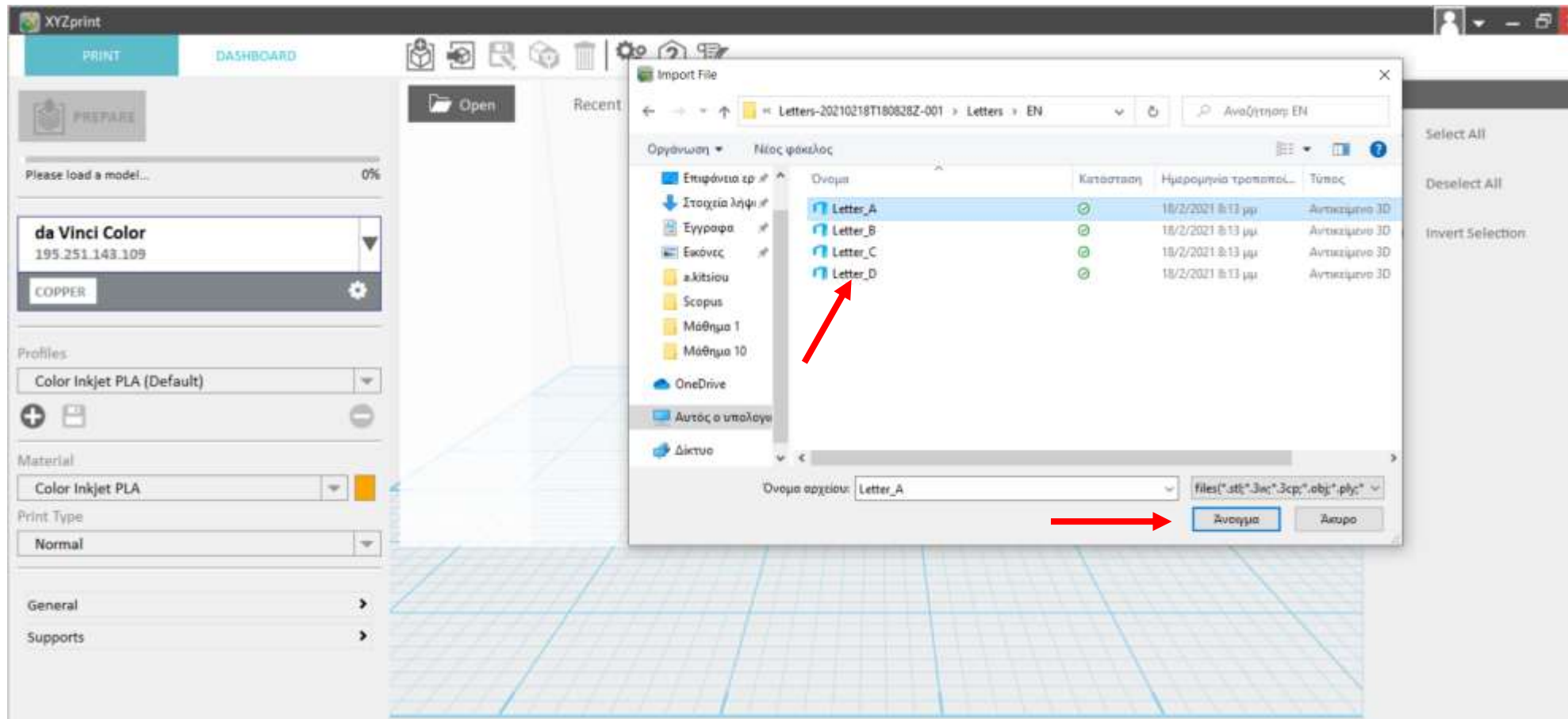
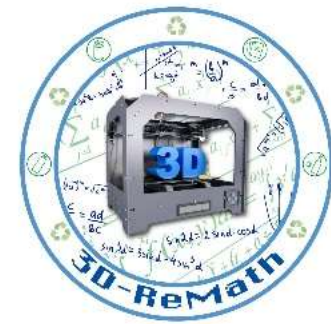


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Importing alphabet letters in XYZ slicer (2/3)



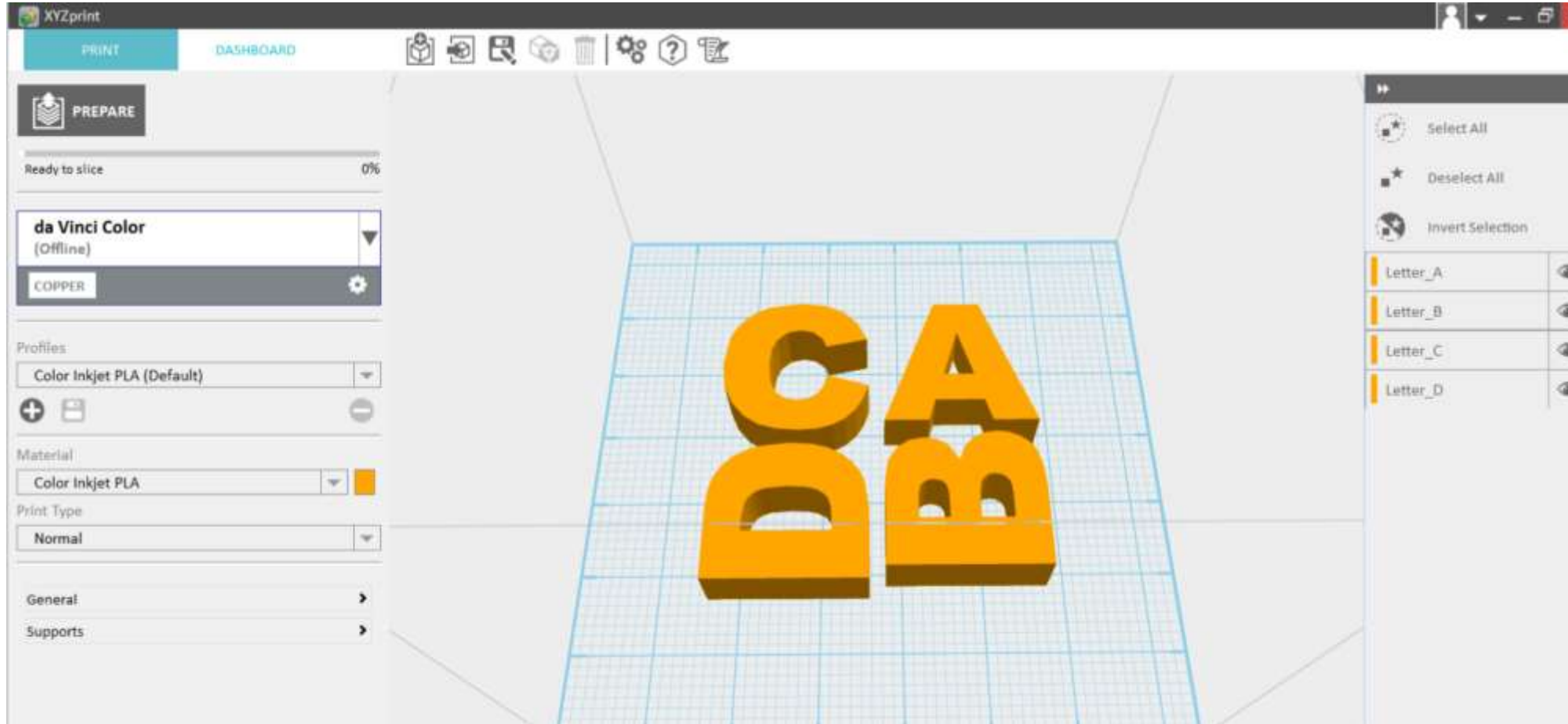
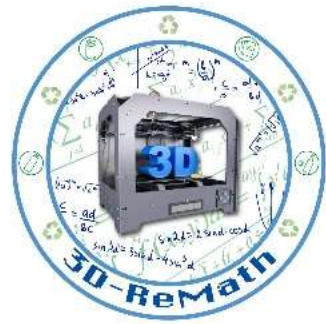
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Importing alphabet letters in XYZ slicer (3/3)

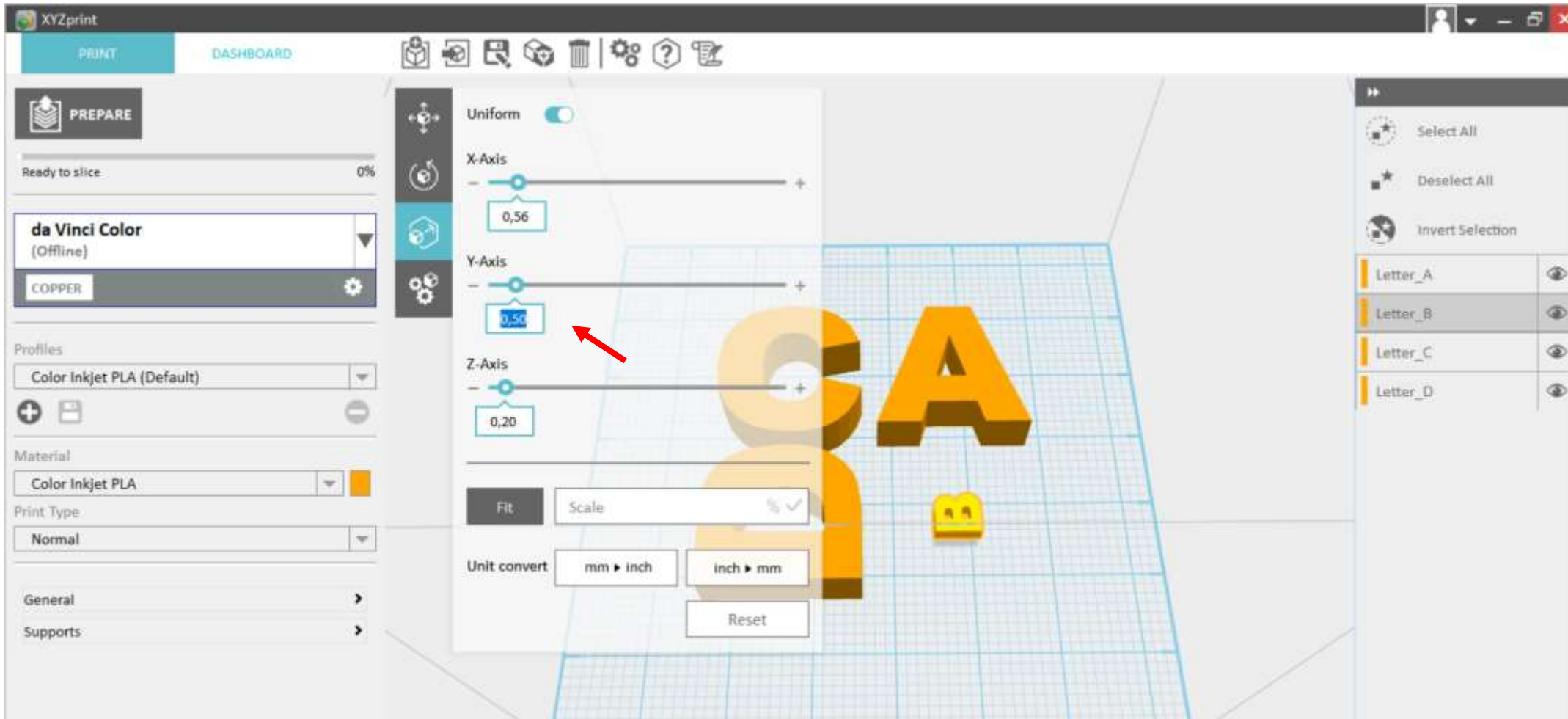
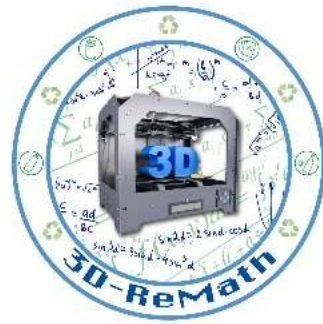


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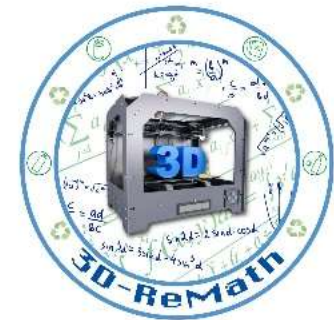
Preparing 3D models for printing (1/6)



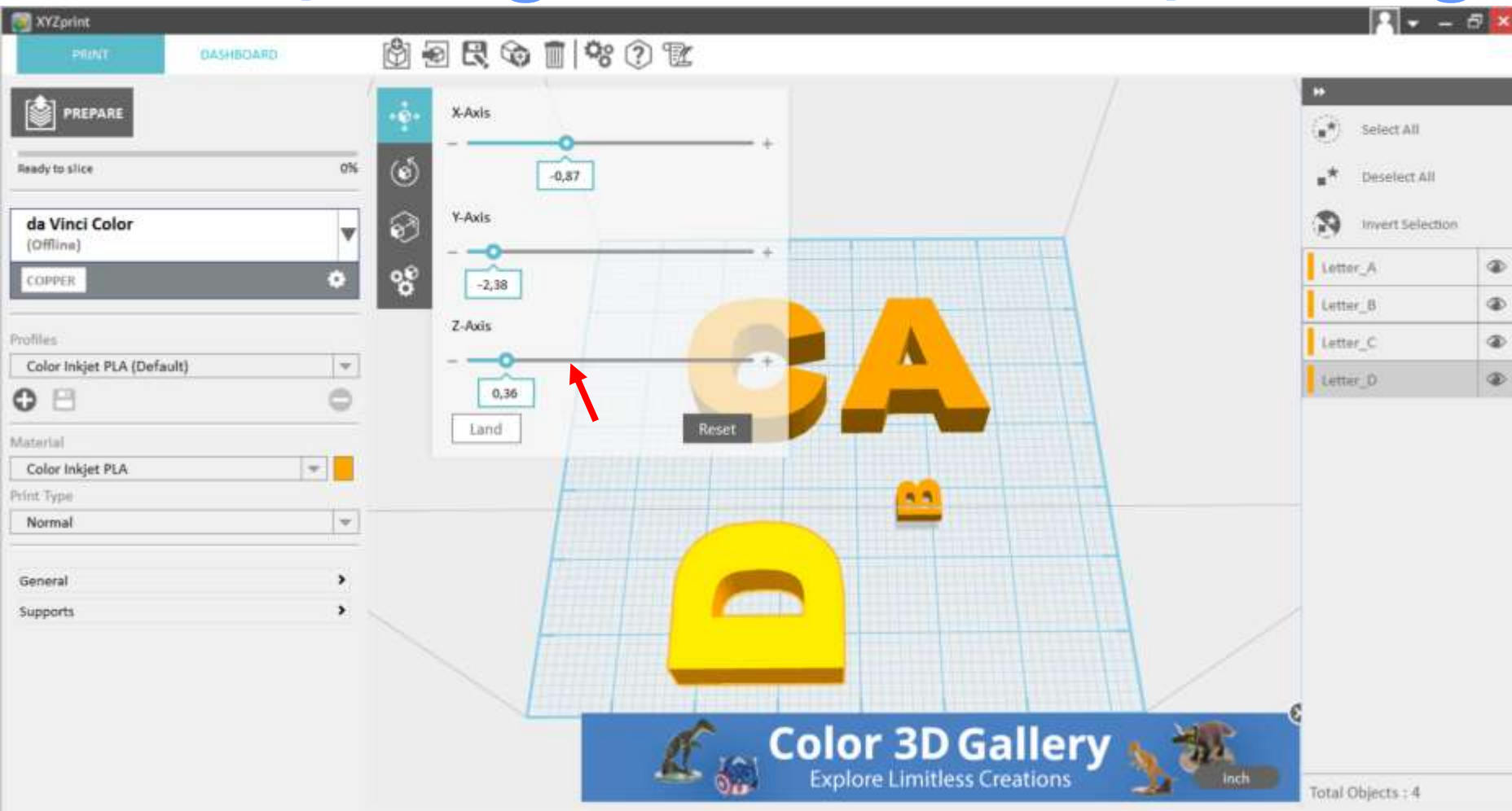
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Preparing 3D models for printing (2/6)

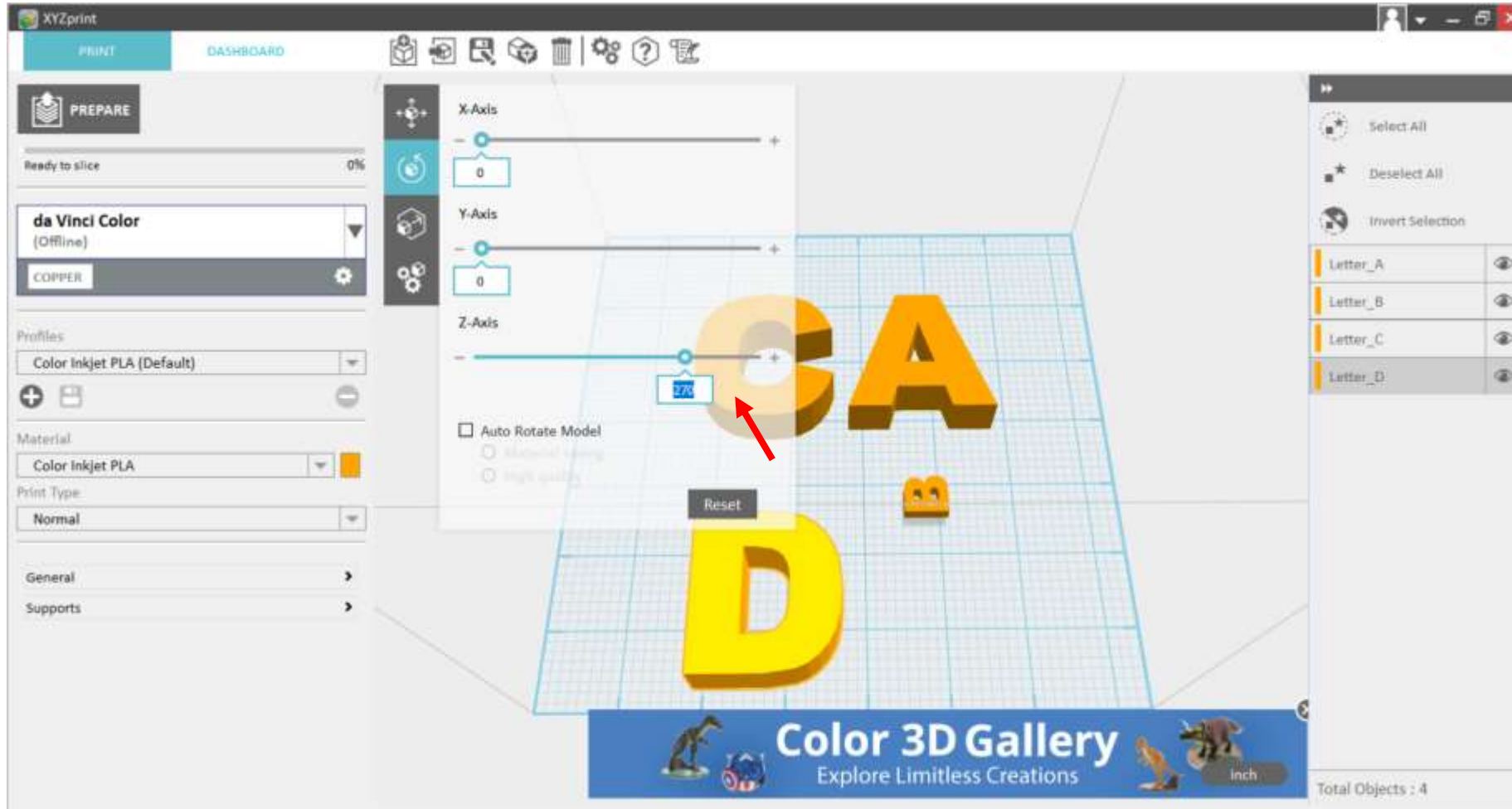
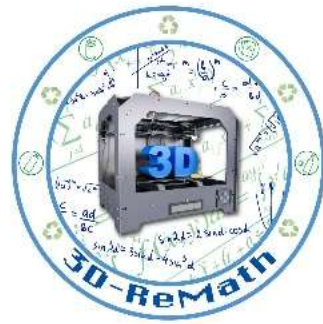


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Preparing 3D models for printing (3/6)

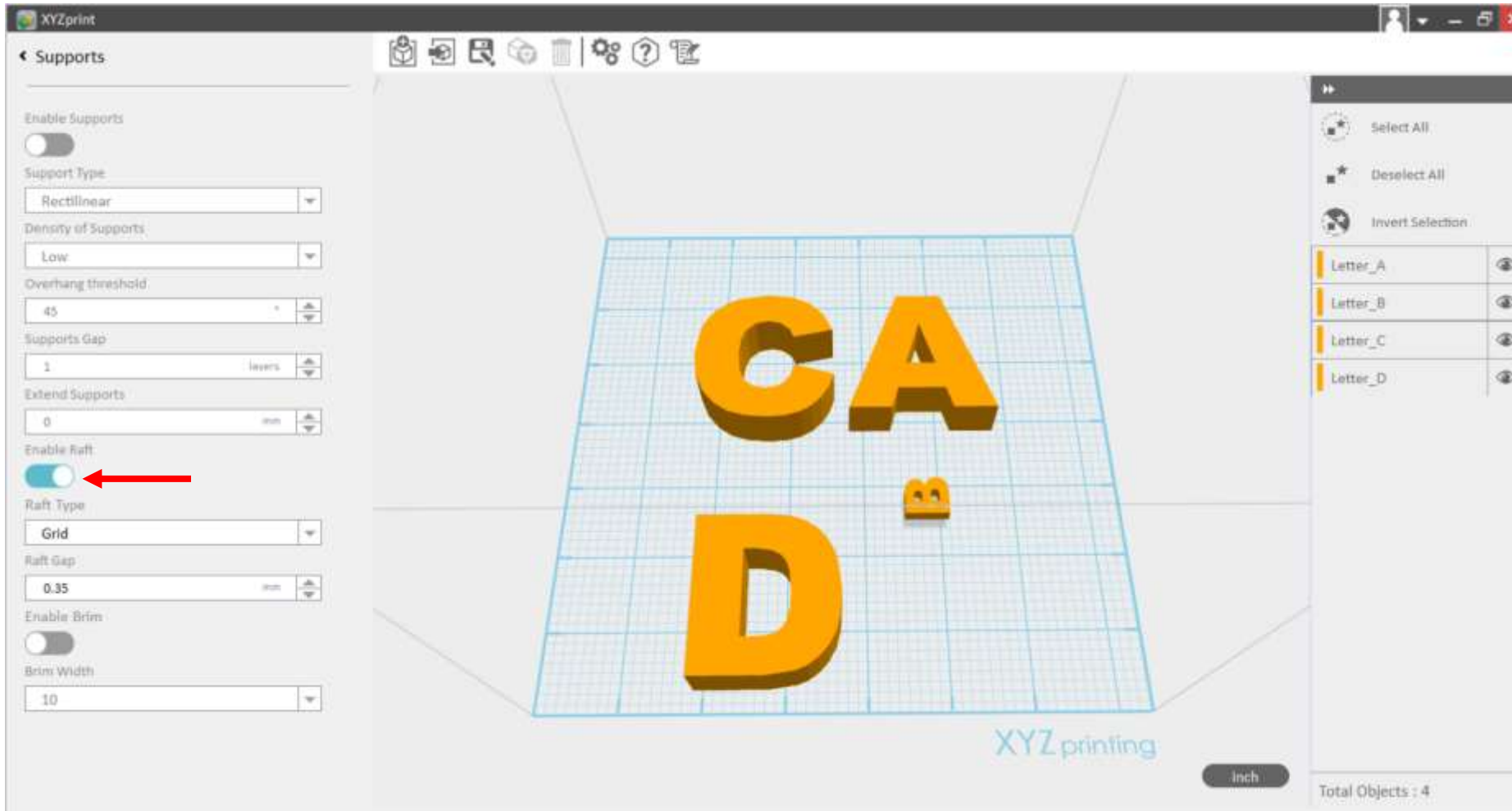
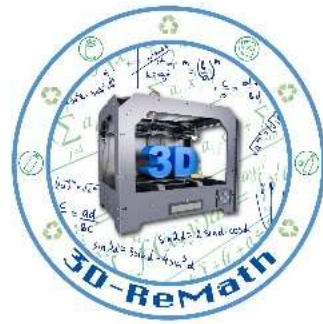


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Preparing 3D models for printing (5/6)

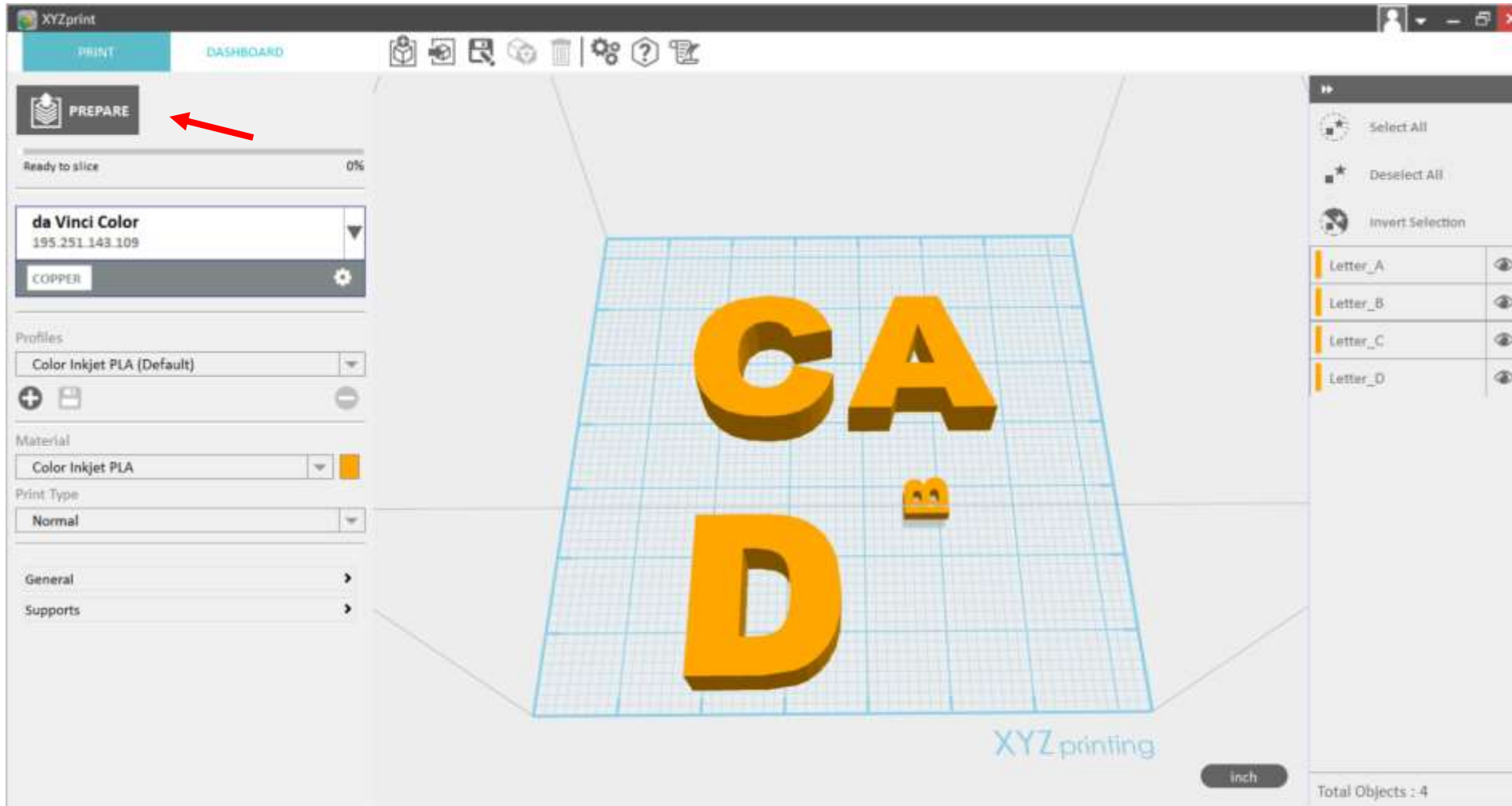
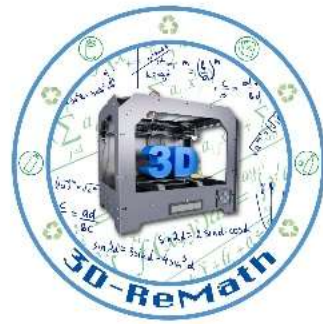


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Preparing 3D models for printing (4/6)

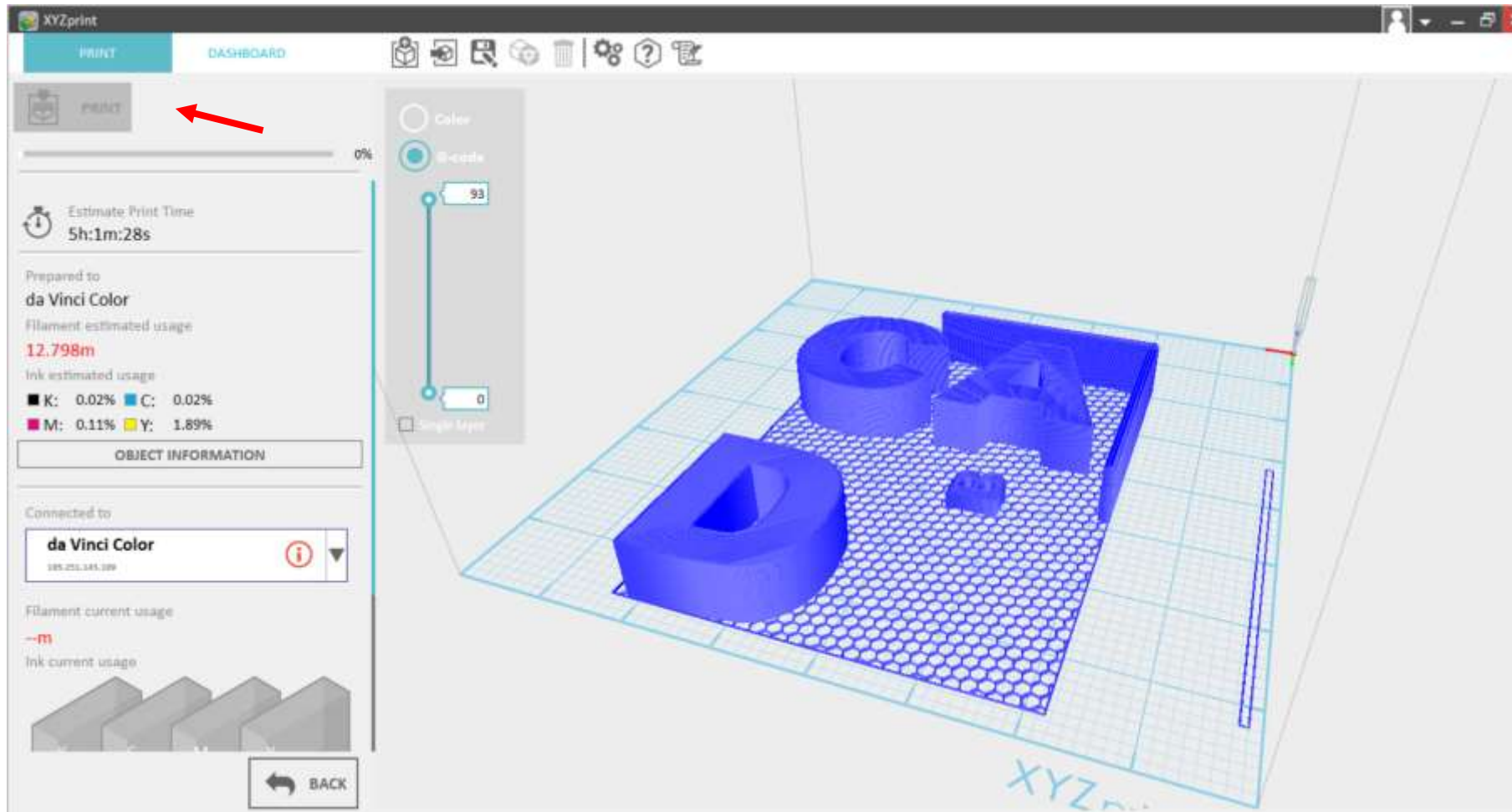
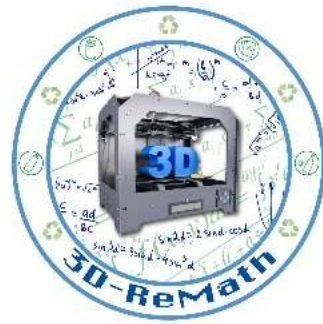


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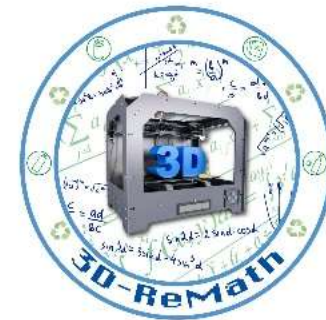
Preparing 3D models for printing (6/6)



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Thank you!!

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