

Tinkercad



Oregon State

University

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tinkercad.pptx

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Start Here

1

Our notes are available through a browser:

cs.oregonstate.edu/~mjb/tinkercad

2

The Tinkercad program is available through a browser too:

www.tinkercad.com

3

You can create your own Tinkercad account. The advantage of this is that Tinkercad will keep your 3D creations in cloud storage so you can get at it later. If you are under 18 years old, have your parents help you.

4

If you want to use our educational account, use:

User: mjb@engr.oregonstate.edu
Password: [corvallis72542](#)



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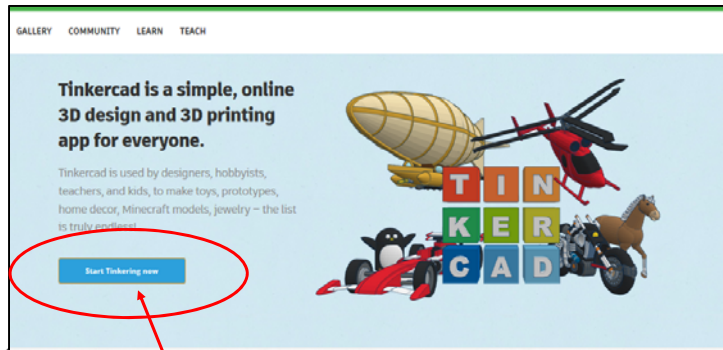
TinkerCad

3

TinkerCad is a free web-based CAD package from AutoDesk

It is a solid modeler, so you always have legal 3D objects suitable for 3D Printing

You get to it at: <http://www.tinkercad.com/>



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Click here to start

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Logging In

4

Country
United States

Birthday
January 1 2000

Next

Already a user? [Sign In](#)

User: mjb@engr.oregonstate.edu
Password: corvallis72542

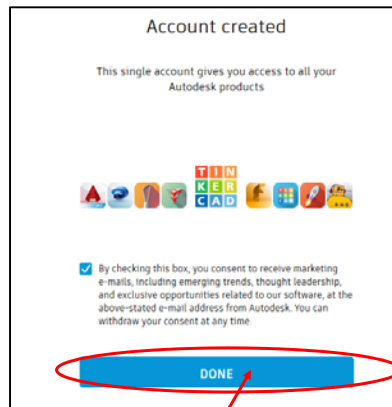


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Do this to create a
new account

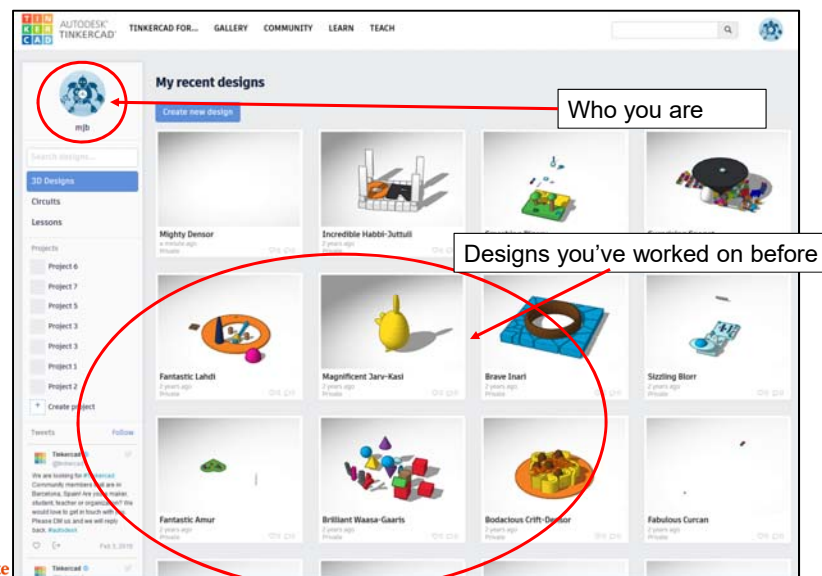
Go here if you've
already got an account

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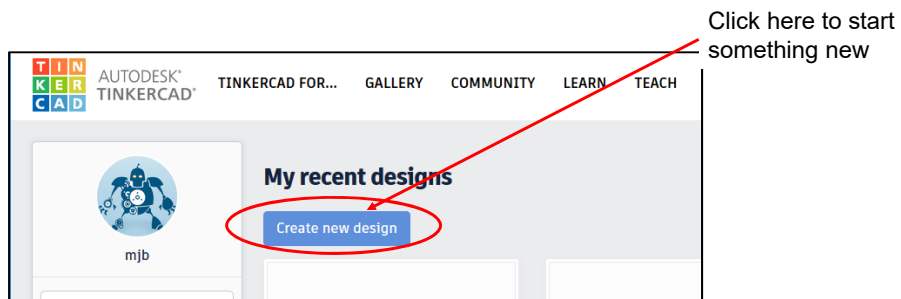
If you created a new account, then click here

The First Screen You See



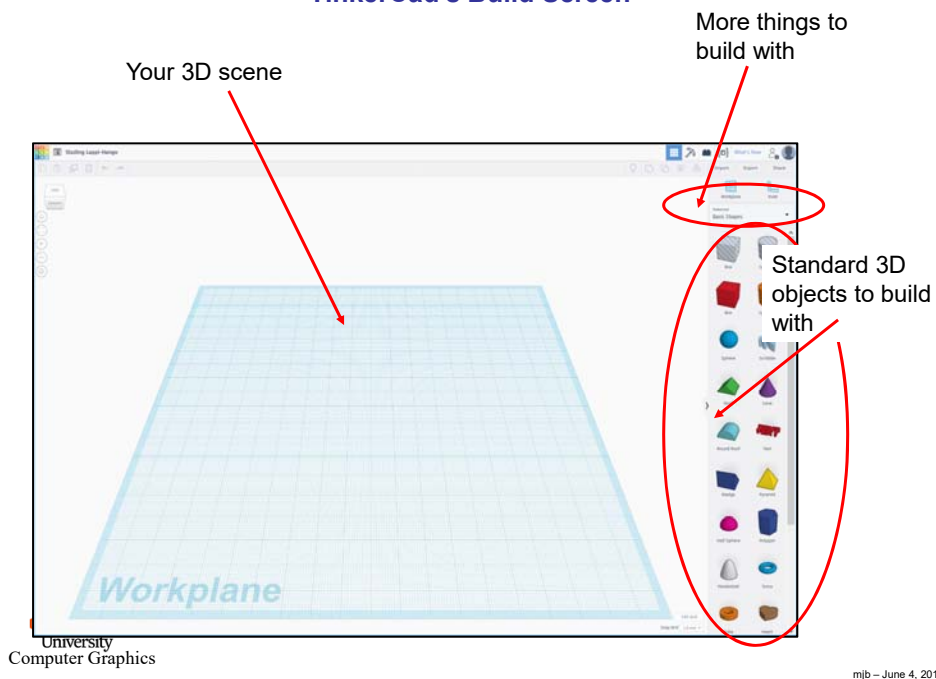
First Screen You See

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Tinkercad's Build Screen

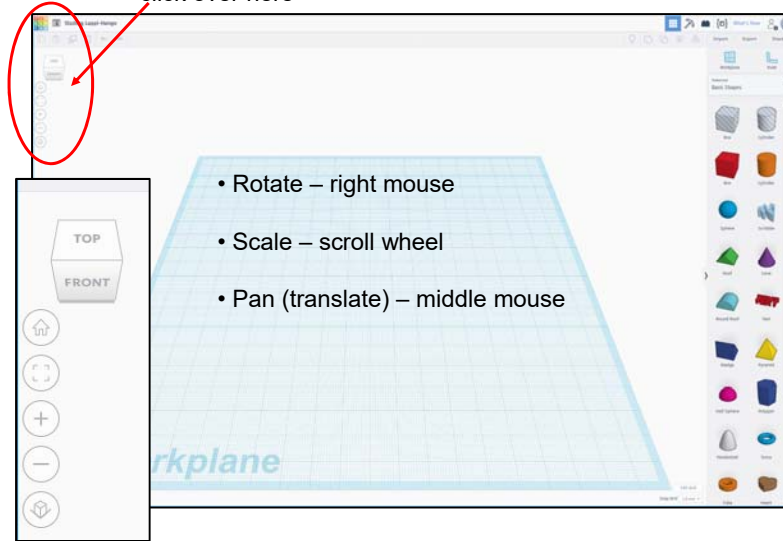
8



Moving the Scene around in 3D

9

You can also
click over here



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Un-do and Re-do are Your Best Friends Ever!

10



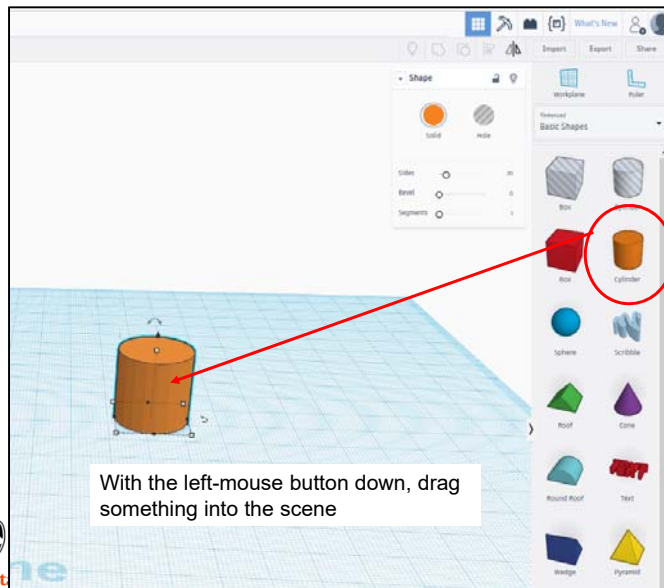
Control-Z also works as an Un-do


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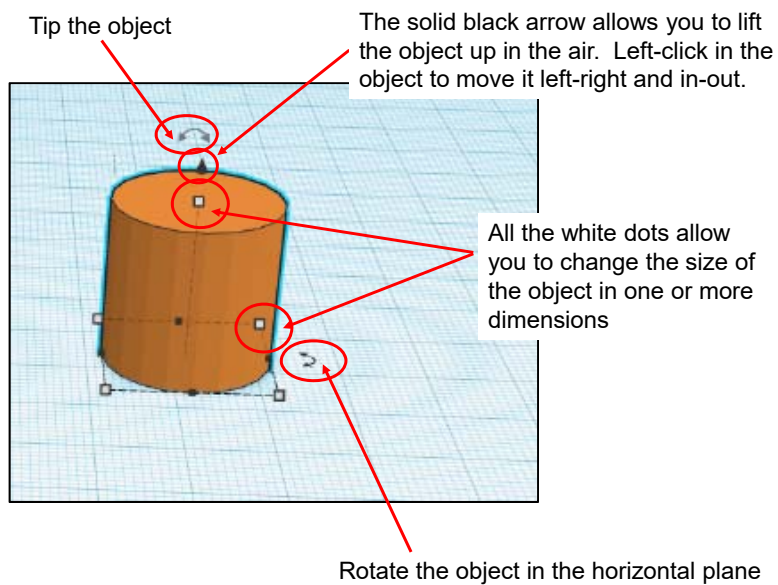
Start by Placing an Object into the Scene

11



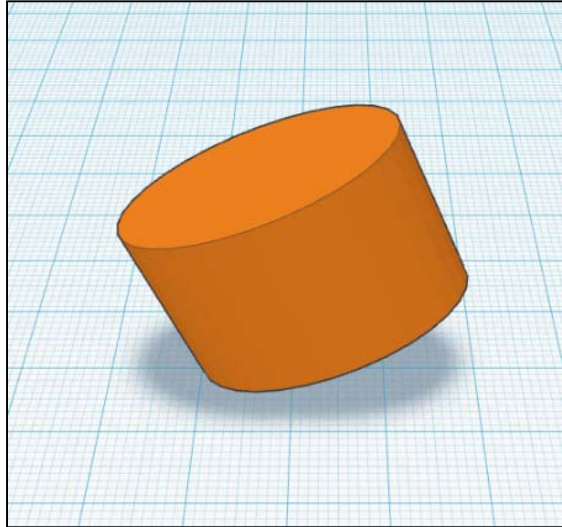
The Small Symbols Let You do Things to the Object

12



Scaled, Lifted, and Tipped

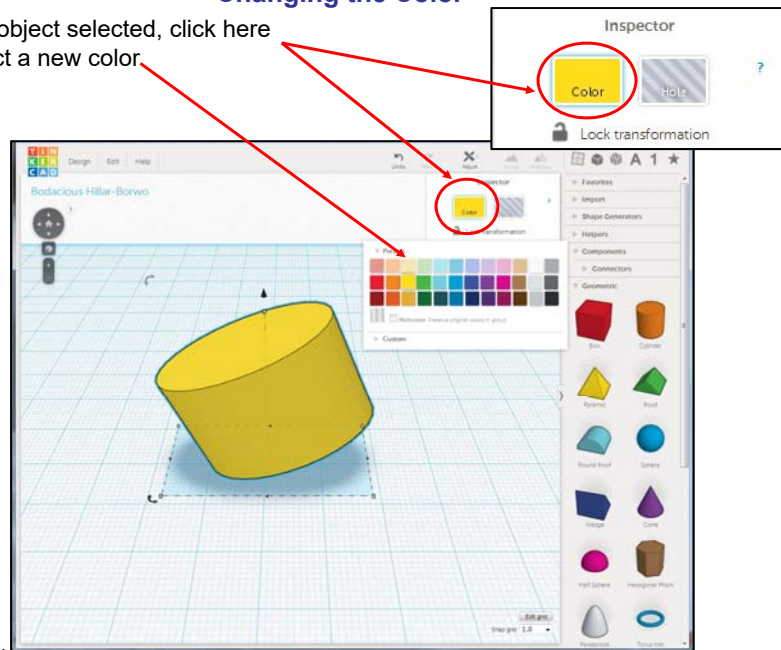
13



Changing the Color

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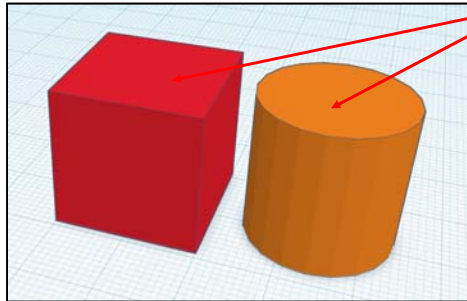
With the object selected, click here
and select a new color.



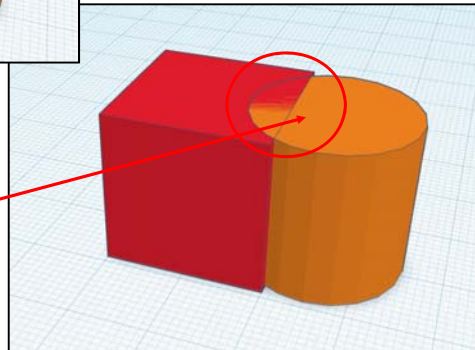
Combining Objects

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Take 2 objects and overlap them.



They might look like they are one object together, but they aren't. You can tell by the overlapping edge lines and overlapping polygon colors here.

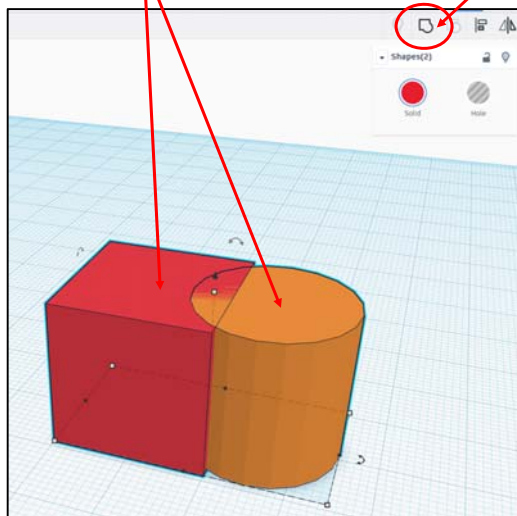


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Combining Objects

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Select both objects (left-click on one and then shift-left-click on the other) ... and then click on **Group**



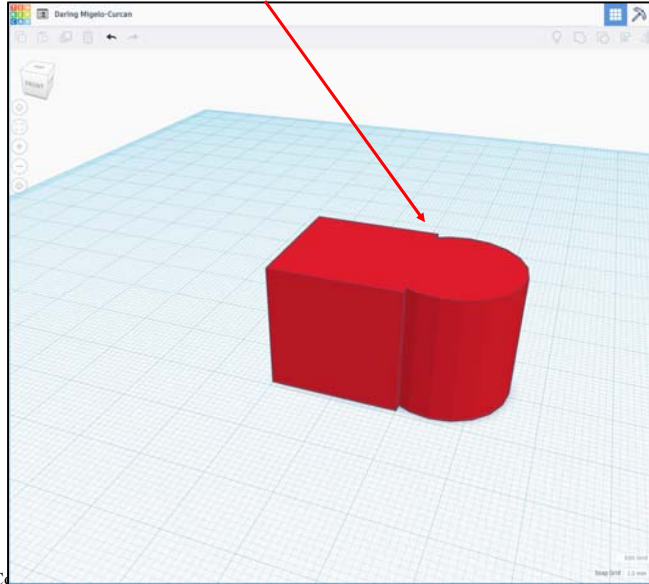
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Combining Objects

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You can tell they are now one object because you see no overlapping edge lines here, and they are a single color

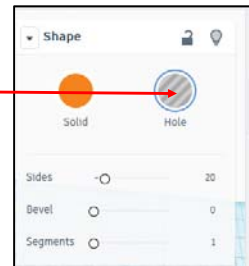
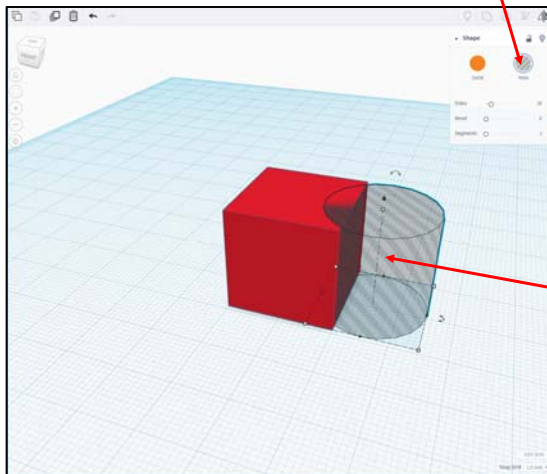


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Combining Objects

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An even cooler trick – while the objects are overlapped, click on just one of them and then click on **Hole**



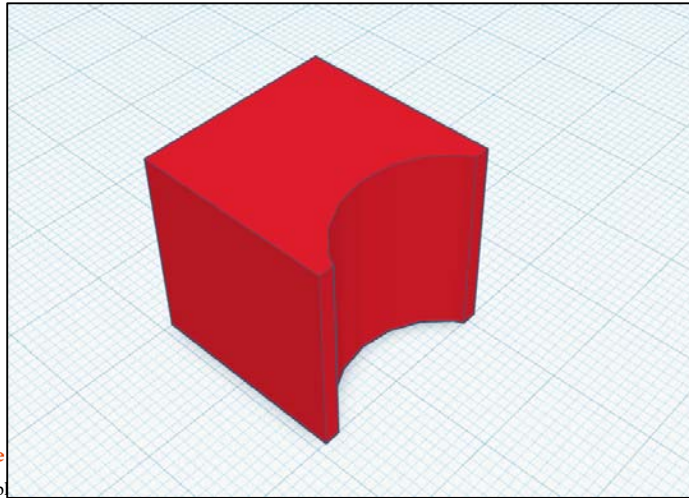
This makes that object a "negative object"

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Combining Objects

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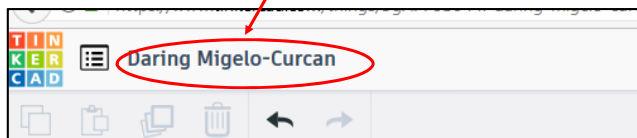
Now shift-left-click on the other (not a hole) object, then click on **Group** like you did before. This causes the Hole object to take a “3D Bite” out of the other object. You can use this to make new shapes, or can even create holes through shapes.



Changing the Name of Your Design

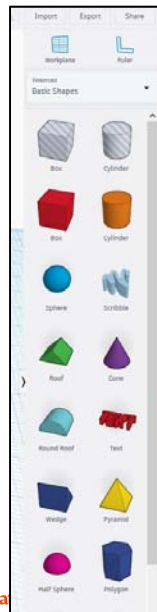
20

When you start a new design, Tinkercad gives it a funny name. This is OK, but if you want to give it a more descriptive name, click on the funny name and type in a new one:



Geometric Primitives

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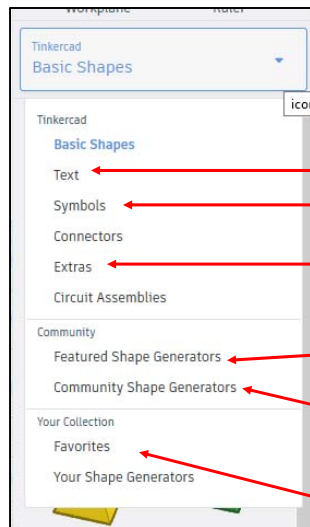


These are the standard built-in objects that you can use



Other Stuff

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Solid letters and numbers

Solid symbols

Solid goofy things

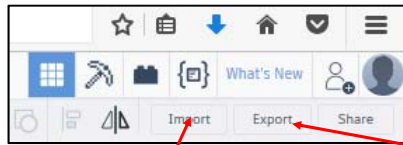
Shapes where you can enter information about them (includes state outlines!)

Shapes donated by other users (includes some good text-input objects)

A place to store your favorite shapes

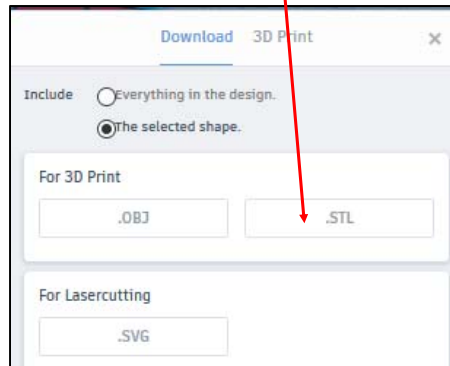
Other Stuff

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A way to bring in files from somewhere else

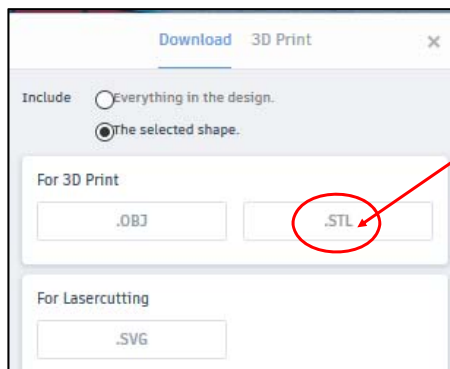
Write your design out to use it somewhere else, including 3D Printing



3D Printing

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Most 3D Printers want an **STL** file.

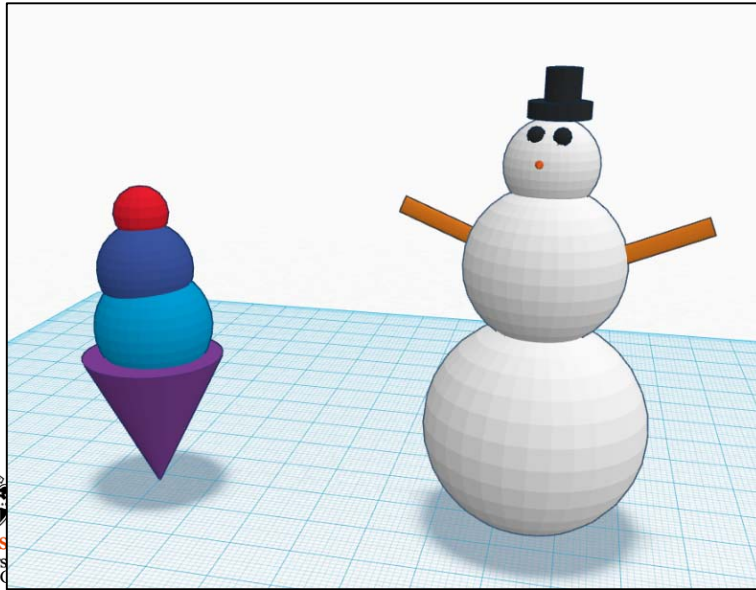


Click here

You'll then be given the opportunity to save the **.stl** file somewhere.

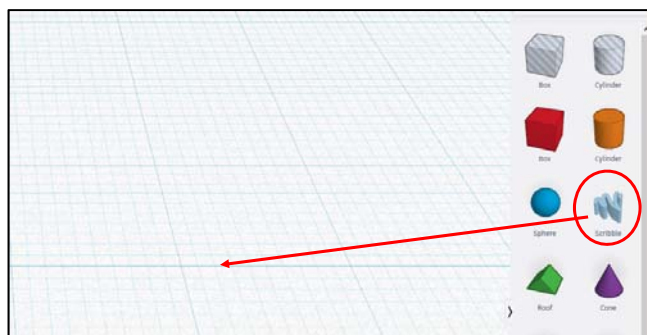
Not Sure Where to Start?
Try One of These

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Something New: Scribbling

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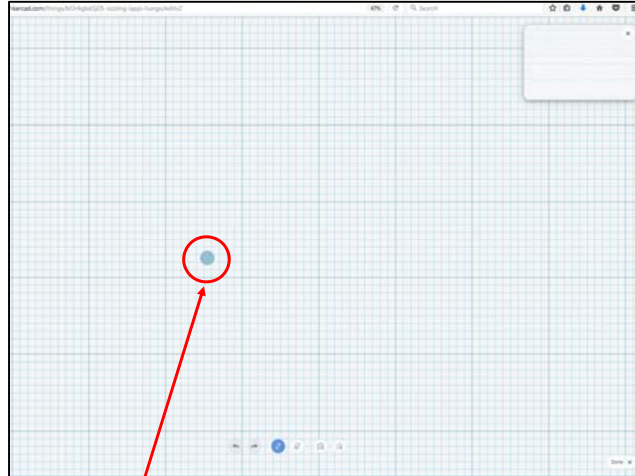
With the left-mouse button down, drag
the **Scribble** icon into the scene



Something New: Scribbling

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The screen changes to this:

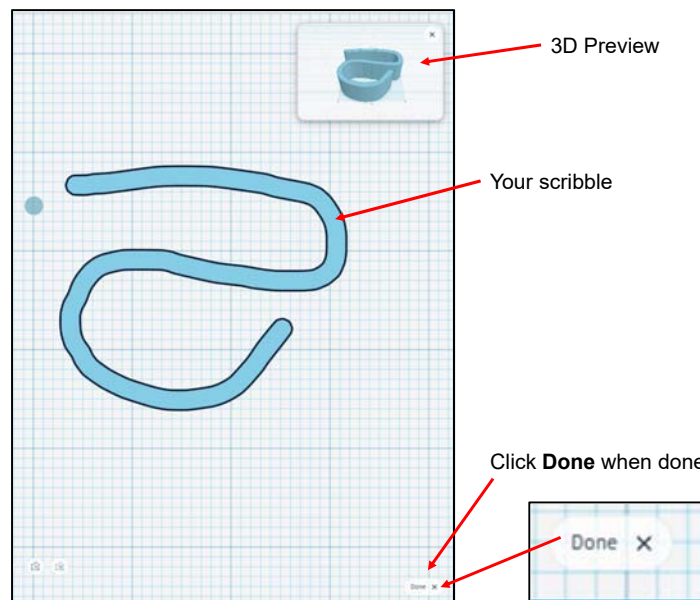


Grab this icon and, well, scribble with it

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Something New: Scribbling

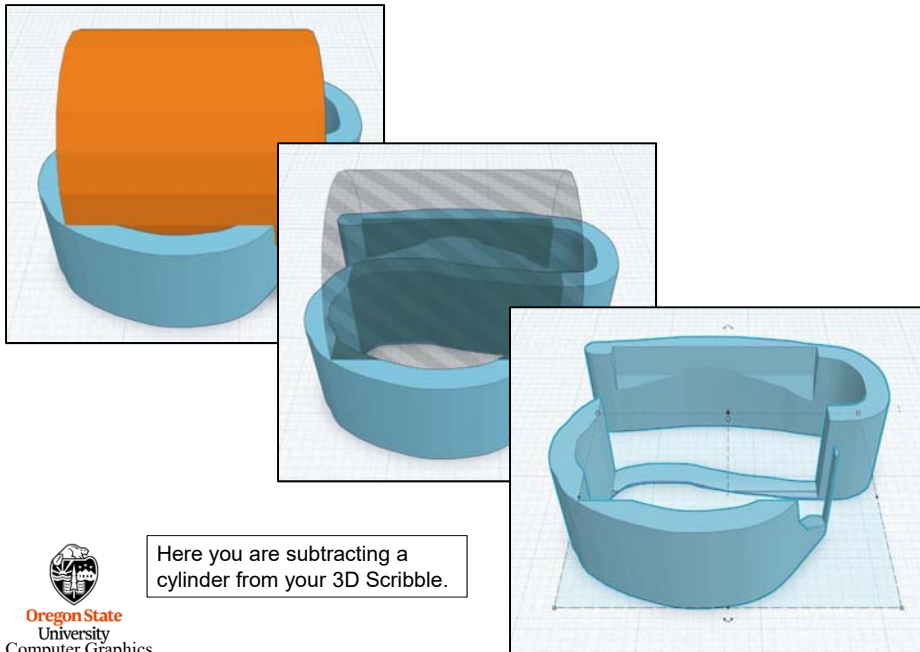
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From there on, it acts like any other 3D object

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Here you are subtracting a
cylinder from your 3D Scribble.

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