

FET 6.1

Introduction to TinkerCAD

This lesson will introduce you to TinkerCAD, an online CAD software application. It's not nearly as powerful as SolidWorks, but it does some of the things that SolidWorks does, but it's much simpler and easier to use. Complete parts 1-3 below. Do this INDIVIDUALLY – this is not a team project.

Part 1 – Account Setup

1. Go to www.tinkercad.com and click 'Sign Up'.
2. Enter the correct country and birthday information, then click 'Next'.
3. Use your student gmail account for email, which is your computer login followed by @haralsonschoools.org (for example, if your computer login is albhc123, enter albhc123@haralsonschoools.org for the email). Use your computer login password for the password. Click 'Create Account'.

Part 2 – Take Lessons

1. When you first log in, it will automatically start you on the first basic lesson. The lessons are also accessible from the 'Learn' link on the dashboard (the main 'home' screen).
2. Complete all 6 basic lessons, starting with 'Learning the Moves' and ending with 'Die on a Workplane'.
3. Take any other lessons you want as long as you have time. You need to be finished with all lessons 30 minutes before class is over

Part 3 – Create Your Own

1. Go to the TinkerCAD dashboard (click the logo in the upper left of the screen).
2. Click 'Create New Design' in the All Designs section.
3. Create a design of your choice. It must be 'something', not just a bunch of random objects dragged onto the workspace. Be as creative as you want, but keep it clean. You must use at least the following:
 - 4 different geometric shapes
 - A hole to cut or change something
 - At least one letter or number
4. Change the name of your design. Click 'Design' in the upper left, select 'Properties', enter a better name (TinkerCAD automatically generates a weird name), then click 'Save Changes'.
5. Save your design. Click 'Design' again and choose 'Save'

Grading, Competition, and Printing

- At some point, everyone will open their designs at once.
- I will grade them based on meeting the criteria in Part 3 above.
- Everyone in the class will look at all the designs and vote on their favorite.
- The top 2 vote-getters in each class will be printed on the 3D printer.