PLTW Virtual Learning

7th and 8th Grade Design and Modeling

May 5, 2020

Lesson 21: 3D Modeling Day 2

Objective/Learning Target:
Students will understand basic navigation of multiple computer-aided design softwares.

Warm-Up:

Have you ever used a 3D modeling software?

If so which one?

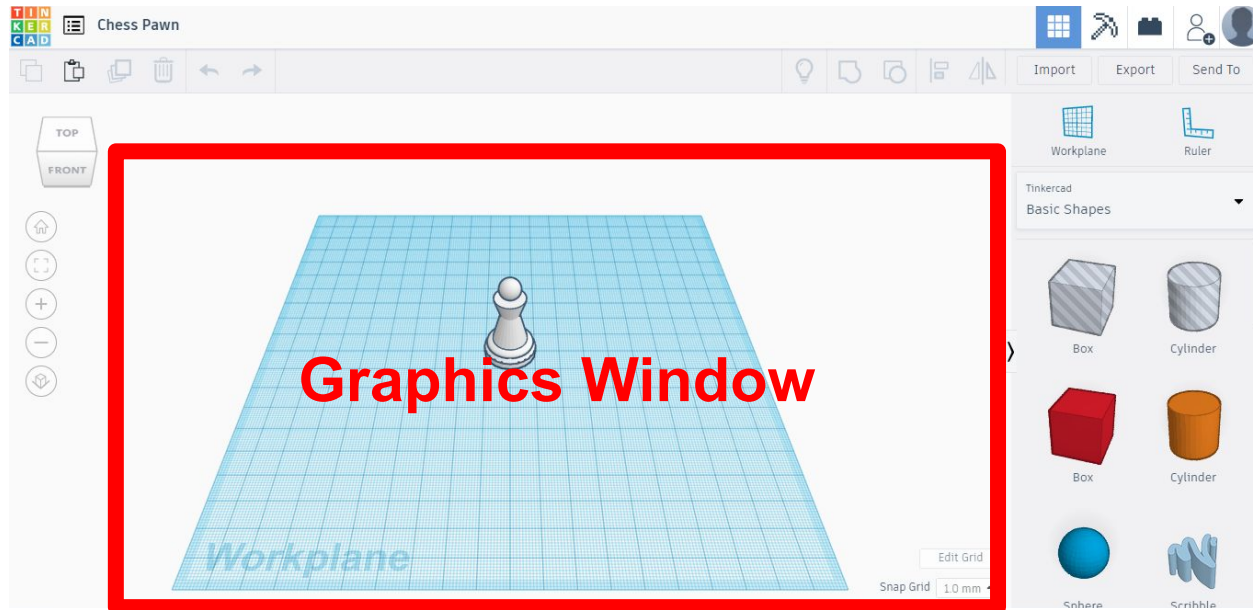What did you create in this program?

Lesson Introduction/Background Information:

Get out your notes we started for 3d modeling softwares yesterday.

Today we are going to focus on navigating one of these softwares. As you progress through the slides, add the information to your notes.
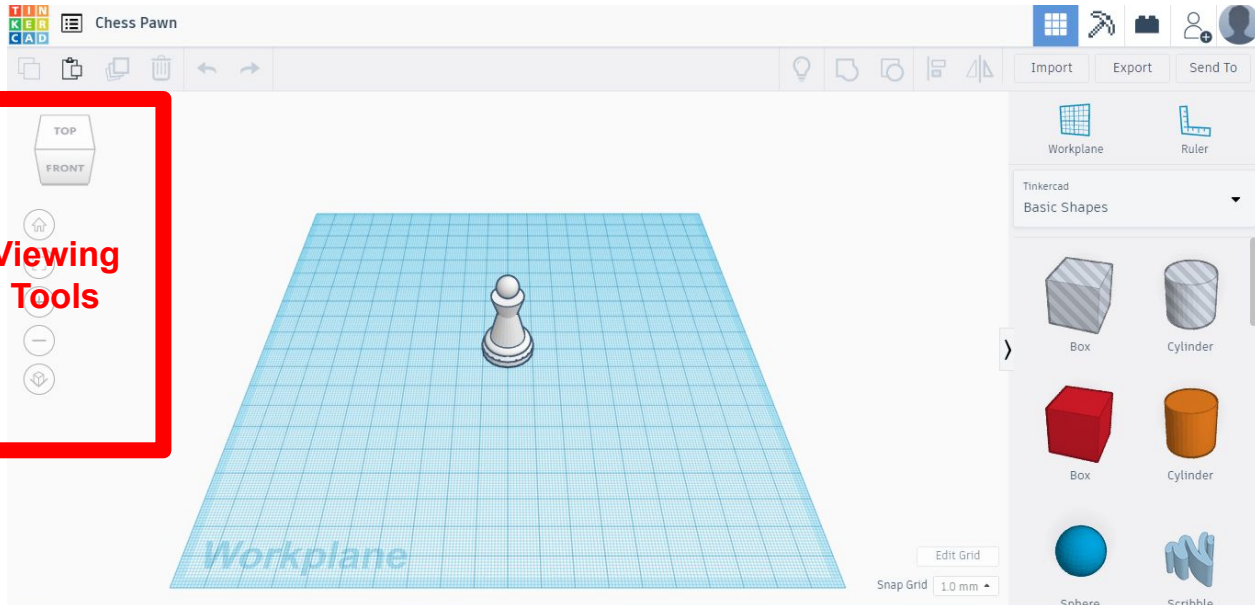
Graphics Window

All CAD (computer-aided design) programs have a design environment that allows you to view, edit and document your project. Your object is located in the middle of the window and the tools are located around the edges.
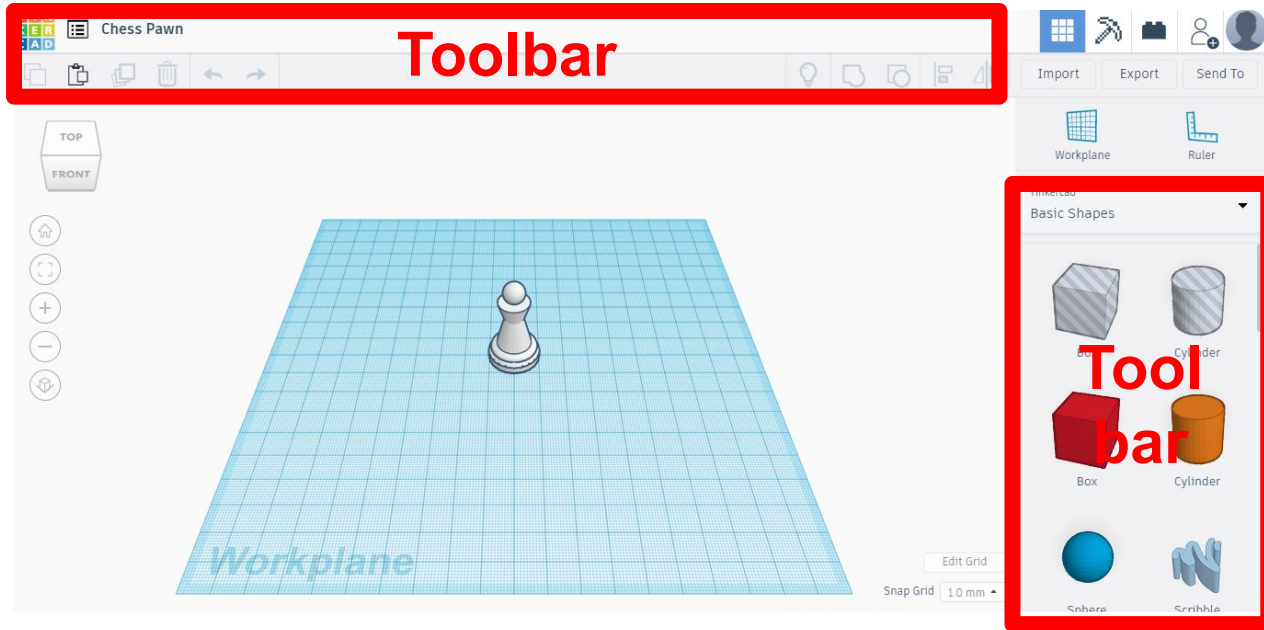
Viewing Tools

These tools allow you to see your project from a different orientation. They allow you to rotate, zoom ⊕, and pan ✋.

NOTE: The wheel on a mouse can also be used to zoom.

Toolbar

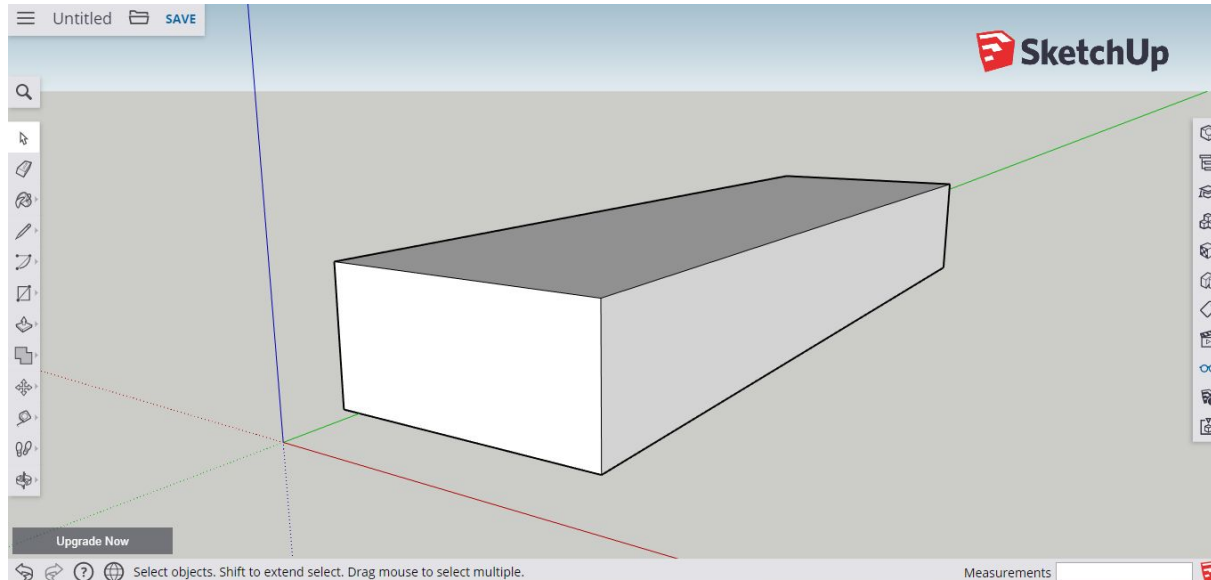The tool bar holds the commands to create your shapes.

Practice:

Watch the video of a cup being drawn in TinkerCad. See if you can identify all the parts that we learned about today. Add to your notes anything else that will be helpful to know when navigating a 3d program.
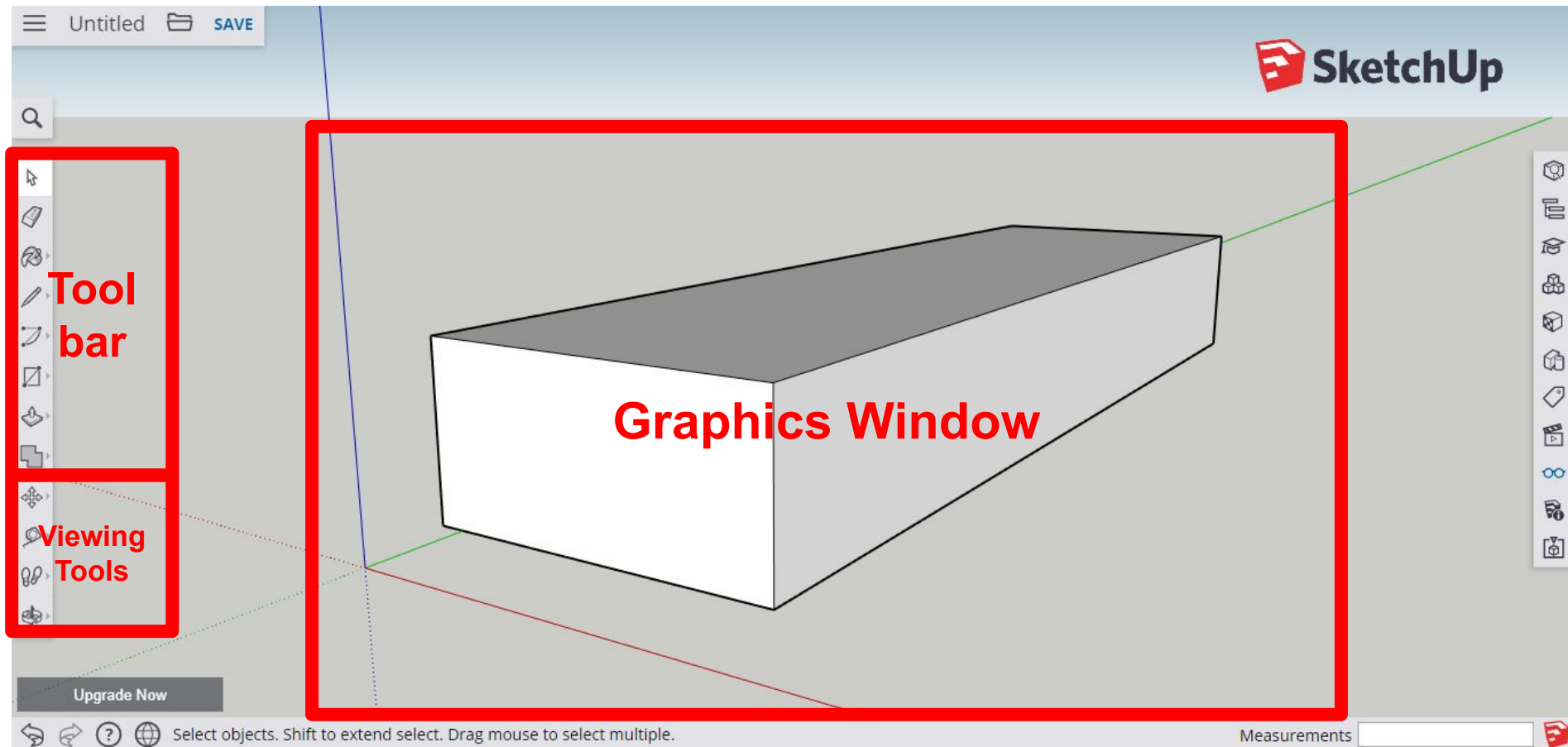

TinkerCad cup

Self-Assessment:

While not all programs look exactly the same, they all contain the same components. See if you can label the parts of this 3d modeling software.

Self-Assessment: Answers

Extend Your Learning/Continued Practice:

Watch this tutorial of Sketchup to see how to navigate another 3D software

[Sketchup House](#)