EXTENDING 3D MODELING IN THE GATEWAY CLASSROOM, AT HOME AND IN A VIRTUAL REALITY

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PRESENTATION TOPICS

▪ Autodesk Inventor Tips and Tricks
▪ Flipping the classroom to home with a cloud based app called Tinkercad
▪ Creating a digital notebook using Microsoft OneNote
▪ Presenting objects in augmented reality using the app Augment
Custom created activities for an introduction to Autodesk Inventor features to make parts

Custom created activities for an introduction to Autodesk Inventor features to constrain parts into assemblies

Will share any and all created activities – just email Dr. Rhonda Jones at rjones2@bssd.net
AUTODESK 123D DESIGN

- [http://www.123dapp.com/design](http://www.123dapp.com/design)
- PLTW LMS email from October 30th announced that the Gateway DM curriculum is being completely rewritten and Autodesk Inventor is being replaced with Autodesk 123D Design
- Create a digital model on the iPad, on the web, or on your desktop, and then directly 3D print or fabricate it.
BUILD WITH CHROME

- Additional 3D modeling practice for school and home

https://www.buildwithchrome.com/
SKETCHUP MAKE

- Additional 3D modeling practice for school and home
ADDITIONAL 3D MODELING SOFTWARE FROM AUTODESK

- [http://usa.autodesk.com/autodesk-123d/](http://usa.autodesk.com/autodesk-123d/)
- **123D Catch**—Automatically convert ordinary photos into extraordinary 3D models leveraging the power of the cloud.
- **123D Creature**—Design and 3D print fantastic creatures and character models on the iPad.
- **123D Make**—Transform 3D models into a cut pattern with animated assembly instructions for making artful physical creations.
- **123D Sculpt**—Sculpt and paint interesting and realistic 3D shapes with your fingers digitally on the iPad.
TINKERCAD

- Allows students to practice CAD at home
- Basic “Pull CAD”
- Basic Shapes to complex designs.

https://www.tinkercad.com/
MICROSOFT ONENOTE

- Use to go to a “paperless” classroom
- Teaches how to construct objects with lines
- Allows organization of digital information
- Examples
Isometric Graph Paper
Isometric Graph Paper

Cruz Llanas
Google leads $542 million funding of mysterious augmented reality firm Magic Leap

Places objects created in CAD into a “virtual world”

https://www.youtube.com/watch?v=kw0-JRa9n94

https://www.youtube.com/watch?v=I3rmFCJtYlo
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