

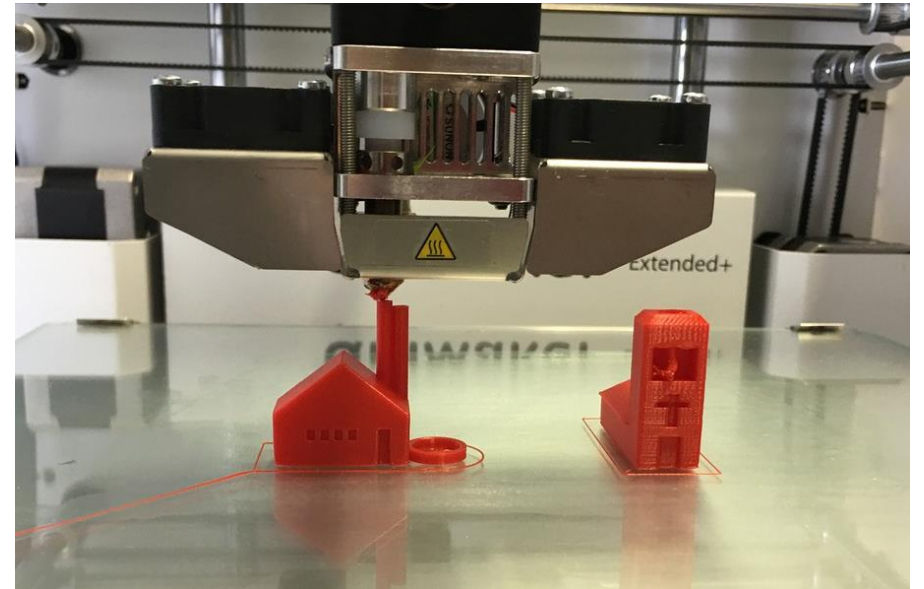
3D MODELING IN THE CLASSROOM

Dr. Nicole Caldwell
Autism Specialist
Math and Science Tutor



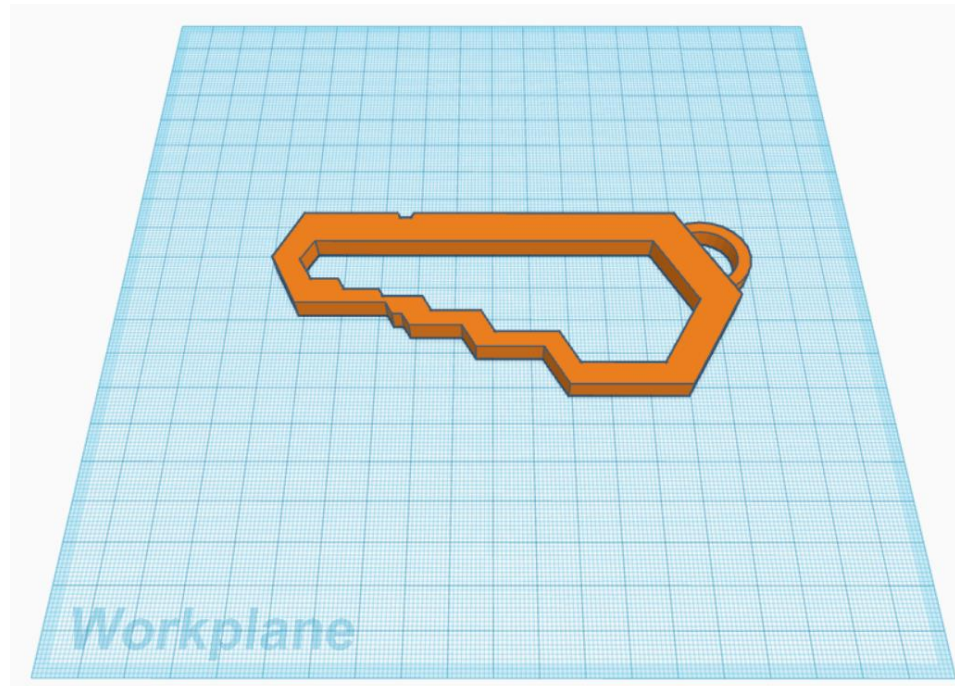
WHAT IS 3D MODELING AND DESIGN?

- Designing digital objects in a 3D workspace.
- Objects designed can be 3D printed.
- Can be used for prototyping.



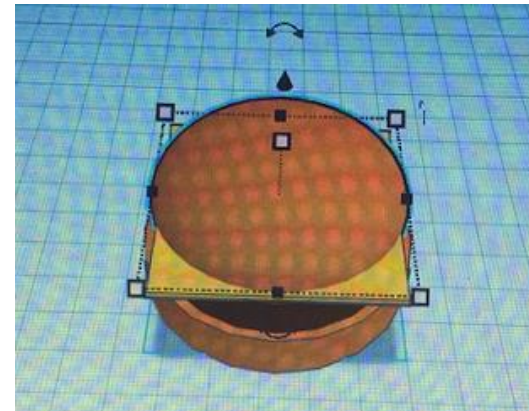
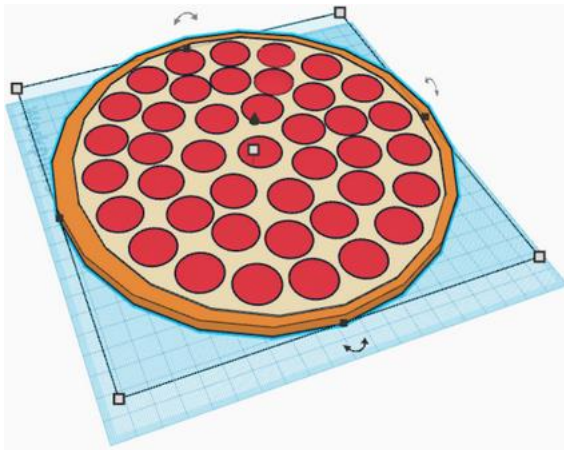
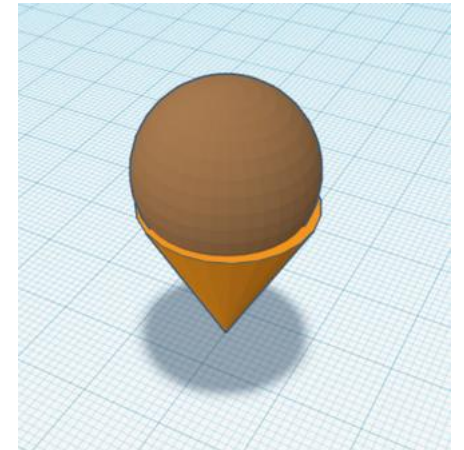
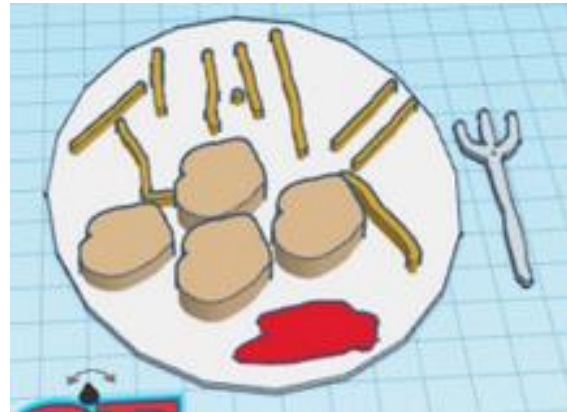
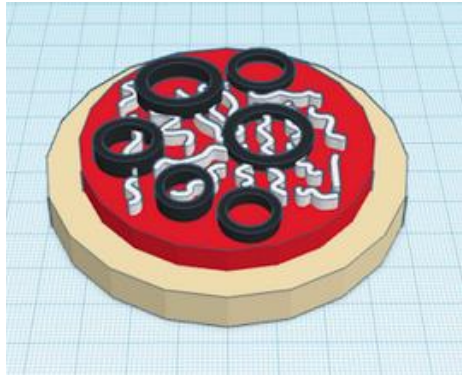
WHY TEACH 3D MODELING AND DESIGN?

Improve visual-spatial skills



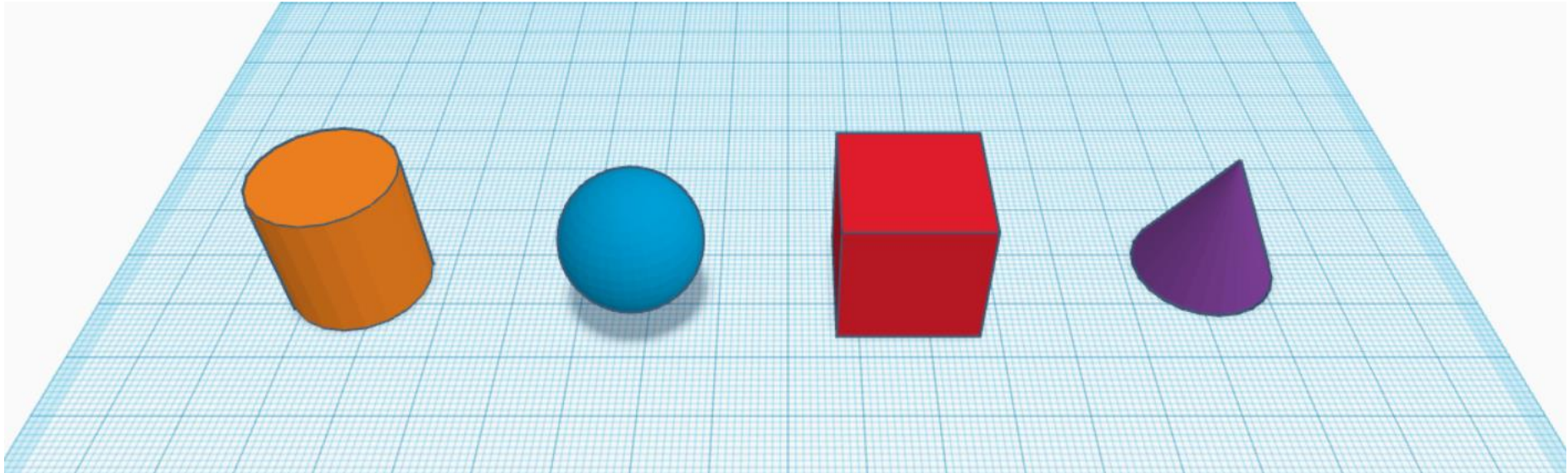
WHY TEACH 3D MODELING AND DESIGN?

Problem-solving and creative thinking



WHY TEACH 3D MODELING AND DESIGN?

Learn names of 3D shapes



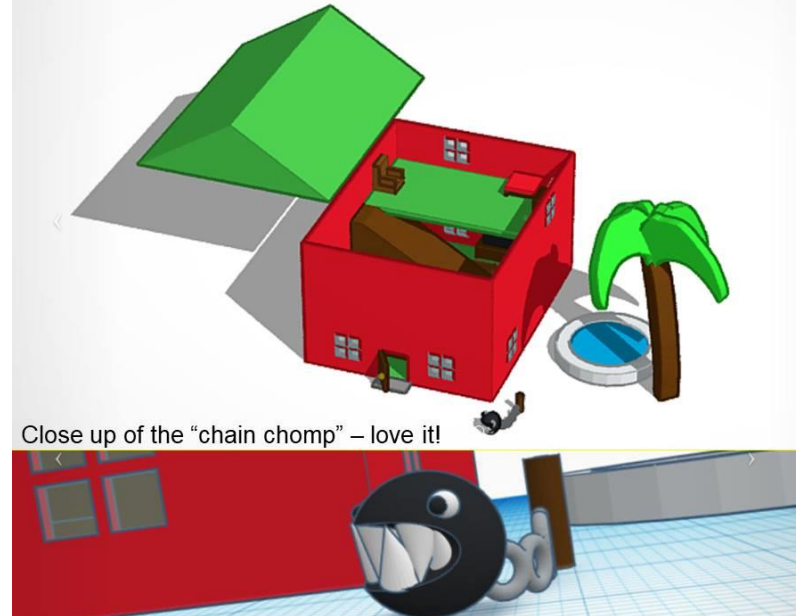
WHY TEACH 3D MODELING AND DESIGN?

Pre-vocational skill



Windows on a house model made by one of my students using the program Sketchup.

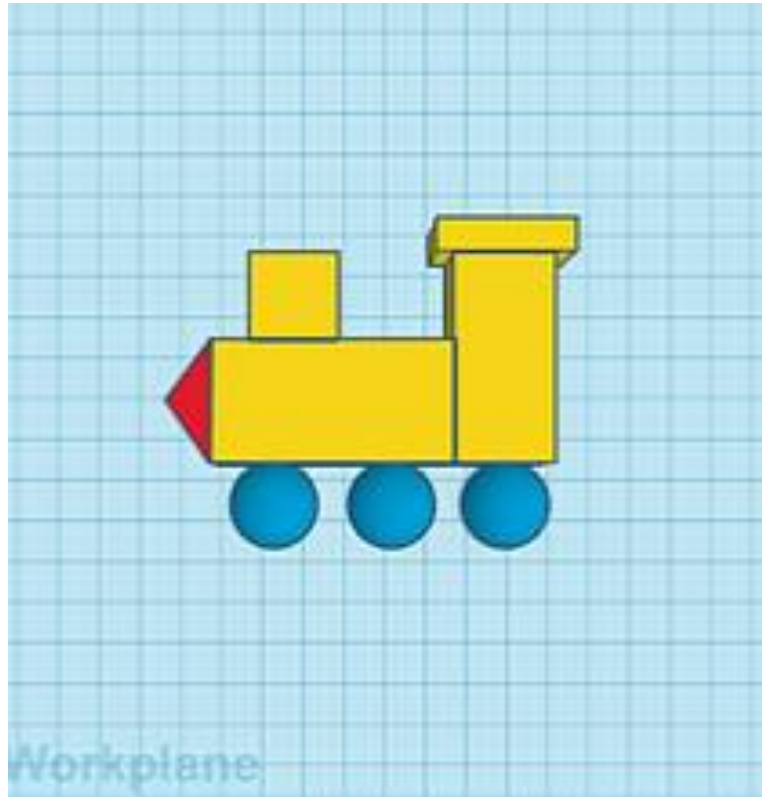
A final project made by one of the students in my "Intro to 3D Modeling and Design" class.



Close up of the "chain chomp" – love it!

WHY TEACH 3D MODELING AND DESIGN?

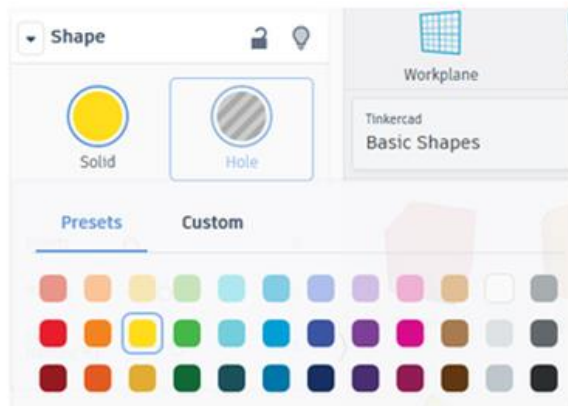
Reward/reinforcer



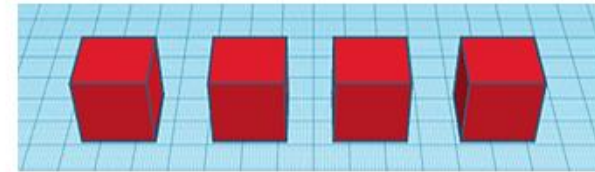
WHY TEACH 3D MODELING AND DESIGN?

Colors/shapes/letters/numbers/prepositions

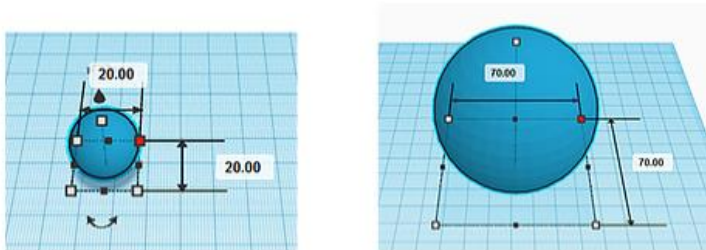
Asking for a shape to be a certain color:



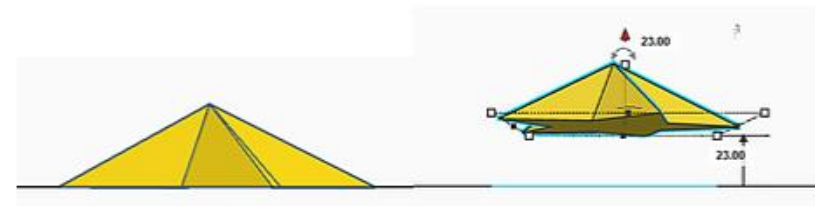
Asking for a certain number of a shape (you could use this for counting too – having the child count).



Asking for a shape to be made "big" or "little":



Asking you to move a shape "up" or "down."

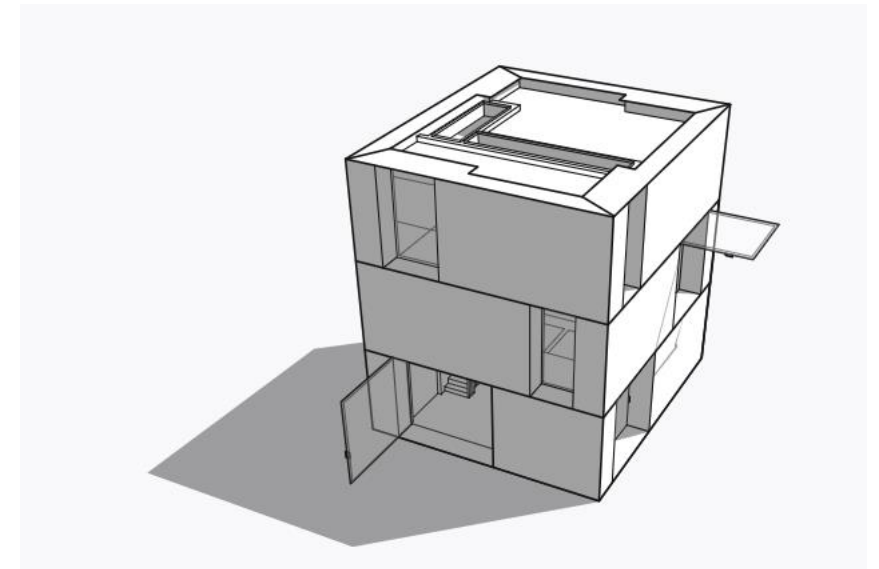


A FEW OF MY FAV 3D MODELING PROGRAMS

TinkerCAD



Sketch-Up





ADDITIONAL RESOURCES

- Using 3D Modeling to Teach Language and Communication Skills:
<https://www.autismhomeschoolsuccess.com/single-post/2019/07/26/Using-3D-Modeling-to-Teach-Language-and-Communication-Skills>
- Science, Technology, and Vocational Skills for Students with Autism Facebook Group:
<https://www.facebook.com/groups/1615841168578319/>
- My online classes for middle and high school students:
<https://www.autismhomeschoolsuccess.com/online-courses-for-high-school-stud>