

## Fitted Models

### 7<sup>th</sup> Grade Design Technology

Due: Friday, April 1, 2016

#### Goal:

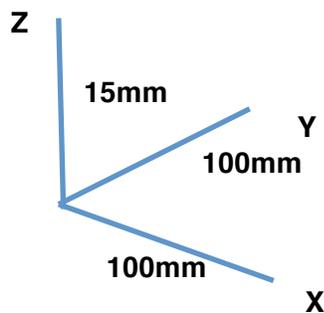
Use the tools in Tinkercad to create two 3D model that fit together without using glue or tape. Be creative in how you use shapes to build the structure and decorate your model.

Idea 1: You can fit the two models together OR use another material to attach them. Some examples of materials are: a pen, wooden dowel, toothpick, drinking straw, paper clip, toothbrush,

Idea 2: To get two pieces to fit together and not fall apart you will need some exact measuring. The best tool for this is a digital caliper. You are welcome to use one of the digital calipers in the Design Lab to measure your connector material.

#### Requirements:

1. Only one (1) of your models can be an imported 2D shape. No imported 3D shapes.
2. Both models on same design/workplane
3. Models can be no longer than 100mm on X or Y axis. Models cannot be higher than 15mm on the Z axis.
4. Change the name of your model to describe what your model is. You can change the name and make your model Public by clicking on Properties in the Design menu.



#### Tips:

1. The basics of moving, aligning, and grouping shapes are covered in the “Let’s Learn Tinkercad!” Project on the Project Ignite website. It’s a good place to go when you get stuck.
2. The Design Lab website has links to helpful videos if you get stuck. Check for Tinkercad under the Learn tab in the top menu. (888designlab.weebly.com)

#### When you are finished...

1. Click “Download for 3D Printing” in the Design menu and choose .STL format. The model file will download to the computer.
2. Email the file as an attachment to [3d@cais.org](mailto:3d@cais.org) and [j\\_mickelson@cais.org](mailto:j_mickelson@cais.org).