Distance Learning Module 2: Week of: 4/6/2020-4/9/2020

# Grade 8 Computer Science - Modified from Unit 1 - 3D Modeling

## **Targeted Goals from Stage 1: Desired Results**

**Content Knowledge:** Design requires a great deal of precision and accuracy in creating a prototype, which means being able to fluently manipulate 3d modeling software and work in virtual 3D spaces.

**Vocabulary:** Placing, viewing, moving, rotating, sizing, grouping and aligning of objects.

#### Skills:

- Insert shapes on a new geometric plane while creating an object, using 3D modeling software.
- Create an object with a variety of features, using 3D modeling software.
- Group several shapes together while creating your object.
- Manipulate the orientation options of any given object, as needed.

### **Expectation:**

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday	Tinkercad	<ul> <li>Teacher can moderate student</li> </ul>
<ul> <li>Finish up last week's Tinkercad</li> </ul>		progress via Tinkercad dashboard.
lessons.	Students do the following activities:	
	<ul> <li>Creating Holes</li> <li>Scale, Copy &amp; Paste</li> <li>Key Ring, Letters!</li> <li>Die on the Workplane</li> </ul>	
Tuesday World's First 3  • Watch videos posted to Google	World's First 3D Printed Heart	Google Classroom Question     assignment completion.
Classroom and respond to the question on the Classroom	Tortoise Gets New Lease on Life	

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
assignment.	ICON 3D Printed Homes	
<ul> <li>Wednesday</li> <li>Watch videos posted to Google         Classroom and respond to the         question on the Classroom         assignment.     </li> </ul>	World's First 3D Printed Heart  Tortoise Gets New Lease on Life  ICON 3D Printed Homes	<ul> <li>Google Classroom Question assignment completion.</li> </ul>
Thursday  • Get more practice with essential Tinkercad functions by completing some slightly more advanced self- paced lessons.	Tindercad Students do the following activities:	Teacher can moderate student progress via Tinkercad dashboard.
Friday GOOD FRIDAY		

### Week criteria for success (attach student checklists or rubrics):

- Ss will create a TinkerCAD account and complete some basic 3D modeling functions.
- Ss will consider the impact 3D printing has on our society by responding to a Question in Google Classroom.
- Ss will complete Tinkercad lessons that call on them to synthesize their CAD skills thus far.

## Supportive resources and tutorials for the week (plans for re-teaching):

My video tutorials above can be viewed multiple times for students to re-teach themselves. I will have my official office hours every day 1:00-2:00, when I will respond to student emails ASAP. But you can contact me at kiefer.michael@madisonps.org any time of the day.