Grade 8
Distance Learning Module 4:   Week of: 4/20/2020-4/24/2020

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: CAD = computer aided design, workplane, 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.
- Synthesize your CADing skills to design an original object

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday • Review and refine Tinkercad skill-moves by completing two self-paced lessons in Tinkercad.	Complete only Lesson 3 and Lesson 4 in the Let's Learn Tinkercad self-paced project. • Watch teacher's technique video that corresponds with Lessons 3 & 4.	• Teacher can moderate student progress via Tinkercad dashboard.
Tuesday • Review and refine Tinkercad skill-moves by completing two self-paced lessons in Tinkercad.	Complete only Lesson 3 and Lesson 4 in the Let's Learn Tinkercad self-paced project. • Watch teacher's technique video that corresponds with Lessons 3 & 4.	• Teacher can moderate student progress via Tinkercad dashboard.

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Wednesday ● **Live video class (ACE classes)** ● Design your own snowperson with Tinkercad	● Design your own snowperson with Tinkercad ● Watch teacher model how to get started during live class	● Students will have to turn in a screenshot of their snowperson in Google Classroom
Thursday ● **Live video class (BDF classes)** ● Design your own snowperson with Tinkercad	● Design your own snowperson with Tinkercad ● Watch teacher model how to get started during live class	● Students will have to turn in a screenshot of their snowperson in Google Classroom
Friday ● Watch Tinkercad tutorial on making organic shapes and brainstorm ideas for your own original design	● Tinkercad tutorial on making organic shapes	Student will watch video and respond to a question on EdPuzzle.

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

● Students will complete some basic 3D modeling functions AND synthesize them to create well-designed models.
● Students will show they have begun the early planning stage of design by brainstorming ideas.

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.