

Grade 7

Distance Learning Module 9: Week of: 6/1/2020-6/5/2020

Grade 7 Technology Explorations – 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, extrusion, 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 with a high level of attention to detail and 3-dimensionality.
- Create “organic” shapes with the extrusion tool.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday <ul style="list-style-type: none">● Continue working on your original 3D model.	<ul style="list-style-type: none">● Final CAD project description and criteria.● All necessary resources will be available on Google Classroom.● Teacher will be available to assist students as needed during office hours.	<ul style="list-style-type: none">● The teacher will be able to track student progress via Tinkercad moderation.
Tuesday <ul style="list-style-type: none">● Live class with Google Meet● Continue working on your original 3D model.	<ul style="list-style-type: none">● Final CAD project description and criteria.● Teacher will be available to assist students as needed during office hours.	<ul style="list-style-type: none">● The teacher will be able to track student progress via Tinkercad moderation.

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Wednesday <ul style="list-style-type: none"> Continue working on your original 3D model. 	<ul style="list-style-type: none"> Final CAD project description and criteria. All necessary resources will be available on Google Classroom. Teacher will be available to assist students as needed during office hours. 	<ul style="list-style-type: none"> The teacher will be able to track student progress via Tinkercad moderation.
Thursday <ul style="list-style-type: none"> Continue working on your original 3D model. 	<ul style="list-style-type: none"> All necessary resources will be available on Google Classroom. Teacher will be available to assist students as needed during office hours. 	<ul style="list-style-type: none"> The teacher will be able to track student progress via Tinkercad moderation.
Friday <ul style="list-style-type: none"> Turn in your your original 3D modeling Final Assessment. 	<ul style="list-style-type: none"> Final CAD project description and criteria. Teacher will be available to assist students as needed during office hours. 	<ul style="list-style-type: none"> The teacher will be able to track student progress via Tinkercad moderation.

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.
- Students will imagine 3D model that represents them as a person.
- Final CAD project description and criteria.

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.