Mike McNally Plans -- March 16, 2020- March 27, 2020

COURSE 1 --- STEAM COMPETITION

1. INTRO TO JS: DRAWING AND ANIMATION -- https://www.khanacademy.org/computing/computer-programming - The students can use this link to go to a course offered by CODE.ORG. I recommend that they complete the lessons in **Intro to JS: Drawing & Animation.** This is a great introduction to JavaScript, and the tutorials are the most user-friendly I have ever seen. Plus it's fun. The kids will learn how to use computer programming to create artwork, and even animations. They can work at their own pace and complete as many lessons as they wish. They can also create a free account which will help them keep track of their progress.

2. 3D DRAWING IN ONSHAPE –

   https://www.youtube.com/playlist?list=PLvjHub-Rig3ZkIBhCPqwNPVTB-80VWZXQ - Alternatively, the students can access tutorials at this website to help them complete 3D drawings in OnShape. Some of the kids have already done some of these lessons, but they can pick up wherever they left off, or they can use what they already know to explore the software more deeply and create a more complex project of their own choosing. Depending on how big or complicated it is, we can print it when they get back to school. Note - for those students who either haven't done any work in OnShape, or who forget how to get to the website, it can be found at https://www.onshape.com/ The process is pretty simple - watch the videos and do the work in OnShape as you go along.

COURSE 2 – ROBOTICS

1. 3D DRAWING IN ONSHAPE –

   https://www.youtube.com/playlist?list=PLvjHub-Rig3ZkIBhCPqwNPVTB-80VWZXQ - Access tutorials at this website to complete 3D drawings in OnShape. Some of the kids have already done some of these lessons, but they can pick up wherever they left off, or they can use what they already know to explore the software more deeply and create a more complex project of their own choosing. Depending on how big or complicated it is, we can print it when they get back to school. Note - for those students who either haven't done any work in OnShape, or who forget how to get to the website, it can be found at https://www.onshape.com/ The process is pretty simple - watch the videos and do the work in OnShape as you go along.

2. 3D DRAWING IN ONSHAPE – Independent Study – Continue what you have learned by designing a new robot design for the BotsIQ team for the year 2020-2021. The design is open-ended, with the caveat that the wheels should be on the outside of the frame, allowing for a much slimmer chassis. Include methods of guarding the wheels as well as side and rear flanged guards.