DR. MCNALLY ROBOTICS CLASS & STEAM COMPETITION APRIL 20-24 WORK AT YOUR OWN PACE – No Assignments will be due until May 1.

IMPORTANT!!! Progress Update *For ALL ASSIGNMENT OPTIONS.*

**** Email or message me with your progress!

Include:

- 1. Which project are you working on?
- 2. Summarize, describe, or list what you have completed in your project.
- 3. Include any questions or problems you have encountered.
- 4. OPTIONAL Send me a file, a picture, or other evidence of what you have complete

NEW INFORMATION FOR ALL PROJECTS

1. <u>RVW – LEVEL BUILDER PROJECT</u>

**** Your trial license is EXPIRING. Watch this video and install your 90 day license. <u>https://www.youtube.com/watch?v=p0w9zukii04&list=PLvjHub-Rig3ZEXVbRddu-</u> <u>Cy_B1CkAzsNA&index=2&t=0s</u>

<u>Robotc license info</u>

- License ID 80208396
- Password M76588X6

2. Intro to JS: Drawing & Animation.

- You may be well into the course or approaching the final lessons. If possible, send me a picture, file, or description of the best thing you've done.

- Consider your next steps. You may move easily into the HTML course. HTML and JavaScript are closely related, as HTML is used to design websites while JavaScript often controls images and animations on websites, so they work together. Alternatively, you may try to create a more ambitious project/animation using the existing course tools. Amaze me!

3. 3D DRAWING IN ONSHAPE ----

- a. OPTION 1 Find an object at home and make a replica using OnShape. This could be anything, maybe a plastic part that broke off of an appliance, or something decorative, or a toy ANYTHING. If you have a ruler or tape measure, find the various dimensions and try to make it in OnShape.
- **b. OPTION 2** *Explore the THINGIVERSE website* <u>https://www.thingiverse.com/</u> and try to reproduce something on the site or make your own version.

ARCHIVED INFORMATION — If you're getting a late start or you forgot how to do something, ALL EARLIER LESSON INFORMATION IS BELOW

RVW LINKS AND INFO

STEPS – Follow this links IN ORDER for best results.

- 1. McNally Video 1 <u>https://www.youtube.com/watch?v=_vYurRprPPs</u>
- 2. Download and Install RobotC http://www.robotc.net/download/lego/
- 3. RVW: Level Builder Part 1 Overview https://www.youtube.com/watch?v=HIh5Dd-KTJw
- 4. RVW Level Builder Tutorials

 <u>https://www.youtube.com/playlist?list=PL2x9NEZfxJkf1I4yW7zseyJgV4ngv_9TV</u>
 5. RVW Model Importer Tutorials
- RVW Model Importer Tutorials

 <u>https://www.youtube.com/playlist?list=PL2x9NEZfxJkeHqaROBv9dfvOi28kU9EQ8</u>
- 6. TRIAL LICENSE EXPIRED -How to Install a RobotC License <u>https://www.youtube.com/watch?v=p0w9zukii04&list=PLvjHub-Rig3ZEXVbRddu-</u> <u>Cy_B1CkAzsNA&index=2&t=0s</u>

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OPTION 2 - Intro to JS: Drawing & Animation.

- March April 17 -- <u>https://www.khanacademy.org/computing/computer-programming</u> Use this link to go to a course offered by <u>CODE.ORG</u>. I recommend that you complete the lessons in <u>Intro to JS: Drawing & Animation.</u> This is a great introduction to JavaScript, and the tutorials are the most user-friendly I have ever seen. Plus it's fun. You will learn how to use computer programming to create artwork, and even animations. Work at your own pace and complete as many lessons as you wish. You can also create a free account which will help you keep track of their progress.
- 2. April 20 May 1 Consider your next steps. You may move easily into the HTML course. HTML and JavaScript are closely related, as HTML is used to design websites while JavaScript often controls images and animations on websites, so they work together. Alternatively, you may try to create a more ambitious project/animation using the existing course tools. Amaze me!

OPTION 3 -- 3D DRAWING IN ONSHAPE ---

- March April 17 <u>https://www.youtube.com/playlist?list=PLvjHub-Rig3ZkIBhCPqwNPVTB-80VWZXQ</u> Use the tutorials on this page to work on 3D drawings in OnShape. If you've already done some of these lessons, you may pick up wherever you left off, or use what you already know to explore the software more deeply and create a more complex project of your own choosing. Depending on how big or complicated it is, we can print it when you 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 <u>https://www.onshape.com/</u> The process is pretty simple watch the videos and do the work in OnShape as you go along.
- 2. April 20 May 1 Consider your next steps. You may move easily into the HTML course. HTML and JavaScript are closely related, as HTML is used to design websites while JavaScript often controls images and animations on websites, so they work together. Alternatively, you may try to create a more ambitious project/animation using the existing course tools. Amaze me!