## **Unit 3.1 Playlist - Onshape Build it - Legos**

**Estimated Time = 90 minutes** 

## **Directions:**

Follow the playlist! Every time you complete an activity, move the pin representation of class each day, Copy & Paste the pushpin representation of class each

Topic/Instruction	Topics/Questions	Student Resource or Links	Pacing & Progress
READ the Summary and Pacing Guide	<ul><li>Unit Goals</li><li>Lesson Descriptions</li><li>Suggested Pacing</li></ul>	Summary and Pacing Guide	
Complete the Peardeck!	Peardeck: What is an Engineer?  Formative: 2C - Creative Communicator  (Do NOT need to submit when done)	Student Join Link	
Copying the Onshape Document for Unit 3	<ol> <li>Open Onshape:         https://fcps.onshape.com/c/signin     </li> <li>Open the <u>Student Guide</u></li> <li>Make a Copy of the Onshape doc→</li> </ol>	Intro to CAD - 3.1-3.4 - Onshape Power Tools  Rename to:  "3.1-3.4 - Onshape Power Tools - [Your First Name]".	

Additional Support	This is a HELPFUL YouTube Playlist of Step by step for struggling students  PLEASE! Use this when you are struggling!  Open the link and check out the resources!	Youtube Playlist for Unit 3	
OPEN Unit 3 Onshape Document	<ol> <li>Open Onshape</li> <li>Open your copy of "3.1-3.4 - Onshape         Power Tools - [Name]".</li> <li>Share the link/URL to your Onshape         Document!</li> </ol>	Link to student onshape Document:	
3.1 How the Pros Do It	Topics  Rectangular extrusion  Design intent  2D sketches to create 3D  Workspace units  New CAD Skills  Variables  Shell  Creating mate connector  Linear pattern	• Complete 3.1 → Steps 1-8	Step # 9
Screenshot	Post a Screenshot of your box after you complete step 8	Student Screenshot:	

STOP & CHECK	Stop! Check in and have a short discussion with MS. McGaughey		
Continue in Onshape!	3.1 How the Pros Do It	Complete 3.1 → Steps 9 - 17	Step # 12
Screenshot	Post a Screenshot of your box after you complete step 17	Student Screenshot:	
Formative	Formative: 1B  Make sure you have applied the material "ABS (density 0.001 g/mm³)".  Use the mass properties tool to find the mass of your brick.  What is the mass?	Student Answer:	

STOP & CHECK	<ol> <li>Stop!</li> <li>Check in and have a short discussion with MS. McGaughey!</li> <li>With Ms. McG you will discuss 3.1, check in and (for a Grade) make sure your answer to the exit ticket above is correct!</li> </ol>
YOU DID IT!	GREAT JOB!
SUBMIT!	Submit this playlist when everything above is complete!