

**Second Extra Bonus Opportunity**  
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In this extra bonus opportunity, please start to draft the **reflections for your learning experiences** you have had for the

(1) Learn from the posted videos. We have many videos on D2L. Pick some and watch. What you have learnt from those videos. Please watch five of them and use a table to summarize the videos.

Video Name	Video URL	What you have learnt from the video	Any questions not answered through the videos?
Unbelievable: 3 Mind-Blowing Mosfet Projects That Even Beginners Can Create!	<a href="https://www.youtube.com/watch?v=GbdF6th5PZk">https://www.youtube.com/watch?v=GbdF6th5PZk</a>	I learned that Mosfet can easily be used to have fun LED lights that would go along with the speakers. I also saw how Mosfet could be used for a high sensitivity fire detector. Finally I saw how it could be used for a heat sensitive fan. Overall, it seems like Mosfet is	

		extremely versatile yet simple to use.	
Subwoofers, Woofers, and Tweeters as Fast as Possible	<a href="#">Subwoofers, Woofers, and Tweeters as Fast As Possible (youtube.com)</a>	I learned that tweeters typically cover the 2000-20000 Hz range. I also learned that what separates each of these types of speakers is size. Sound quality can depend on whether the frequencies being supplied to a speaker are best for the size of the speaker.	
Passive RC Low Pass Filter Tutorial	<a href="#">Passive RC low pass filter tutorial! (youtube.com)</a>	I learned that a low pass filter can be implemented into a circuit just by putting a resistor and a capacitor in series. This is because the voltage on a capacitor cannot instantaneously change. So, when the resistor slows the charging of the capacitor, the output	

		<p>voltage is not able to follow the sudden changes in input voltage, and therefore higher frequencies get filtered out. I also learned that it is best to choose R and then let the cutoff frequency equation solve for the best value of C.</p>	
<p>RLC Band Stop Filters and Band Pass Filters</p>	<p><a href="#">RLC Band Stop Filters and Band Pass Filters (youtube.com)</a></p>	<p>I was reminded that a band pass circuit can be made by putting resistor in series with an inductor and capacitor that are parallel. I learned that if an inductor and capacitor are in series, the inductor blocks high frequencies, and the capacitor blocks low frequencies. I learned that a band pass filter could also be assembled by putting an inductor, capacitor, and resistor in</p>	<p>Is one band pass filter design better than the other?</p>

		series. I also learned that a band stop filter can also be made by putting an inductor, a capacitor, and a resistor in different positions.	
DIY simple Powerful Amplifier using TDA2030, Homemade Amplifier 12V	<a href="#">DIY simple Powerful Amplifier using TDA2030, Homemade Amplifier 12V - YouTube</a>	One thing I noticed was how much soldering could reduce the number of wires and therefore also reduce noise. I also saw some ideas for a amplifier circuit using a TDA2030a. Also, I noticed the there was a diode placed after the DC power supply, which is something I may integrate to protect the chip.	

*(2) Provide me some feedback for how to make our class better, any feedback will be highly appreciated to make sure you are successful for our class.*

I think that more practice over how to integrate filters into the amplifier circuit for various different chips would be helpful.

