Class 11 Quiz: Unit 1 Project, [Electrify the Linear Systems Problem](http://www.appliedlinearalgebra.com/blog/for-teachers/linear-algebra-laboratory-exercises/electrify-linear-systems) Playlists: [Part 1](https://www.youtube.com/playlist?list=PLSt7rwoPGTy3AiRIUGxesVeg-HHEYc9QZ) and [Part 2](https://www.youtube.com/playlist?list=PLSt7rwoPGTy3_hJQHfFfwEzAJsmZIkXCA)

**PROBLEM 1:** Please fill out the table(s) below. Please be honest with yourself. The point of this exercise is to track your progress. Remember that in this class, you have many opportunities to recover from setbacks. If you’re falling behind, it might be helpful for us to set up a meeting. This class is fast paced : I’ve prepared a lot of material for you. I know how seriously you take your education and I want to support your success. Falling behind is not an indication of failure: it is an opportunity for growth. The first steps in that process are to take an accurate and honest look at your progress. If you are a bit behind, please reach out to me (in addition to noting this in you quiz). Let’s meet and figure out how I can support your learning.

Linear-Systems Project: Part 1

[Introduction to the Electronics Learning Laboratory Kit](https://www.youtube.com/playlist?list=PLSt7rwoPGTy3AiRIUGxesVeg-HHEYc9QZ) (12 Videos: 2 h, 5m, 3s)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Video Title | Length | Complete (Yes or Not Yet) | Watch  Video | Read Notes or Other | Time to  Complete |
| 1. [Intro to Linear Algebraic Nodal Analysis Algorithm](https://youtu.be/R05zS0jlgTE) | 2m, 19s |  |  |  |  |
| 2. [The Electronics Learning Lab Kit](https://youtu.be/OFzozmpSaX8) | 6m, 14s |  |  |  |  |
| 3. [What is a Solderless Breadboard?](https://youtu.be/sJ72h7Cubxk) | 13m, 23s |  |  |  |  |
| 4. [Introduction to Resistors](https://youtu.be/enbhIJwCEfI) | 13m, 56s |  |  |  |  |
| 5. [Introduction to DC Voltage Sources](https://youtu.be/8RzyCJ4smQ4) | 10m, 5s |  |  |  |  |
| 6. [Introduction to DC Current Sources](https://youtu.be/5BvSCfqUa44) | 6m, 6s |  |  |  |  |
| 7. [Our first circuit with a resistor and dc voltage source](https://youtu.be/3QrSn1TWCUk) | 9m, 25s |  |  |  |  |
| 8. [How do we measure the voltage drop using a DMM?](https://youtu.be/Vm6g8SZrrE8) | 12m, 7s |  |  |  |  |
| 9. [Some intuition about the voltage drop across an element](https://youtu.be/6pZOvRYU9ws) | 14m, 55s |  |  |  |  |
| 10. [What the heck is measurement polarity?](https://youtu.be/29ghHGeN58o) | 13m, 25s |  |  |  |  |
| 11. [How do we measure current using a DMM?](https://youtu.be/rtAC-znQ1qE) | 7m, 55s |  |  |  |  |
| 12. [Measuring circuit variables: Example 1](https://youtu.be/7aSRQ68FQaI) | 15m, 33s |  |  |  |  |

Linear-Systems Project: Part 2

[Basic Concepts in Circuit Analysis, Part 1](https://www.youtube.com/playlist?list=PLSt7rwoPGTy3_hJQHfFfwEzAJsmZIkXCA) (6 Videos: 1h, 41m, 45s)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Video Title | Length | Complete (Yes or Not Yet) | Watch  Video | Read Notes or Other | Time to  Complete |
| 1. [Measuring Circuit Variables: Example 3](https://youtu.be/rqBD7svo8Ew) | 17m, 35s |  |  |  |  |
| 2. [Measuring Circuit Variables: Example 5](https://youtu.be/1NMsDn1Rdjg) | 14m, 44s |  |  |  |  |
| 3. [Parallel and Series Circuits](https://youtu.be/qSVL4h6bVQ0) | 11m, 11s |  |  |  |  |
| 4. [The Canonical Circuit Element](https://youtu.be/hrr4gng87lI) | 14m, 20s |  |  |  |  |
| 5. [The Nodes of a Circuit](https://youtu.be/oaW-Zk19m5Q) | 14m, 13s |  |  |  |  |
| 6. [Measuring Circuit Variables: Example 7](https://youtu.be/5tEZJRCf4fQ) | 29m, 42s |  |  |  |  |

**PROBLEM 2:** Our Lab 5 project is more than a little challenging. What can I do as your teacher to help you rise to this challenge?

**PROBLEM 3:** As mentioned in problem 2, our Lab 5 project is going to be intense. What can you do for yourself to meet this challenge and thrive?

**PROBLEM 4:** What questions do you have for me at this point? These might be technical questions, class-structure questions, or other questions?

**PROBLEM 5:** What else would you like to share that you haven’t shared in your responses to the questions above.