

Name:

Date:

Class:

Post Assessment

Instructions: Answer the following questions.

Understanding Data Conversion:

1. How does converting a .wav file to a .csv file help in data analysis?
2. What challenges might arise during the conversion process?

Analyzing Neural Data:

3. What differences do you observe between the neural signals of finger and wrist movements?
4. How can downsampling and smoothing impact the quality of your data?

Interpreting Visualizations:

5. What patterns or trends do you notice in visualized neural data?

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6. How can these patterns help in understanding muscle activity during different movements?

Critical Thinking:

7. Why is it important to remove noise from the neural data?

8. How would you improve the data collection and processing methods for better accuracy?

Application of Computational Thinking:

9. How did you apply decomposition, pattern recognition, abstraction, and algorithm design in this activity?

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10. Can you think of other real-world applications where similar data analysis techniques might be useful?