

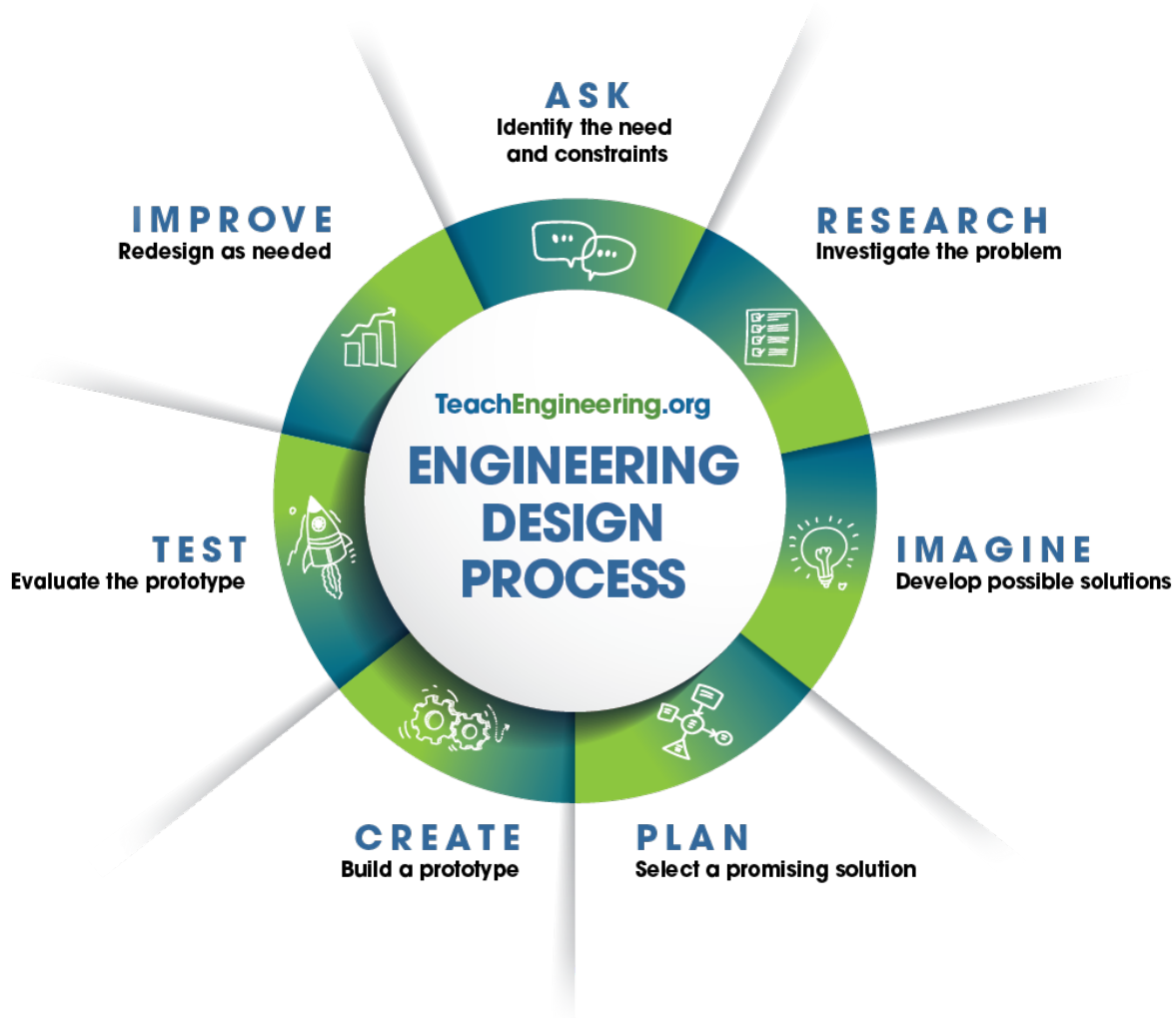
Name:

Date:

Class:

Engineering Design Process Worksheet

Instructions: Using the engineering design process, you and your team will act as biomedical engineers who are tasked with creating a micro:bit experiment that shows how different body parts require different levels of neural recruitment.



1. **Ask** – Identify the need and constraints of the problem.

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2. **Research** – What do you know about basic neuroscience? (Hint: What did you learn from Handouts 1, 2, and 3?)

3. **Imagine** – Individually sketch out four possible solutions.

a	b
c	d

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4. **Plan** – Have each team member share their ideas. As a team, select ONE solution. This can be one specific solution or a mixture of ideas. Draw your team's solution in the box below.

5. **Create** – Build your prototype as shown in your group's drawings.

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6. Test – Test your design and then answer the following questions.

What worked in your design, and why?

What did not work in your design, and why?

7. Improve – Based on your testing and results, how would you improve your design? Why?

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8. (optional) Iterate – Make changes and retest your updated prototype.

Did your changes improve your prototype? How?

What worked in your updated design, and why?

What did not work in your updated design, and why?
