1. What is the title of your STEM professional development?

The title of my professional development is engineering design process.

2. Why did you select the topic?

I selected this topic because the school has outdated science materials and most elementary teachers aren't sure what to teach.

3. Who is your proposed audience (minimum 12)? Which teachers will you serve with your PD and activities? What grades, subjects, and how many students do they teach?

My purposed audience are the Kindergarten through fourth grade teachers (10 teachers). The audience teaches all subjects and have about 15 students in each of their classes which makes a total of about 120 students. The school is very small and ranges from K-8, however the middle school is departmentalized so there is just one teacher for math, social studies, reading and science. By presenting to the elementary teachers, I am reaching over half the teachers in the building.

4. What "general" science or mathematics concepts or learning goals will you and your materials address which can potentially replace other classroom activities?

I plan to target the engineering design NGSS goals

3-5-ETS1-1.	**Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.**
3-5-ETS1-2.	**Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.**
3-5-ETS1-3.	**Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.**

5. How and where do you intend to carry out your PD? How long will the session be? When will it be held? Will teachers have access to computers?

I plan to carry out the PD in our school library. This is where our faculty meetings are held and also serves as out media center with several computers.

6. What outcomes or expectation do you hope to see for your educators?

I hope that the teachers who attend the PD will learn what the engineering design is and how to use it not only in science but other areas within the classroom.

7. How will you follow up with the teachers in attendance?

I will follow up with teachers who attend the PD by inviting them into my class or I go into their class for implementation viewing.

8. What data collection methods (e.g. surveys, interviews) will you use to analyze the PD's success?

I plan to use survey monkey to not only analyze the PD but also address any questions teachers might have after the PD was given.