General lesson plan:

1. Students learn about the origins of systems science, try out simulations, and learn about flowcharts. You can divide students into 3 groups, and have each present to the others about what they learned:
    a. Abolitionists
    b. Cybernetics
    c. Spaceship Earth

2. Students read through **worksheet 1** to learn about the different topics they can explore. Then they decide which topic they want to learn more about, and get into groups, one per topic.
3. Students research their topic using articles at https://csdt.org/culture/systemsscience/research.html
4. Students analyze their topic using **worksheet 2**. These can be presented on the screen as each group reports out.
5. Students look over the sensor shopping list. They use this to help with worksheet 3, where they develop some research ideas.
6. Students make their research ideas more concrete by using maps with worksheet 4. The map might be a google maps view of the playground, the floor map of the school, or anything that gives them a visual to work with. It could be as simple asking kids where dust might be found in the room.
7. Worksheet 5 helps students to start thinking about data collection, being more specific about what exactly is being measured.
8. In Worksheet 6 students develop a protocol. They specify all the additional environmental factors that create the context: the location, time, date, a description (this can be a photo), who took the measurement and so on. This goes into the field with them. They might need to make changes in worksheet 5 after reflecting on the protocol.
9. Building sensor boxes: these instructions can be found here.
10. Go do some sensing! Don't forget your protocol sheets.
11. Now it's time for data analysis.
12. And finally, make a presentation about your work.