

## Engineer a Name Tag Activity

### Teacher Instructions:

1. Give each student a copy of the handout and show them the supplies available.
2. Tell students that in order to get to know each other as a class, we need amazing name tags.
3. As a class, discuss the criteria and constraints for the name tags. Some example constraints would be that it has to include the person's name and it is limited to the size of the paper available. Some criteria could include how colorful the name tag is or how well it represents that person's interests.
4. Have students interview a partner and then have them draw some initial sketches.
5. Have students get feedback from their partner about what they like and don't like about the name tag ideas.
6. Have students create the name tag for their partner and then share what they have created. Depending on your class size and set-up, the share out can be in small groups, as a whole class, or a mixture of both.
7. After students have presented, you can review the [engineering design process](#) with students and have a discussion about how they engaged in engineering through creating a name tag.

## Engineer a Name Tag

We need name tags to help us know one another!

| <b>Criteria</b><br>(What would make one design measurably more successful than another?) | <b>Constraints</b><br>(What limits the possible solutions or what must happen to succeed?) |
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| Design could:  | Project-imposed:   |
|  | Natural world-imposed:   |

### Interview to establish more criteria (3 minutes each)

- What is your partner's name and what are they excited about for this school year?
- What are some experiences that your partner has had with science? (in school or out of school)
- What are some things they enjoy doing outside of school?
- What is something unique about them?

### Initial sketches (5 minutes)

Generate as many sketches for the name tag design as you can in the time allowed! These do not need to be works of art, just convey your ideas.

### Feedback (2 minutes each)

Collect "data" from your partner (what design ideas do they like? What might they want to see changed or added?) to help you make design decisions.

### Build (15 minutes)

Create a design prototype on a full sheet of paper that incorporates your partner's feedback. Share it with them and, if you have extra time, make one or two more modifications.

### Share out to your table (2 minutes)

Explain 1-2 design decisions that you made based on your data and any tradeoffs (things that could not be optimized based on time, materials, and other constraints).