

Student Log Book

After each day, answer the questions in your notebook in complete sentences.

Day 1

1. What is sled hockey?
2. What are the specifications for a sled hockey stick?
3. What materials do you think are presently used to make sled hockey sticks?

Day 2

1. Explain what you learned from your research.
2. Sketch and label the materials of a design that you think that would withstand the most when tested.

Day 3

1. What do you expect to happen when you do the tensile test? Will your stick bend? If so how much (in cm)? Is there a specific place in the stick that will bend?
2. You are in the middle of step 5 of the engineering design process. Imagine if you didn't have step 2 in the process. Would it be difficult to create a sketch without research?

Day 4

1. Did your testing go as predicted? What went differently than you expected?
2. Where were the normal forces on the stick?
3. Where were the tension forces on the stick?
4. How could you redesign your stick to make it withstand more weight?

Day 5

1. Did you learn anything from the other groups in terms of materials or design that you would change for your redesign stick?
2. What polygon structure did you use in your original design? Do you think it worked? Will you change the internal structure after hearing from other groups and analyzing your data?

Final Day

3. What is different about your redesign stick from your initial hockey stick?
4. Now that you know what the testing procedure is, how well do you think your redesign would do if tested?
5. What did you learn from this experience?