



Engineering Design Challenge Activity

Student Feedback Form (Post-survey)

Introduction: As a participant in this Engineering Design Challenge activity, you've been selected to take part in a brief questionnaire to test a future survey for clarity and comprehensibility of the questions therein. We also want to validate the estimate for how long it takes to complete this survey. **Therefore, we ask that you please note the time that you start this survey because we will ask at the end how long it took to complete this survey.**

Thank you for your cooperation! If you wish to participate in this test survey, please continue to the next page.

Privacy Notice: This is an official NASA application hosted on SurveyMonkey.com. This is not a government application, the application is controlled and operated by a third party. NASA's Web Privacy Policy does not apply to this application. NASA will not maintain, use, or share Personally Identifiable Information (PII) that becomes available through the use of this third party application unless expressly stated and consent is obtained from the user. For additional information on NASA's Third-Party Privacy Notice please go to http://www.nasa.gov/about/highlights/HP_Privacy.html.

Paperwork Reduction Act Statement: This information collection meets the requirements of 44 U.S.C. §3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 2700-0159 and expires 04/20/2018. We estimate that it will take 15 minutes to read the instructions and answer the questions. Send only comments relating to this time estimate to: richard.l.gilmore@nasa.gov.

Student Instructions:

Congratulations again on taking part in a NASA educational activity! To improve this program for the future, all students who participate in this activity are being asked to complete a survey. There are no “right” or “wrong” answers to any of the questions. We want your honest answers. It should take no more than 15 minutes to complete the questions. NASA and its research team will make sure that only they will see your answers to this and future surveys for this activity. No report will use your name or describe you in any way that anyone could tell that it is you.

We also want your help to tell us how long it takes to complete this survey. So, please make note of the time that you start this survey because we will ask at the end how long it took you to complete this survey.

Thank you very much for your help!

If you wish to participate in this survey, please continue.

Your Views about Engineering

The next sets of questions contain a number of sentences about engineering. You will be asked what you think about these sentences. Please let us know how much you agree or disagree with each of the following sentences. Place a checkmark in the circle (☐) for each item.

1. How much do you agree or disagree with the following sentences about engineering?	Strongly Disagree	Disagree	Agree	Strongly Agree
a. I get excited about engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I like to participate in engineering projects.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I want to understand engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I like to see how things are made.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I get excited to learn about new discoveries.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I pay attention when people talk about the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I am interested in engineering inventions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I would like to have a science job in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I enjoy playing games that teach me about engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I like to make things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How much do you agree or disagree with the following sentences about how much you like engineering?	Strongly Disagree	Disagree	Agree	Strongly Agree
a. I enjoy learning new ideas about engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I have fun learning engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I am interested in learning about engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I like reading about engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I enjoy doing engineering problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Working hard now will help me do engineering work later.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How much do you agree or disagree with the following sentences about how important engineering is to you?	Strongly Disagree	Disagree	Agree	Strongly Agree
a. Engineering is important for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Engineering is important for what I want to study later.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Engineering will help me find a job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How much do you agree or disagree with the following sentences about engineering jobs?	Strongly Disagree	Disagree	Agree	Strongly Agree
a. I know about different kinds of engineering jobs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I know where to find information about engineering jobs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I know the steps to take to get an engineering job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I know of companies that hire people to work in engineering jobs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How often do you do engineering things?	Hardly Ever	Sometimes	Regularly	Very Often
a. I watch engineering TV shows.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I visit engineering websites.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I watch online videos about engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I attend engineering clubs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How much do you agree or disagree with the following sentences about yourself as an engineering person?	Strongly Disagree	Disagree	Agree	Strongly Agree
a. I think of myself as an engineering person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. My friends/classmates think of me as an engineering person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. My family thinks of me as an engineering person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. My teacher thinks that I am good at engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Engineering is easy for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I stay away from engineering activities because they are hard.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I am interested in a job where I will design new things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. How curious are you about these topics?	Not At All Curious	Not Very Curious	Fairly Curious	Very Curious
a. Science	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Math	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next, we'd like to ask some questions about your experience with the NASA Engineering Design Challenge (EDC) and whether you found the activities useful.

8. Which NASA EDC did you work on? (Select only one)

- ☐ Parachuting onto Mars
- ☐ Crew Exploration Vehicle (CEV) Design
- ☐ Why Pressure Suits?
- ☐ Packing up for the Moon

9. How long did the NASA EDC take you to complete?

- ☐ More time than I expected
- ☐ About the time I expected
- ☐ Less time than I expected

10. Have you participated in any NASA EDC before? (Select One)

- ☐ Yes
- ☐ No

11. How many times did you speak with a NASA scientist or engineer?

- ☐ Never (If Never, skip to #14)
- ☐ Once
- ☐ 2 times
- ☐ 3 times
- ☐ More than 3 times

12. How much do you agree with the following statement?

Talking with the NASA scientist or engineer helped me with my NASA EDC.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly Agree

13. Were you able to apply what you were taught by the NASA scientists or engineers (also called subject matter experts) during the afterschool activities?

- ☐ Yes
- ☐ No

14. How hard was the NASA EDC for you?

- ☐ Very easy
- ☐ Easy
- ☐ Not Easy, Not Hard
- ☐ Hard
- ☐ Very Hard

15. Did the design process you were taught during the NASA EDC activities make sense to you?

- ☐ The design process completely made sense.
- ☐ The design process kind of made sense.
- ☐ The design process did not make sense at all.

16. Were you able to apply what you were taught from your instructor to your final NASA EDC product?

- ☐ Yes
- ☐ No

Finally, we'd like to know if you liked the NASA Engineering Design Challenge (EDC) and what you liked or did not like about it.

17. Did you like the NASA EDC?

- ☐ I liked the NASA EDC a lot.
- ☐ I kind of liked the NASA EDC.
- ☐ I did not like the NASA EDC at all.

18. What did you like about the NASA EDC?

19. What did you not like about the NASA EDC?

20. Would you like to work on another NASA EDC?

☐ Yes

☐ No

Information about yourself:

21. Your first name ONLY: _____

22. What is your birthday (MM/DD/YEAR)? Month: ____ Day: ____ Year: _____

23. What grade did you enter this school year?

☐ 5th ☐ 6th ☐ 7th ☐ 8th

---End of Test Survey---

Please provide feedback on your experience with this survey by answering the following questions.

24. How many minutes did it take you to read the instructions and answer the questions?

____minutes

25. Please tell us how much you agree or disagree with each sentence.	Strongly Disagree	Disagree	Agree	Strongly Agree
a. The survey instructions were clear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The questions were easy to understand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. As you went through the survey, did you think of any comments or feedback you can give us about the instructions or questions?

Thank you for participating in this survey!