





Roger That! Design Challenge

To commemorate the life of Roger B. Chaffee and the brave astronauts of Apollo 1, Grand Valley State University and Grand Rapids Public Museum are co-hosting the second annual *Roger That!* conference on the weekend of February 16-17, 2018.

We invite interested $5^{th} - 8^{th}$ grade students in the greater Grand Rapids area to participate in the *Roger That!* Design Challenge. Separate awards will be presented for $5^{th} - 6^{th}$ grades and $7^{th} - 8^{th}$ grades.

Problems to solve:

- Humans in Space
- Communities in Space
- Robots in space

Examples of things you can do:

- ✓ Explain concepts related to space or space exploration
- ✓ Discuss solutions to barriers to space exploration
- ✓ Write a story or perform a play about space travel or life in space
- ✓ Design clothing, buildings, or devices for space travel or life in space
- ✓ Build physical devices (robots or models) to be used in space exploration
- ✓ Create a webpage or computer model relevant to space or space exploration

How to participate:

- 1. Select a topic.
- 2. Form a team (recommended size 2-6 students), and research your topic.
- 3. Email your project reflection and your project documentation (explained below) to rogerthat@gvsu.edu by Friday, February 9.
- 4. Projects will be on display Friday, February 16 at GVSU and Saturday, February 17 at GRPM as part of the *Roger That!* conference programming.

Project Reflection (up to 5 pages including figures and bibliography):

- 1. Your reason(s) for choosing the problem
- 2. Your research into the problem
- 3. Your solution to the problem
- 4. Something(s) you learned that surprised you
- 5. The most challenging part of your project

Awards will be based on:

- Project documentation (copy or picture of your poster, your story, video of your play, pictures of any physical models or robots, etc.)
- Project reflection (content, scientific accuracy, grammar, appropriate referencing)
- Innovation (creativity and originality)

Prizes include:

- · Certificates for each team member
- Pizza party for your class
- Droid Inventor Kit for your classroom