# CREATE YOUR

inquiry communication critical thinking creative thinking problem solving collaboration

## reflection

## Entries Due By February 19

CONTEST PRIZES



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### Engineers are problem solvers. They notice something about the world that could work better – and then try do it.

#### The first question to ask yourself as an engineer is: What need is not being met? Who experiences this problem, and in what setting?

Once you are sure a need exists, you can use the **engineering design process** to guide you on your journey. The most important thing about being an engineer is to never give up! Learning from mistakes is how the best inventions are created.

#### For this contest, follow Step 1-3 in the Engineering Design Process (Question, Brainstorm,

Plan & Design) and think about these guiding questions:

- What problem do I want to solve?
- Who will my invention help?
- Does this improve something that already exists in order to solve this problem? What existing things can inspire my new invention?
- What is unique about my invention? How will it be used?
- What materials do I need? How much do they cost?
- How does my invention work? Write the steps. Describe your invention. Consider the size, weight, shape, color, smell, movements, and sounds it makes. Draw diagrams.
- What is your invention called? Name it.

#### Once you have planned out your invention, we want you to share it! Enter a video to the contest Flipgrid by February 19. In your video you should tell us about your invention and show



your diagram. Use the guiding questions to help communicate your idea. Videos will be limited to 3 minutes.

The contest site will be made public during the National Engineering Week (Feb 20–26, 2022) so the public can see your videos, "like" them and comment. Winners will be decided by "likes" and our contest judges. There will be three age categories: grades 3–5, grades 6–8 and grades 9–12. The winning video from each age category will be proudly shown on both the Vermont 4–H and UVM College of Engineering and Mathematical Sciences Facebook pages. **Winners will each receive a \$50 gift certificate.** 

Participants must register to get access to the Flipgrid contest site: www.uvm.edu/extension/youth/announcements

To request a disability-related accommodation to participate in this program, please contact Lauren Traister, 4–H Teen & Leadership Program Coordinator, at lauren.traister@uvm.edu or 802–888–4972 by February 1, 2022 so we may assist you.





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