



YVC Summit 2020 Canstructure Competition Toolkit

Brief Overview:

This year, the YVC Summit 2020 Virtual Experience is providing a unique opportunity for the entire YVC network to engage in a Canstructure competition. Canstructure is a structure built using canned goods to fight hunger. Affiliates who complete a Canstructure project will receive a Sunderland grant (see the “Funding” section below). Grant reports and photos must be submitted at <http://yvc.org/sunderland-grant-report/> by **October 1st**. Canstructures will be showcased at Summit, where the International Youth Advisory Board (IYAB) will vote on a winner, who will receive an additional \$1,000.

Funding

Youth Volunteer Corps Headquarters (YVCHQ) will award **\$0.50 per canned good** to affiliates for their Canstructures. All affiliates who participate in the Canstructure competition will receive a minimum of \$300. The maximum award amount for an affiliate’s Canstructure is \$1,000. The winner of the competition will also receive an additional \$1,000. Awards will be distributed after the YVC Summit 2020 Virtual Experience. All funding for this project is provided by the Sunderland Foundation.

Canstructure Competition Rules

1. All teams are responsible for acquiring food used for their structure.
2. Structures must fit within a 10’ x 10’ area, and be a maximum of 7’ high.
3. There is no limit to the number of people involved in the planning, logistics, and design. Youth volunteers must be the primary contributors to the project, although adults may assist. While it is not required, we encourage affiliates to reach out to parents/contacts with experience in construction, engineering, or architecture to help with this project.
4. All food used for the Canstructure must be unopened, with the majority being canned foods. All labels must remain intact.
5. Structures must be completely self-supporting, with no framework or other structural support. Max ¼” sheets of Plexiglass, foam-core, cardboard, plywood or similar material can be used as a leveling device between rows of cans.
6. Canned food may be joined using: tape (masking, scotch), Velcro, fishing line, wire, rubber bands, zip straps etc. Any other method that provides easy demounting is permitted, provided the labels and cans are NOT damaged. NO gluing, heavy duty tape, welding or other permanent affixing of cans allowed.
7. No glass containers, alcohol, pet food, perishable, damaged or open packages of food allowed.

YVC Model Implementation

Don’t forget to incorporate all parts of the YVC model in your Canstructure project! You can use your own icebreakers, service-learning, and reflection resources, or you can use the ones below during your project:

[Canstructure Project Suggested Icebreakers](#)

Canstructure Project Suggested Service Learning Lessons

[*The Science Behind the Structure](#)
[Hunger Web of Connections](#)
[Redistribution of Food](#)

*New Lesson

Step-by-Step Instructions on How to Build a Canstructure

Materials Needed

Pencil
Colored paper
Measuring tape
Spirit/bubble level
1/4-inch foam board or other leveling device (optional)
Scissors
Clear packing tape or other adhesive to join canned food together (see rules for what is allowed)
Canned goods (amount depends on your design)

Step 1

Recruit youth to join your Canstructure project. You may also recruit an engineering/construction professional to serve as a mentor for this project. Reach out to parents, local trade schools, engineering firms, or construction companies to find someone to help. Having a professional mentor is not a requirement, but can be helpful in navigating the STEM-related concepts of this project.

Step 2

Choose a local agency (i.e. food bank, food pantry, or soup kitchen) to donate the canned goods your YVC will collect to. Partner with them and other local agencies to promote your Canstructure project.

Step 3

Determine where your YVC will build your Canstructure. The space of the location will affect the size you can build your structure. If you are not sure where to build, you can contact local businesses with large lobby spaces to see if they would like to partner with you and allow you to build the Canstructure there. Using a spirit or bubble level, check the floor or any hard surface on which you plan to build the canstructure to ensure it is completely level.

Step 4

Have a group brainstorming session to come up with an idea for a Canstructure design. Your design does not have to fit with a certain theme. It can be related to an issue-area your YVC is passionate about or just a fun design the youth volunteers come up with!

Step 5

Draw a canned foods sculpture structure concept based on your idea that includes estimated dimensions and ideas for can choices. Design a base sufficiently thick to ensure the stability of the overall structure. The size of the sculpture structure must be within a 10' x 10' area and cannot exceed 7' tall.

*If available, consult with a professional mentor and get input to determine the feasibility of your design. Work with them to determine the number and types of cans needed to build the structure.

Step 6

Take height and width measurements of canned food varieties you are considering for use in the sculpture and write them down with the corresponding product name.

Step 7

Divide the approximate dimensions of the sculpture structure by the measurements from the proposed cans to calculate how many you will need to complete the design.

Step 8

Collect canned goods, accurately keeping track of the amount collected as you go. (The grant report will ask your final number of canned goods collected). Some ways to collect canned food donations include:

- Go door-to-door in a neighborhood to collect canned goods, explaining the purpose of the Canstructure competition to help a local food pantry.
- Find a benefactor in the community who will match the donation total of your YVC.
- Contact a local grocer for permission to set up a food drive table at the front of their store. This is a great way to receive food donations, but also monetary donations.
- See if a local food bank or business will do a food drive on your behalf.

Step 9

Redraw the design using the final amount of cans collected to get a basic blueprint of the sculpture.

*Consult with your professional mentor to determine if you have enough cans for your design and discuss possible scaling options for adjusting the size, as needed.

Step 10

Wrap the cans with colored paper based on the design of your structure. To do this without destroying the food labels, be sure to put tape on the colored paper only, and not on the food label. Discard any cans that have reached their expiration date.

Step 11

Gather and prepare all materials needed for the building of your structure, including wrapped cans, adhesive, and any leveling devices (i.e. foam board or Plexiglass).

Step 12

Build your Canstructure! Follow your blueprint to start stacking the cans (with leveling devices between rows for extra support if desired). Make sure you have a sturdy foundation before stacking cans.

TIP: Nesting cans in tall, tube-shaped towers creates a very unstable structure. Stagger the cans like bricks as you stack them to create a more stable sculpture.

Step 13

Take photos of your finished Canstructure! Submit them with your grant report at yvc.org/sunderland-grant-report by October 1st.

Step 14

Unwrap all of your cans and donate them to a local food pantry or agency of your choice. Incorporate reflection activities for youth to reflect on what they learned and experienced through Canstructure.

Step 15

Attend the YVC Summit 2020 Virtual Experience and watch the showcase of YVC Canstructures at the awards ceremony, where the winner of the competition will be announced.