

# Need ideas for winning a specialty prize?

We've compiled some ideas based on the previous year's Carton 2 Garden applicants for you to peruse.

## STEM Integration

- Many schools used their cartons to conduct science experiments practicing fundamental skills such as engaging in research, predicting results, designing experiments, collecting data, analyzing results and using the findings to recommend best practices. For example one group used the cartons to create different types of drip irrigation systems and then carefully tested their inventions to determine which was the most efficient use of water.
- Cartons were used to design hydroponic garden systems to teach students about innovative growing techniques and water conservation
- Cartons were used to grow native plants to accompany lessons about pollinators and rain gardens and learn about growing and protecting local ecosystems and habitats.
- Construction of many of the projects allowed for practicing engineering principles such as design, scale, and how to manage weight loads. Planting structures varied from having an artistic emphasis such as depicting the school mascot to a more functional design including the construction of green walls.
- Cartons were also used for math-focused ten frames activities, creating living manipulative for younger students to practice counting, addition and subtraction, increasing their number sense through hands-on activities.



# Need ideas for winning a specialty prize?

## Sustainable Practices

- Cartons were used to create pollinator habitats and promote efforts to protect declining pollinator populations.
- Cartons were used to create a number of different functional garden structures including a shade house, vertical garden raised beds and a trellis system saving the gardens money and teaching students how to reuse available materials.
- A number of projects used cartons to promote water conservation in their school garden.
- One school created a drainage system that helped maximize both rain and irrigation water making to the plant roots. Another program used cartons to create a rainwater collection system to save water for later use.
- Motivated by drought conditions, one project focused on using the cartons to grow organic microgreens with minimal water to provide salads for the entire school. They learned that through traditional farming methods it can take up to 15 gallons of water to grow 1 pound of lettuce, but using a wicking system, they grew organic microgreens for 453 students using only 4.5 gallons of water.



# Need ideas for winning a specialty prize?

## Health and Nutrition

- One school used their collected cartons to start vegetable seedlings which they then distributed to their local community and food bank to encourage home gardens, teach about healthy eating habits and increase food security.
- Cartons were also used to grow herb plants which were then used to teach students how to flavor healthy recipes without the addition of salt and other less nutritious ingredients.
- Although most vegetables can only be started in cartons and must later be transplanted to a large space, a couple of projects used them to grow microgreens and lettuce which can grow to a harvestable size in the restricted space and can be used in salads or to make healthy smoothies.
- One school used their cartons to grow wheatgrass to make nutritious smoothies and the planted cartons were later donated to a local animal shelter for pets to enjoy.
- Students promoted better health by creating a mobile indoor garden to improve air quality.

