Design a Lunchbox
Miners and industrial workers of the mid-1800s would often carry their lunch to work in a sturdy metal container. During the 1950s television transformed the lunchbox with bright images of cartoon and TV characters. The images on lunchboxes continue to change in response to current trends and interests. What types of images would you put on a lunchbox? How would your lunchbox design be unique? Look for the *Star Wars lunchbox* on display in *Spark!Lab*.

Invent a Harvesting Device
The fruits and vegetables you find in a grocery store come from plants on farms. Workers pack up the produce to ship to stores near and far. Harvesting large amounts of produce quickly can reduce the cost to customers who buy them. Can you invent a way to harvest fruit from trees? Can you invent a way to harvest the most fruit in the shortest amount of time? Visit *FOOD: Transforming the American Table, 1950-2000*, to see a “lettuce hump” used to harvest lettuce during the 1960s.

Invent a Kitchen Gadget
There seems to be a kitchen utensil for every need. This is evident in the kitchen of the famous chef Julia Child. She stocked her home kitchen with gadgets and utensils that helped her to craft her amazing culinary creations. How can you improve common kitchen utensils? What types of gadgets can you create for the kitchen? For inspiration, visit *FOOD: Transforming the American Table, 1950-2000*, to see Julia Child’s kitchen.

Reinvent the Shopping Cart
The first wheeled shopping cart to roll through stores was invented in 1938 by Sylvan Goldman. The carts were great for gathering merchandise, but when parked they took up a lot of space. In 1946, Orla Watson improved on Goldman’s design by creating the telescoping shopping cart
we know today. Watson’s shopping carts were able to nest inside of each other for storage, taking up much less space when parked. Can you invent a better way to carry your food purchases through the store? What will the shopping cart of the future be like? Look for Orla Watson’s sketch of his shopping cart in Spark!Lab.

Create a Snack Machine
Ready-to-eat snacks are convenient but not always healthy. Snack food found in snack machines is sometimes loaded with preservatives, added sugar, and high amounts of salt. These additives are meant to help the food stay fresh longer and taste good to consumers. In recent years health-conscious consumers have sought out more nutritious snack options. Can you create a snack machine for healthy snacks? How can you keep your machine from damaging the food?

Create a Recipe
American food is the food of the world. The ingredients in our favorite food dishes often come from another part of the globe. As people immigrate to this nation they bring their eating habits and favorite foods along. The ingredients and dishes that are introduced to the United States melt their way into American food culture. What food dish would you like to create? Where do the ingredients for your recipe come from?

Design a Way to Insulate Food
Being able to control the temperature of food during transport can help reduce food waste. Some foods are better kept or eaten hot, while some foods need to be kept cold. Insulated refrigerators, ovens, and food carriers make it possible to transport all types of foods. What would you invent to keep food hot? What would you invent to keep food cold? For ideas, look at the thermos cutaway model on display in Spark!Lab.

Invent a New Way to Grow Food
Humans need nutritious food to sustain life and stay healthy. Humans also like to explore areas where food is hard to come by. One of these areas is outer space. As we work toward landing on Mars, we need to develop techniques and inventions that will allow us to grow what we need to survive. How would you grow food on Mars? How can you reduce the size and weight of your Mars garden?