



Connect Activities August–November 2018

Design a Voting Poster

There are many reasons why people don't vote during elections. Sometimes they think they don't know enough about the candidates or what they would do if they won. They may also feel like their vote doesn't matter. Groups create slogans, posters, and commercials to make sure that people know about candidates and issues and go to the polls to vote.

What words and pictures will you use to get people to vote? Who are your posters for: kids, parents, workers, pet owners, others? Visit the 2 West exhibition [*American Democracy: A Great Leap of Faith*](#) to learn more about this country's political process.

Create a Road System

America's interstate highway system began taking shape in the 1930s. The Federal-Aid Highway Act of 1956 funded over 41,000 miles of high-speed, limited-access roadways that would crisscross the country. Connecting states and major cities with the highway system helped some areas, but hurt others.

Which areas on the table will you connect with highways? How will your highway help or hurt other places on the board? Visit the 1 East exhibition [*America on the Move*](#) to learn more about the impact of the United States interstate highway system.

Connect Devices in a Circuit

Once the lightbulb was invented in 1879, a whole new way to get power to where people live had to be created. Power plants were built. Power lines connected power plants to homes, schools, and businesses. Electrical wires and circuits also had to be installed in those buildings. Today, buildings are wired for electricity when they are built, so we can easily plug in our gadgets to make them work.

Can you create a way to power and control electrical devices in a room? What types of devices would you like to power? Visit the 1 East exhibition [Lighting a Revolution](#) to explore more about the history of electrifying America.

Invent Something New

Before the 1800s, most products were made in small batches by hand. Then manufacturing companies began using new machines to mass produce products. These machines required fewer workers and could create the same exact parts over and over. Today, desktop manufacturing equipment (CNC machines, 3D printers, laser cutters) can create small batches of products without the need of a large manufacturing plant.

What will you invent to connect different types of building sets together? How does having different types of interchangeable parts change how you invent? Visit the Hartford, Connecticut, section of the [Places of Invention](#) exhibition next door to explore early manufacturing and mass production.

Tweak a Collaborative Piece of Art

Working with others can be very helpful in the invention process. People with different skills, backgrounds, and points of view can come up with different ideas. Even a piece of art can be created or made better when different ideas are put together. The result of creatively working together often has broader community impact than an idea from one individual.

What will you create to add to a community sculpture? How is your part of the sculpture the same or different from other parts of the sculpture?

Connect Equipment in a Shop

Many of today's machines are connected to electric power to make them work. Before we had plants and power lines sending power across the nation, machines were often connected to a kinetic energy source. They turned spinning into power using rotating belts and pulleys powered by water, a gasoline engine, or an electric motor.

Which machines will you power using a belt and pulley system? Were you able to power more than one machine using the same energy source? Visit the 1 East exhibition [Lighting a Revolution](#) to explore belt-driven machines used in early manufacturing.

Create a Code for Communicating

From social media messages to essays for school, we use computer code to do most of our communicating. Code may look complex, but it's all made up of two different

characters: ones and zeros. During the early 1800s, Samuel Morse used a two-character code—dots and dashes—to send some of the first electrically transmitted messages via telegraph. His code is commonly known as Morse code.

What type of code will you invent to send messages over a wire? Can you make a code that is easy for anyone to use? See Samuel Morse's telegraph receiver in the 1 West hallway exhibition [Inventing in America](#).

Move a Message

We use energy from magnets and electricity to send information from place to place. This electromagnetic energy can be in the form of radio waves, microwaves, and light. Light can carry large packets of information. NASA has tested using laser light to send large packets of data, like video files, over long distances.

What will you do to direct a laser message around obstacles? How many things did the laser hit or bounce off of before reaching the target? Visit the 1 West hallway exhibition [Inventing in America](#) to see the first laser to emit a continuous beam of light.