



Home Activities
April-July 2017

Create a Home Automation System

At one point in our history, home lighting and appliances were only connected to our local power plants. The rise of home computing, faster wireless technology, and low-cost electronics have now made it possible to connect the things in our homes to the Internet. This connectedness, also called the Internet of Things (IoT), makes it possible to control parts of our homes—the temperature, our TV, our lighting, and even our doors—from anywhere there is an Internet connection. Can you invent a home device that could be controlled through the Internet? How could you use home automation to help others?

Invent a Home Cleaning Device

Keeping a home clean is no easy task. In 1908 H. W. Hoover pitched his “electric suction sweeper,” an early vacuum cleaner, to make cleaning easier. But as more inventions were created to help clean different parts of the home, there was increased pressure to have cleaner living spaces. Today we have cleaning inventions for nearly every room and surface in our homes. Can you invent a new cleaning device? Which room or area of your home would your invention help you clean? To learn how one inventor solved this problem, visit *Object Project* to see a 1920s Hoover vacuum.

Create a Piece of Furniture

Furnishings help make the places we live inviting, beautiful, and useful for the people who live there. A dining table and chairs can bring people together for a meal or to play a game. Sitting in a comfortable chair can help us relax and collect our thoughts. Even a small portable lap desk can be the surface for creating the next great invention. Can you invent a new piece of furniture using the materials at this station? Where in a home would you use your furniture? For inspiration, visit *The American Presidency* to see George Washington’s easy chair and Thomas Jefferson’s lap desk.

Invent a Home for a Pet

Pets are part of our families. Even though they live in human homes, they often have their own smaller living spaces to meet their specific needs. A fish, a bird, and a dog all need different things to make them feel comfortable and to keep them safe and healthy. Can you invent a home for a pet using the materials at this station? What type of animal would live in your pet home?

Reinvent a Place to Sleep

It doesn't matter if you are spending the night outdoors, in the belly of a submarine, or under a roof—we all need a good night's sleep. Depending on your environment, your place to sleep might need to be light and portable like a Civil War soldier's cot. It might need to be safe and comfortable like a hospital bed. It could also be designed to help solve a specific problem—like encouraging kids to enjoy going to bed on time. Can you invent a place for someone to sleep? Where could your invention be used?

Create an Innovative Home Gadget

The American Consumer Era began around the 1940s. Innovations in manufacturing made it easier to create more and new products, and advertising made it easy to learn about new items for the home. Today TV shows like *Invention Hunters* and *Shark Tank* help inventors develop, tweak, and market their products. Can you invent a new type of home gadget? How could you make your invention environmentally friendly? For inspiration, look for home appliances on display in *Spark!Lab*.

Invent Something to Help You Move

Around the 1800s, people in the United States began packing up their belongings and heading west. When President Dwight D. Eisenhower signed the Federal-Aid Highway Act of 1956, interstate highways were built and it became even easier to crisscross our nation. With new roads and highways, new types of vehicles were introduced, which helped make moving west, north, south, and east easy. Can you invent something to move all of your belongings from one place to another? How would your invention make moving everything in your home easier? Visit *America On the Move* to explore the development of transportation in the United States.

Electrify a Room in Your Home

When the electric light was invented in 1879, people did not have electricity in their homes. The invention of the light led to the creation of power plants and power lines that could send electricity to homes and businesses. Now our homes are wired for electricity when they are built. All of our electrical appliances and gadgets are plugged into our home's wiring system to make them work. Can you create a circuit to power and control electrical devices in a room? What types of devices would you like to power? Visit *Lighting a Revolution* to explore the history of electrifying America.