Getting Started

Introduce the concept of innovation by asking students to look around the classroom or whatever environment they are in. Ask if they spot anything that could use improvement (for example, the furniture, the equipment, the lighting or the layout of the room). If needed, expand beyond their immediate environment to look for examples from their school or neighborhood. Use the examples to explain that there are opportunities for positive change everywhere and creating positive change is the purpose of innovation.

Use a story from The Henry Ford to further illustrate what innovation means. Use one of the two options below, or curate your own by searching The Henry Ford's website. Whichever story you choose, use it to guide students toward these key points:

- To innovate is to make a significant contribution or improvement to an existing product, process or service.
- The resulting innovation addresses a need and solves a problem.
- An innovator helps to shape a better future.





Story Option 1: Thomas Edison and the Incandescent Light Bulb

Thomas Edison was not the first to invent an electric light bulb. Other inventors developed electric light bulbs before Edison, but their lamps were experimental and impractical for everyday use. Edison and his team experimented repeatedly with different materials and in 1879 developed the first marketable bulb that was safe, affordable and dependable. The Henry Ford has several online resources you can use to tell this story, including the following:

- Video segment from The Henry Ford's Innovation Nation: Menlo Park (03:48 minutes)
- Profile and interview about Edison: Visionaries on Innovation: Thomas Edison
- Article: What If Thomas Edison Hadn't Turned Failure into Success?





Story Option 2: Jessica O. Matthews and the Soccket

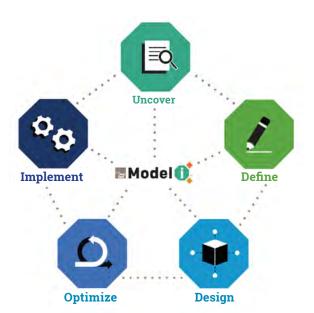
Jessica O. Matthews had a unique idea: turn a soccer ball into a battery that powers lights for people in the developing world. Her story shows how an ordinary object can be transformed to address a need and improve people's quality of life. Show students the following segment from The Henry Ford's Innovation Nation: Soccer Ball That Generates Energy (03:50 minutes).



Getting Started: Pre-Show Activity 1 / page 2

The pre-activity helps students understand Model I as a language to talk about innovation through artifacts and stories of innovators. Show the Model I framework, which is available online at thf.org/modeli. Explain the Actions of Innovation and Habits of an Innovator using the descriptions and graphics. The best way to understand the Actions and Habits is to experience them, so try not to dwell on specific definitions at this stage. Instead, help students understand the big picture and purpose of Model I.

Actions of Innovation are guideposts that help innovators move forward as they develop an idea or solve a problem. The process usually starts with Uncover, but Actions can take place in any order.



Habits of an Innovator describe ways of seeing, thinking and doing. Habits connect to Actions. Together, they increase the innovator's chances of success.



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To help put the Actions of Innovation and Habits of an Innovator into context, get students to identify Actions and Habits from an innovator story. For example, if you used Thomas Edison's or Jessica O. Matthews' story, you can circle back to it and help students connect the innovator to the Actions and Habits as follows:



THOMAS EDISON

Collaborate:

A team of people worked with Edison at the Menlo Park laboratory. Edison knew the importance of working with people who brought different skills to the table.

Learn From Failure and Stay Curious:

Edison and his team experimented repeatedly with different materials before they developed a practical light bulb. This means they went through numerous failures before they found the right combination.

Optimize and Implement:

Edison and his team constantly made improvements to their designs to ensure his electrical distribution system could become a commercial success. In 1882, he demonstrated the system's functionality when the Pearl Street generating station began to supply reliable electricity to streets and buildings in a small area of New York City.

JESSICA O. MATTHEWS

Challenge the Rules and Take Risks:

Most people would not look at a soccer ball and see it in a completely different light, the way Matthews did. The Soccket challenges what a soccer ball is and what it can do.

Be Empathetic:

Matthews empathized with children who need a source of light at night, and she addressed that need with something that fit naturally into their lifestyle: soccer.

Uncover and Define:

In her travels to Africa, Matthews noticed that children, despite poor living conditions, were happy and carefree when playing soccer. She also observed that people had a serious lack of access to sustainable power, which prevented children from studying at night because it became too dark.

