

Goldie at Home: Matthew Edel Blacksmith Shop

Activity Overview: In early Iowa communities, a blacksmith was considered a very important and necessary profession. Blacksmiths would repair wagon wheels, sharpen farm equipment, as well as shoe horses and oxen. This Goldie at Home activity was created in partnership with the [Matthew Edel Blacksmith Shop](#) in Haverhill, Iowa, and focuses on the creative and inventive mind of Matthew Edel. Edel invented numerous tools to help him work, and this activity will help you become an inventor as well.

Connection to Iowa History

Iowans have created many inventions in the past including trampolines and bread slicing machines. Matthew Edel was a German immigrant who moved to Haverhill, Iowa, in 1883 to set up a blacksmith shop. As his business grew, he invented and patented tools to help with his tasks. Some of his inventions include the Perfection De-Horning Clipper and the Edel's Garden Weeding and Cultivating Hoe. Edel worked in his blacksmith shop until 1940 when he passed away, and the building remains relatively unchanged since he closed the door for the last time.



What is Blacksmithing?

Blacksmiths use a process called forging to create objects out of iron using a very hot fire. Anvils, tongs and hammers are the main tools used by a blacksmith. As the metal gets hotter, it can be pounded with a hammer and shaped into different designs. These designs can be decorative pieces found within homes or used to create tools. This activity does not require fire or hammers, but it does manipulate materials into different shapes using your own hands.

Instructions

- 1 **Print.** Print out the "Invent Like an Iowan" worksheet.
- 2 **Get Inventive.** Identify the problem you want to fix, and complete the first section of the worksheet.
- 3 **Build.** After preparing and drawing the design for your invention on your worksheet, use the wire and other materials to create, sculpt and build a small prototype.
- 4 **Review and Evaluate.** After building the prototype, does it work? Write your final thoughts and observations on the worksheet.
- 5 **Promote.** Matthew Edel would advertise his inventions to the public. Pick a name and create a flyer to promote your invention.
- 6 **Share!** If you would like to share your invention with the State Historical Museum of Iowa, please email photos to museum.education@iowa.gov. We want to share your creation with other young historians!

Materials

- "Invent Like an Iowan" worksheet
- Pen, pencil, colored pencil or marker
- Bendable wire: wire hangers, craft wire, floral wire or twist ties
- Construction paper

Instructions continued on next page

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Instructions continued

7 Questions to Spark Learning

- Blacksmith shops were once considered very important in early Iowa towns. Why do you think these shops no longer exist in most towns?
- Why do you think blacksmiths were important in Iowa communities? What purposes could they serve that other businesses could not provide?
- Matthew Edel owned and operated his blacksmith shop from the late 1880s until 1940. What type of technological advancements would Edel have witnessed during this time? Think about new types of transportation and energy sources.

8 Additional Resources

Explore additional resources about the work and legacy of Matthew Edel.

- [Matthew Edel and his Blacksmith Shop - Artisan and Inventor in Haverhill, Iowa](#)
- [Matthew Edel Blacksmith Shop Site History](#)
- [Matthew Edel Blacksmith Teacher Guide](#)

Invent like an Iowan Worksheet

Matthew Edel invented tools to help make his work in the blacksmith shop easier. This activity asks you to create something that will help make life easier around your home today, just like Edel did over 100 years ago.

Step 1: Identify the Problem

Chores around the house are never fun. Wouldn't it be wonderful if there was an invention to help you with those tasks? Your task is to create and design something to help with your chores. Examples could be making your bed every morning, sweeping or vacuuming the floors, washing the dishes or cutting the grass.

What is the chore you would like help with? _____

Step 2: Brainstorm

The next step is to think about how your invention will help with your chore. Consider what components your invention will need to complete the task.

What features and components will be needed for this invention to help with this chore? Think about the steps required to complete the task. Also consider energy supply, mobility and other important factors.

Step 3: Design

Now that you have an idea for your invention, use the space below to sketch your prototype. Be sure to label the different parts and highlight any special features.

Step 4: Build

A blacksmith like Matthew Edel would use heat and metal to create his inventions. Manipulate your wire and add any additional materials to create a small prototype of your design. Consider multiple types of materials, like construction paper to create the structure.

What materials are you using?

If you do not have the materials needed, what materials would you like to build with?

Invent like an Iowan Worksheet

Step 5: Review

After designing and building your prototype, take a few minutes for review and re-evaluation.

Is there anything you would like to change about your design?

Step 6: Promote

After creating his inventions, Matthew Edel promoted and sold the products through mail orders and advertised with flyers to promote his creations. Use the space below to create your own flyer to promote your invention to your friends and family.

What is the name of your invention?

How would you describe your invention to the public?

Flyer Design