Havens Elementary students melt metal in 'Foundry in a Box' event

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THOMAS TWP. – Students at Havens Elementary School in Thomas Township were involved in a project recently that allowed them to create their own metal casts out of tin.

The American Foundry Society (AFS), Saginaw Valley Chapter, paid a visit to fourth graders on Wednesday, Jan. 23, for the second year in a row.

Teacher Beth Pufahl explained that the in-class project began last school year when an AFS member's grandson was attending the school.

"The member's grandson was attending our school. The grandpa dropped off the information and I happened to be the one to receive it," she said.

Last year's premiere happening was held for fourth and fifth graders and the Girl Scouts after school.

The fourth-grade team hosts the event, with Pufahl organizing last year's event and teacher Lori Vacik putting together this year's event.

"We think this is an amazing opportunity for students to engage in hands-on learning," Pufahl said.

Members from the American Foundry Society, as well as parent-volunteers,

were on-hand to assist students during the occasion.

First, a presentation from a society member detailed the project. Students picked the shape of their patterns/ mold from an assortment of choices, then members and parent volunteers' helped students step-by-step through the process of creating their own piece.

After packing their mold with sand, students watched as melted tin was poured into the mold. After it cooled, the casting was extracted, and the excess metal trimmed and filed.

The young participants were able to take their pieces home, as a token from

The AFS Saginaw Valley Chapter (SVC) said it presents the educational, hands-on activity to help bring the metal casting experience to young people.

The experience was created to get the younger generation of engineers and technicians excited about science, technology, engineering and math (STEM), its website at www. saginawvalleyafs.org, said.

A variety of tools and items are essential to make the foundry project portable, including pots, tin nuggets, gloves, safety glasses, drills, sand, brushers, pliers and more.

"The goal of this experience is to teach



Presenter Brian Smith, from the American Foundry Society Saginaw Valley Chapter, details the foundry project for a group of students.



Photos by Mandilee Hecht

Havens Elementary student Rudy Rodriguez (top right) watches as his tin casting is filed and finished during the school's recent event, Foundry in a Box.

youth what a foundry and metal melting is all about by taking the Foundry in a Box on the road," the site added.

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The project aligns with a variety of grade-level standards, Pufahl said. "In social studies, all fourth-grade

"In social studies, all fourth-grade classes have been learning about how Michigan's location and natural resources influenced its economic development," she said.

"Saginaw Valley Chapter members

"Saginaw Valley Chapter members were able to share about this concept when presenting to students. It also aligns with the science curriculum as we learn about types of fossils, including cast fossils. Lastly, it provides students an opportunity to hear about careers, especially in STEM, which aligns with a school improvement goal."

Pufahl also noted that teachers plan to host the program in upcoming years as well, if its available. Foundry in a Box is geared toward third grade and up.

For more information, visit www. saginawvalleyafs.org.



Students (left to right), Zachary Irvine, Rocco Ragnone, Kamdyn Reynolds, and Kenneth Kowalski pick out their casting mold.