# Local

# Peshtigo science students design model houses

## Juniors utilize solar energy

## Special to the EagleHerald

PESHTIGO-Peshtigo High School juniors learned to design homes keeping the sun's angle in mind. Solar energy can be harnessed to collect as much sunlight as possible in the winter and the home can be designed to reduce sun exposure in the summer.

"Students were highly engaged in this activity, because they were in control of the design process," states science teacher Hank Reines. "We build a testing chamber by setting up light sources at specific positions to represent angles of winter and summer sun."

"Most people don't even think of the way the windows are facing in their house," explains student Claire Conklin.

Reines originally got the idea for his lesson from attending Wisconsin Public Service's Solarwise for Schools Program as well as the Wisconsin Renewable Energy Fair. "The mented, "Passive solar houses are *trict*.

Anasazi and the Greeks used some of cool and building things is fun." these concepts to increase the comfort and functionality of their dwellings long before the use of fossil fuels to heat and provide light," he said. "Why would someone build a house that will potentially stand for 100plus years and not make clever use of the sun?"

Reines teaches his students to build the roof overhang to block summer sunlight and to plan the direction and size of the windows to maximize winter sunlight.

Student Serenity Clausen states, "It's important to use the sun's light to its full advantage."

"The home I built used many windows to collect as much winter heat as possible. Two of the things I liked most about my house was its look and functionality," shared student Joey Danielak.

Students were able to test and modify their designs using light sources, protractors and a compass rose, resulting in a model specifically designed for Peshtigo's latitude. They also learned planting deciduous trees for summer shade or evergreens for year round windbreaks ing bills low." also saves energy and money.

Student Ryder Demarce com- submitted by the Peshtigo School Dis-

Student Max Steffan added, "If everyone did this in the real world, energy use would probably shoot down significantly."

"The solar window is open now and will be for the next 5 billion years. I don't know how much a therm or kilowatt hour will cost then, but for the foreseeable future it looks like the cost is on the rise," Reines adds, "Uncovering science's connections to everyday life, economics, and history gives young people a stake in their future. Science inspires and empowers young people to make our world a better place to live."

Reines pushes students to problem solve and think outside the box. "Learning needs to be relevant and personal for students to genuinely invest their full attention. Activities need to allow for creativity while driving the lesson home."

Student Madeline Mans said, "I learned that passive solar heating is good to take into consideration when building a home to stay efficient, keeping your heating and cool-

EDITOR'S NOTE: This article was





