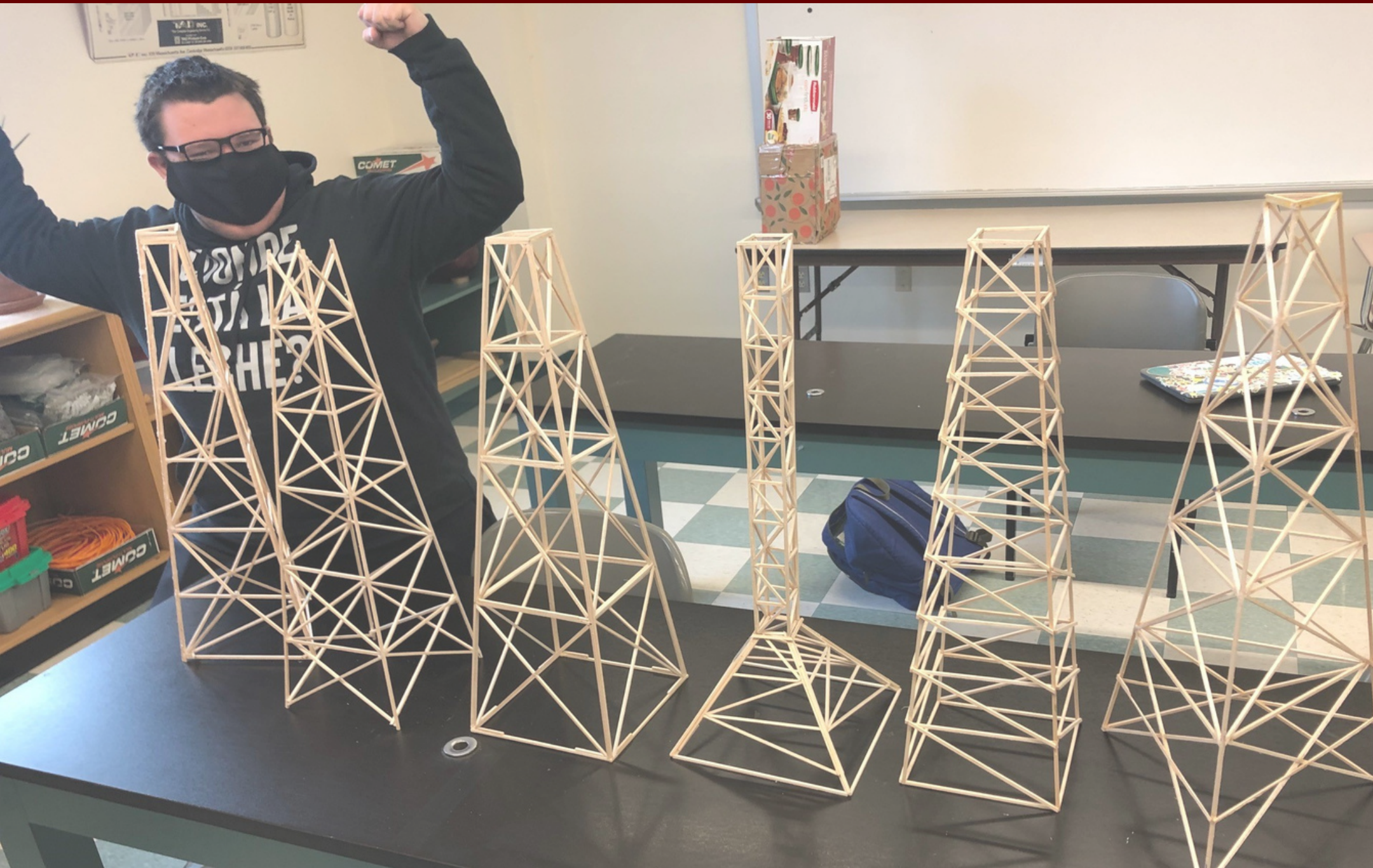


Lehighton Area High School



The tower project (pictured above with Tyler Pickett) is completed by physics and physical science students. It is the culminating project at the end of a semester. Leading up to this, students have completed multiple STEAM challenges in which they construct things like clay boats, newspaper towers, parachutes, and more. Specifically, we build bridges using K'Nex to learn about structures and structure building. Students have also built a six foot ferris wheel and a working rollercoaster.

For the final project, students draw sketches, then scale blueprints to show their plans for the tower. When those are finished, they are given balsa wood and glue to construct the tower. In class, we put the tower to the test by loading it up to a maximum of 15 kg which is about 34 pounds.

Physical parameters: Towers must be constructed entirely of wood and glue. No other materials. They must be a minimum of 60 cm tall and support a 5 cm x 5 cm loading block. The base of the tower must be large enough to stand astride of a 20 cm x 20 cm square hole.

Towers must meet all of the physical parameters and are then ranked by efficiency. Efficiency is the ratio of mass held, compared to the mass of the tower itself. In other words, it should be as light as possible and hold as much as possible. There are small prizes for 1st, 2nd, and 3rd place.

Congratulations to Jackson Zacharias who was first in his class, as well as First Place overall.