

# Puyallup School District

## STEM Showcase: Overview

The STEM Showcase consists of **four** categories for student entries. Each building will have maximum of 7 spots for each category (NO EXCEPTIONS).

### Scientific Practices:

- Individual entries only

Scientific Practices requires students to use higher order thinking skills as they learn science using a hands-on minds-on approach. This covers Scientific Methodology, Research, Hypothesis, Experiment Design, Data Collection and Analysis.



### Invention Projects:

- Individual and group entries (maximum of 4 students per group) permitted

Scientists try to understand how nature works; engineers create things that never were or improve upon something that already exists. An invention project should state the engineering goals, the development process and the evaluation of improvements.



### Technology Projects:

- Individual and group entries (maximum of 4 students per group) permitted

The participant in the technology category must create and/or design a project using computer technology. Participants will be responsible for supplying their own computers, laptops, and tablets to show their project on. These projects will be exhibited and participants must be able to share information about their project and process in an oral presentation.



### Reverse Engineering Projects

- Individual and group entries (maximum of 4 students per group) permitted

Reverse engineering is the process of discovering the technological principles of a device, object, or system through analysis of its structure, function, and operation. It involves taking something apart and analyzing its workings in detail.

