



August Summer Session

The second summer session of nPower Girls took place at Clark College, Main Campus on August 13 & 14. ESD112's Math and Science Coordinators Sue Bluestein and Vickei Hrdina initiated the August sessions by giving the nPower teachers an online Visual Spatial Intelligence test. The teachers will administer the same test in their own classrooms, and will then provide activities to increase the spatial skills of their students.



***Pentominoes - The Perfect Mathematical Puzzle.** Teachers from Castle Rock and View Ridge Middle Schools compare notes with their colleagues from Naselle-Gray's River, Mt Pleasant and Mill A, with the goal of determining how many shapes they could construct from five differently-sized squares.*

September 24th Meeting

Teachers presented initial solutions to the "Mallowntown Meltdown" packaging engineering problem presented in August, but were faced with additional criteria: Packages must be scaled up to create the most cost efficient crate of individual packages. Revised solutions will be completed at the October meeting. Teachers also began studying the Eight Criteria of Project-Based Learning and used the criteria to evaluate a STEM unit of study.



Science Materials Center Specialist Serena Williams challenged teachers to exercise their spatial skills by staging a science kit packing contest!

What is nPower Girls?

A 3-year State Math and Science Partnership grant between ESD 112 and teachers from Mill A, Wishram, Ridgfield, Naselle, Longview, Mount Pleasant, and Castle Rock engaged in learning to encourage girls in STEM subjects (science, technology, engineering and math).

www.esd112.org/stem-initiatives/npower-girls

Parent Corner

This year nPower Girls will focus on strategies to improve visual spatial skills: Mental rotation, spatial perception and spatial visualization. AAUW (American Association of University Women) research "Why so Few?" recommends that we encourage and help girls to develop their spatial skills. Spatial ability is important for success in many fields of study, such as mathematics, natural sciences, engineering, economic forecasting, meteorology and architecture all involve the use of spatial skills.

Some home activities to improve spatial skills include:

- » Build bird houses or bat houses-any kind of construction
- » Jigsaw puzzles
- » Create and read road or topographical maps
- » Play Tetris
- » Try photography taking pictures from different angles
- » Packing suitcases efficiently

Articles of Interest:

[Growth Mindset: How to Normalize Mistake Making and Struggle in Class](#)