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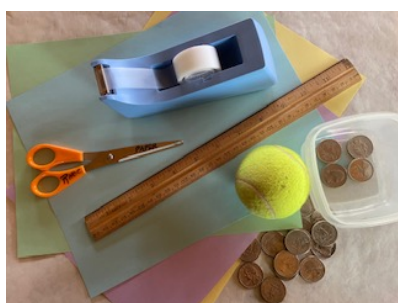
Raven Hill Discovery Center is a 501(c)(3) tax-exempt corporation.

Mission: Raven Hill provides a place that enhances hands-on and lifelong learning for all ages by connecting science, history & the arts.

Tower construction

Towers are tall structures (taller than wide) that are self-supporting and usually used for communications or observation, but not typically for habitation. Towers have been used by man, since prehistoric times. Today's challenge is to construct a tower from one piece of paper and 1 foot of tape. No other materials are allowed. The tower must be as tall as possible and free-standing. It cannot be attached to anything or lean against any other surface, like a table, wall, desk, etc. Measure your tower's height vertically from the highest point to the table or floor, even if the tower sags or curves. Time your tower to see how long it stands or if it stays up for at least 30 seconds, whichever comes first. If everyone in the family constructs a tower, see whose tower is the tallest? Which tower stands the longest? In case of ties, the straightest will determine the best tower. Can you create a tower with the same two materials that can support a tennis ball or a wooden block or something mutually agreed on by all participating tower builders BEFORE the tower construction starts! Build and test a tower that is taller than a piece of copy paper (11"). Measure the height & test it with the block or tennis ball. Build a tower and place a plastic container on top. Add quarters or other weights and see which tower holds the most weight before it crumples or falls over. What other tests can you think of for your towers?

From "Towers" by MESA (MATHEMATICS-ENGINEERING-SCIENCE ACHIEVEMENT—CSU Fresno, Senior High School MESA Day 1999-2000. Modified by Raven Hill.



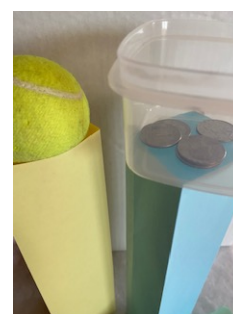
1 Tower supplies



2 Make towers



3 Test towers



4 Which holds most weight?