

Balancing Acts

Taken from Fifer, F. & Ledbetter, C. (2000). *Penny Ante Science*®. Dallas: SCE Associates.

Use these **extensions** to inspire your own creativity to integrate these activities into your present curriculum.

Ecology: Suppose your structure is an ecosystem. What portions of that system could you remove without causing a crash? How can you determine, in the natural world, which organisms can be removed and which must be saved? Mountain building, weathering, and other geologic processes impact the surface, soil and substrate that supports life.

Geology: As deposition occurs, structures build; however, what happens if the center of mass of a structure is shifted? How does this apply to the movement of materials around a subduction zone?

The rate at which magma cools determines the size of the mineral crystals within the rocks. In contrast to the initial pile of skewed nails, when properly aligned, the lattice that balances is highly stable.

Humankind: Within the body, there are many systems that must work together to maintain stasis. Adding or taking away chemicals can cause any of these systems to “crash”; thereby impacting all others, and ultimately the whole. Similarly, the Subduction Factory is a critical component of earth systems.

These detailed **correlations** indicate direct applicability to specific standards; others may be implied.

Texas Essential Knowledge & Skills (TEKS)*	K-2	3-6	6-8	IPC, Biology, Chemistry, Physics	Aquatics, Astronomy, Environmental, GMO
		5.5, 9		IPC.1, 4, 8 Biology.3 Physics.1, 3	Environmental. 2, 3, 4, 7, 8

* Compiled from Ledbetter, C. (2000) *TEKSing through Penny Ante Science*®. Dallas: SCE Associates. Specific listing within any category pre-supposes applicability to the general process TEKS for each area.