

## **TREBUCHETS**

Trebuchet comes from the French word trebucher, meaning to overthrow.

The trebuchet has its roots in fourth-century China where the Chinese used traction trebuchets. Instead of having weight on one end, the traction trebuchet had a rake-like end that had many ropes hanging from it. Many men would pull down on the ropes, asserting a force that would sling the projectile.

The trebuchets work on some very simple physical principles. The main part of the trebuchet is a long lever that is supported by a frame. The lever has three main parts: the weight basket, the fulcrum, and the sling.

**Science Connection** – Students develop abilities necessary to do scientific inquiry and develop abilities for technological design.

**Technology Connection** – Students develop abilities to apply the design process and assess the impact of products and systems.

**Engineering connection** – Students learn to design and use instruments to gather data. Students learn that malfunctions of any part of a system may affect the function and quality of the system.

**Math Connection -** Students understand numbers, ways of representing numbers, relationships among numbers, and number systems. Students compute fluently, make reasonable estimates, and solve problems that arise in mathematics and in other contexts.