

Engineer This!

Subject: Science, Math

Grade Level: 3-5

Concept: Economic Concepts

Method: Experiential Learning

OVERVIEW

Students are given dry spaghetti noodles, marshmallows, and plastic (constraint of materials). They are then given a real world problem and are asked to create an object that would solve this problem (defining the problem). The object must effectively solve the problem and must be a certain length and width (criteria). There are also objects in the "store" that will make the student's building a little easier. These materials are not free, however, and cost money in order for the students to use them (constraint). Students will pay for these materials by earning money through answering engineering questions correctly. For every question they get right, they earn a dollar. For every question they get wrong, they lose a dollar. Students will face time constraints as well for models must be completed by a certain time (maybe in rounds). Students must pay a dollar in order to test their model. If their model works, then they earn more money. If it doesn't, they lose a dollar. After students know that their model works, they must sell their model to their classroom by creating a commercial or skit. Students with the most effective model, the best commercial, and the most money at the end wins.

Connection to Entrepreneurship: Materials are not free and cost money in order for the students to use them. Students will pay for these materials by earning money through answering engineering questions correctly.