Growing a Useful Plants (Potatoes, Cucumbers and Tomatoes)

We have provided you with some potatoes and some cucumber seeds. These can be used to experimentally grow some useful plants in your schoolyard. Here are some instructions and helpful hints for growing your plants.

**Potato**

*History of the potato:*
Potatoes are said to have originated in the mountains of South America in Peru. It is thought that the Incas were the ones who originally domesticated the potato around 200 BC, and they developed over 200 varieties of potato, including the “Irish” white potato we often eat today. The potato only arrived in Europe in the 16th century when the Spanish conquistadors brought it home with them after conquering Peru. At first Europeans resisted eating potatoes. Today potatoes are grown all around the world and are a staple food for many.

*Growing tips:*

Cut the seed tubers into pieces weighing about 2 ounces (these are called *seed pieces*). Make sure there is at least one "eye" or bud on each piece. Prepare a deep, loose seedbed. If desired, apply a small amount of low-nitrogen fertilizer such as 5-10-10. Plant seed pieces about 4 inches deep with the eyes facing up. Space them about 12 inches apart.

Either grow the plants in a very large, deep pot, or plant them in a raised bed garden. If growing outdoors, after a one or two-month period, hill the rows by drawing soil up against the base of the plants. This guards the developing new tubers against turning green and therefore **toxic** from exposure to sunlight. Water plants thoroughly once a week when rainfall is inadequate.

Begin harvesting when tubers reach the size you prefer (probably around 5-6 months after planting). Larger, more mature tubers have thicker skin and will store better than small, thin-skinned, "new potatoes".

**Cucumber**

*History of the Cucumber:*
The cucumber is native to India and may have been domesticated there as long as 3,000 years ago. The cucumber later spread to China, then to Greece and Italy, where the ancient Romans adopted it into their cuisine. Eventually all of Europe followed suit. There is evidence of cucumber cultivation in
France in the 9th century and England in the 14th century. The cucumber finally made the journey to the Americas in the 16th century. Today, cucumbers are commonly eaten raw or pickled, are used in the beauty industry to treat acne and other facial skin problems (ever had a cucumber mask? It really works!) and are commonly used to reduce puffiness around the eyes.

Growing tips:

Plant cucumbers 6-12 inches apart and ½ -1 inch deep. Cucumbers grow best in full sunlight and loose soil. It is good to spade with a shovel and turn the soil in the area you are going to plant, removing any rocks or other debris. Cucumbers grow best with some fertilizer. Scatter one cup of 10-10-10 for each ten-foot row, working it into the soil before planting.

Cucumber roots reach down 36 to 48 inches, so do not plant where tree roots will rob them of water and nutrients. When they start growing, be careful not to step on the ends of the vines - this is the terminal growing point of the plant. Cucumbers will usually take 40 to 55 days from seeding to first picking.