

# **Middle School Garden Lessons**

## **Integrated into Grade Level Curriculum**

*(Italicized text is grade level topics/cc standards)*

### **6<sup>th</sup> grade Science/Social Studies curriculum**

#### **Q1**

##### **Science:**

*Principles of energy – potential vs. kinetic energy:* How do plants make energy and how is that energy transferred to animals/humans?

- ❖ Look at plant structures for energy storage. Revisit Elementary School bulb lesson: Bulb has stored energy in the winter. In the spring it will grow into a plant (kinetic energy). That plant will be eaten by an animal/human and give them both stored energy and kinetic energy in the form of calories.
  - Activity: Plant bulbs in the garden.

##### **Social Studies:**

*Fertile Crescent/first humans/river valley civilizations – geography's effect on development of civilizations (Mesopotamia, Sumerians, Babylonians, Israelites, monotheism)*

- ❖ Students learn about specific plants that were grown during these civilizations. How were they cultivated? What did they look like and how have they changed over time? How were they eaten and how has that changed over time?
  - Activity: Tour school garden and look at plants/vegetables that were eaten during ancient times. Discuss how these plants were used during those times compared to how they are used in modern day.

#### **Q2**

##### **Science:**

*Great Body Shop – nutritional needs for healthy diet/healthy v. unhealthy foods/reading product labels.*

- ❖ Look at food labels for processed foods. Compare nutritional values of processed foods v. to whole foods.
  - Activity: Make kale chips with dehydrator. Discuss why eating whole foods is more nutritious than junk food.

##### **Social Studies:**

*Classical civilizations: ancient Greeks (culture, religion, philosophy):* Greek religion and philosophy based heavily upon natural world – creation myths that include plants/animals.

- ❖ Revisit Greek myth of Persephone and Demeter – the Reason for the Seasons.
  - Activity: Nature walk to observe plant dormancy/ animal hibernation in the winter.

#### **Q3**

##### **Science:**

*Earth in space – solar system and seasons:*

- ❖ What are the effects of seasons on the environment? Plant and human evolution?
  - Activity: Create sundials in garden using sticks and stones.

##### **Social Studies:**

*Feudalism in Mediterranean (medieval times, peasants & serfs, middle class, trade routes, growth of guilds) Crusades: land, trade, wealth:*

- ❖ The spice trade during the Crusades – value of spices and who had access to them.
  - Activity: Students sample herbs in garden (weather dependent) and learn about their botanic origins. Students grind dried seeds with mortar and pestle to make spices. Students dry herbs in dehydrator and make herbed salt.