



Lesson Plan (LP)	Author: Hannah McTier
Course: General Horticulture & Plant Science (01.46100)	
LP Title: Squash Irrigation Methods	
Estimated Time: 45 minutes	
Grade Level: 9 th – 12 th Grade	

Materials, Supplies, Equipment, References, and Other Resources:
<p>Materials: whiteboard with dry erase markers, Smartboard with projector, newspapers, paper cups, plastic cups, plastic straws, glass jars, cardboard, bowls, clay, aluminum foil, glue, toothpicks, tape, rubber bands, paper clips, water, sink, paper towels</p> <p>References: https://www.georgiaffa.org/curriculum2/topic.aspx?ID=6&TID=4 , https://www.cdc.gov/healthywater/other/agricultural/types.html , activity derived from https://tryengineering.org/teacher/irrigation-ideas/ and adapted for this lesson plan</p>
Standards:
<p>AG-GHPS-12 Describe various plant irrigation methods.</p> <p>12.1 Explain the different types of watering methods for plants.</p> <p>12.2 Compare and contrast the advantages and disadvantages of each type of watering system.</p>
Essential Questions/Objectives:
<p>The student will be able to...</p> <ol style="list-style-type: none"> 1. Explain the different types of watering methods for squash plants by participating in a popcorn reading activity. 2. Compare and contrast the advantages and disadvantages of each type of watering system by participating in a popcorn reading activity and irrigation building activity.

For more information, visit <https://georgiaorganics.org/for-schools/octoberfarmtoschoolmonth> !



farmtoschool.georgiaorganics.org

GA Standards

45 min

farmtoschool.georgiaorganics.org
[#ohmysquash](https://twitter.com/ohmysquash)

Accommodations

For students with disabilities, the instructor should refer to the individual student's IEP to insure the accommodations specified in the IEP are being provided within the classroom setting. Instructors should familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation within any given instructional activity or requirement.

Interest Approach**Estimated Time:** 10 minutes

Pull up the following link on the overhead projector:
<https://www.cdc.gov/healthywater/other/agricultural/types.html>. Have students complete a popcorn reading of the 8 types of irrigation methods listed. Afterwards, discuss how the students will have the opportunity today to build their own irrigation system and should use the methods they just read about as inspiration for their designs. Remind them that their irrigation system should be built with squash plants in mind.

Learning Activity 1**Estimated Time:** 25 minutes**Instructor Directions/Materials/ Teaching Procedure****Brief Content Outline***Irrigation Building Activity*

Have all materials prepped
 Walk around the room and answer questions as needed
 Check off drawings
 Remind students to return materials they are not using to the supply table
 Observe completed systems

Have all building materials set on one table in the room. Instruct students to get into small groups and assign one person as their runner. It will be that person's job alone to gather materials from the supply table and return them when done using them.

Each group is tasked with building an irrigation system that can move 1 cup of water a distance of 2 feet with the water being split equally into 2 containers. Once students are in their groups and understand the goal of building their own irrigation system, have them talk with one another and draw up a plan for their system. Once they are ready, the teacher should check their drawing for understanding before they are released to begin building.

Summary (Reflection)**Estimated Time:** 10 minutes

Have each small group present the irrigation method their system most closely resembles and explain why they chose to build their system that way, pros, cons, etc.

Assessment

Formative: Evaluate the students on their hand-built irrigation systems and responses during their oral presentation of their systems for comprehension of irrigation methods.

Summative: N/A

For more information, visit <https://georgiaorganics.org/for-schools/octoberfarmtoschoolmonth> !


farmtoschool.georgiaorganics.org
GA Standards
45 min
farmtoschool.georgiaorganics.org
#ohmysquash