Join the Science Math Resource Center at Montana State University for our Summer Workshop for K-8 educators about the Science of School Gardens.

This is a wonderful hands-on learning opportunity for participants on the basics of plant growth and gardening.

Learn to establish a school garden and incorporate mathematic and scientific concepts from design, build, harvest and sustainability.
Day One
August 2

Irving School

Garden Guided Tour:

Creating a school garden is an outdoor classroom endeavor. This session will give a thorough overview of how to create a school garden and the curriculum resources that are required to building a
Classroom Workshop:

**Presenters:** Aubree Roth

Aubree Roth has worked with Montana Team Nutrition Program since 2010 supporting Montana farm to school projects and is the Montana Farm to School Coordinator. She also serves as the Montana State Lead for the National Farm to School Network. She is a graduate of the Sustainable Food Systems Master’s program at Montana State University. Ms. Roth provides training and guidance for farm to school initiatives statewide.

**Description:**

Farm to school is taking root across Montana and nationwide. Farm to school programs incorporate school gardens, purchasing local food, and/or food, nutrition, and agriculture education to connect children with their food. School gardens are living laboratories where lessons from nutrition to math, language arts, and science can taught through multi-sensory experiences. Discover standards-based lessons and curricula that can enrich learning for students in grades K-8 while cultivating adventurous eaters and healthy eating habits. Participants will explore the Irving School Garden and Orchard.

**Objectives:**

Participants will:

- Identify at least one garden or nutrition-based activity they will conduct in their classrooms, whether or not they have a school garden.
- Describe at least three considerations for keeping a successful school garden growing.
- Explore Irving School Garden and successful schools gardens in Montana of various types including indoor and container gardening.
- Participants will have identified one garden “mentor” in the class or in their community to contact with after the conference to enhance their garden-based lessons.
- Learn the Montana Harvest of the Month & farm to school basics – how it works, expectations, why it is important, how to implement, available resources, etc.
- Participate in and learn how to conduct taste tests of Harvest of the Month items.
- Understand options for, participate in Harvest of the Month classroom activities, and explore sample lessons.
Day Two

School Gardening Program

MSU Plant Growth Center Guided Tour:

A memorable and educative tour throughout the MSU Plant Growth Center guided by a highly qualified professional. Participants will experience real life situations in Conservatory, Greenhouses, Soil and Plant Preparation Areas, Growth Rooms, Growth Chambers, Quarantine Laboratory, Potato Certification Laboratory and more.

Classroom Workshop:

Presenter: David Baumbauer

David Baumbauer is the Plant Growth Center Manager and has extensive hands-on experience with the highly technical facilities at MSU (greenhouses, growth chambers, insect isolation units), is involved in several active research pro-
Day Two

Description:

A school garden is a powerful learning tool that can increase student science achievement and interest. This session will focus on the scientific concepts of schools gardens (the chemistry of soil, water and nutrient needs of plants). This initiative will provide teachers the scientific confidence to teach their students, so that all children can benefit from hands-on gardening.

Objectives:

At the conclusion, participants will understand:

- Soil pH levels and its impact in plant growth
- Water quality and its impact on plant growth
- Chemical Properties of Growing Media
- Selection and chemistry of Fertilizers
- Organic sources of fertilizers

Be prepared to get your hands dirty by participating in demonstration lessons and activity.