2024 Workshops

WT2a

Thursday; 8-9:50
Fishing in the Schools
Get certified as an Angler Education
instructor in this workshop then build
community and make science
connections to Wisconsin's aquatic
resources in your classroom through
fishing.

WT3a

Thursday, 10-11:50
Relevant, Real-World Issues: Engage
High School Students with PLT
Resources
We will explore three different Project

We will explore three different Project Learning Tree secondary guides that help connect high school students to their community and to the world around them.

WT3d

Thursday; 10-11:50
Focusing Figuring Out on Phenomena to Promote Student Agency
Participants will have the opportunity to experience an everyday phenomenon, construct questions about how and why that phenomenon occurred, and work as a community to make sense of their observations. Afterwards, participants will reflect on how they would enact analogous phenomena-centered lessons in their local context in ways

WT4b

Thursday; 1-1:50 Bring Wisconsin Wildlife Into Your Classroom Snapshot Wisconsin is a community

that promote student agency.

Snapshot Wisconsin is a community science project for monitoring wildlife. Learn more about Snapshot, our free lesson plans, and our interactive wildlife data visualization tool.

WT1a Thursday; 8-8:50 Incorporating Soil Health Assessments in Environmental Education

WT2b

Thursday, 8-9:50 Science in the Trees: K-2 Lessons from Project Learning Tree's New Activity Guide

Let's go outside and try some lessons from PLT's new "Explore Your Environment" activity guide that are NGSS-correlated and perfect for budding young scientists.

WT3b

Thursday; 10-11:50
Wisconsin Geology Storylines
Phenomenon-based HS science
storylines based on Wisconsin Geology
including Ice Ages / Driftless region,
Arctic Circle, Wisconsin's rock layers,
Feedback loops, Climate Change, and
Groundwater issues.

WT4a

Thursday; 11-11:50
15 Questions To Ask Before You Adopt In this session we will share
15-questions to ask before you adopt a new science program and provide a navigation guide to support the review process. The 15-questions focus on three key considerations for districts: budget, alignment and usability of curriculums

WT4c

disciplines.

Thursday; 1-1:50
Bridging Literacy and Science:
Enhancing Reading and Writing through
Science of Reading and Science
Education
Calling all elementary school teachers!
Join us for an engaging and
enlightening workshop that explores the
powerful intersection of science
education and the Science of Reading
initiatives. Discover how teaching
science can support and enhance
students' reading and writing abilities,
creating a comprehensive approach that

fosters academic achievement across

In this session, we will use basic, hands-on soil health evaluations to explore opportunities to integrate soil health science with ecosystems.

WT2c

Thursday; 8-9:50

Storylining in Biology for Coherent

Instruction

Storylines driven by anchoring phenomena improve student engagement. This workshop aims to familiarize participants with the IL Biology Storylines and how they provide coherent, 3-dimensional instruction to ALL learners.

WT3c

Thursday; 10-11:50 Logs to Lumber

Ever wonder what happens to a tree once it becomes a log? Find out by scaling and, grading logs, and milling with a portable sawmill.

WT4a

Thursday; 1-1:50 Living in a Material World! How Materials Science Shapes the Future. Materials science combines many fields such as physics, chemistry, engineering and math to understand the properties of and create new materials for the modern world, learn about them with

WT5a

Thursday, 1-2:50

UW-Madison MRSEC!

Determining the Genetics of a Cash

Cow

In this real-world lab, students use gel electrophoresis to determine the combination of breeding stock that increases milk protein for a better quality of cheese and higher profits. WT6a

Thursday; 2-2:50

The Art & Science of Nature Journaling Nature Journaling is a unique way of expressing both creativity and scientific observations. Join in this hands-on, interactive workshop to use nature journaling through writing and artmaking to help youth engage with the natural world. Adaptable for all ages from preK-college youth.

WT7b

Thursday; 2-3:50

Water Quality and Remote Sensing: How Can Images be Used to Quantify Lake Health?

This workshop introduces a hands-on lesson plan that shows students how satellite imagery and statistical models are used in monitoring lake health.

WT8c

Thursday: 3-3:50

Writing Dialogues for YOUR Classes Dialogues are a successful strategy for engaging students in reading and learning. In this workshop, bring classroom notes and get help writing your own dialogue!

WF3a

Friday; 9-9:50

Design an Experiment for the International Space Station!
Genes in Space is a free experimental design competition for middle/high schools. Learn about the contest and how to receive a biotechnology equipment loan.

WT6b

Thursday; 2-2:50

How to Be a Badge-R - Utilizing the conext of Agriculture to Teach Science The Midwest is home to a massive network of food production - in rural and urban areas, yet many students are unaware of how food is grown and produced in their communities. Discover (and leave with) hands-on activities for 2nd-5th graders using the lens of agriculture to engage students in exploring what we eat, wear, and use every day.

WT8a

Thursday; 3-3:50

Supporting ALL students: making sense of phenomena through shared experiences.

Participants will engage in a hands-on science lesson focusing on the role phenomena play in increasing student engagement and learning.

WF1a

Friday; 8-8:50

Use molecular tools to find antibiotic resistance genes in environmental DNA Track antibiotic resistance in your environment: analyze soil samples with PCR and gel electrophoresis for antibiotic resistance and contribute your data to a national database.

WF4a

Friday; 10-10:50

Beginner Biotech: Micropipetting Art and Gel Electrophoresis for Middle and

High Schools

miniPCR bio makes bringing biotechnology to the classroom easy. Create micropipetting art and build a gel electrophoresis system on a budget you didn't think was possible! WT7a

Thursday; 2-3:50

The Watershed Game: Connecting Land Use and Water Quality for Inspiring

Learning

Dive into the world of watersheds in this hands-on session, designed to infuse excitement and understanding into students' exploration of land use and water quality.

WT8b

Thursday; 3-3:50

Improv to Improve (Science)
Communication in your Classroom
Have you or your students ever groaned
at the thought of yet another ice-breaker
activity? Fear not! In this session,
discover fun ways to utilize your
students' (and your own) creativity to
lead meaningful practice in
communication using improvisation
skills.

WF2a

Friday; 8-9:50

A Revolution in Resource Partitioning: Using authentic field data and DNA metabarcoding to reveal previously hidden dimensions to niche partitioning. Explore HHMI Biointeractive Niche Partitioning resources to illustrate how DNA metabarcoding of dung samples helps scientists determine the dietary composition of grazing herbivores.

Wf5a

Friday; 10-11:50

Changing Planet: Using Biointeractive to Teach the Causes and Impacts of

Climate Change

Utilize clips from the HHMI
Biointeractive film The Science of
Climate Change paired with data sets,
phenomenal images and questioning
strategies to explore climate science
causes, impacts and solutions.

WF6a Fridav: 2-2:50

New Teacher Network Workshop Dig in to a topic or work with the assistance from veteran teachers!

WS1b Saturday; 8-9:50 Why We Teach Science: A Micro-Retreat to Reconnect to Our Deeper Purposes for Teaching Let's spend time together thinking more deeply and talking with our colleagues about what brings us joy in teaching science. How do we see our work in teaching science improving the lives of our students to build a better world? At the end of this session, you'll leave with more clarity on your goals for teaching science to help you better persevere when the days are difficult and to advocate for science education.

WF7a
Friday; 2-3:50
Standards-based grading in a points
and percentage world!
If you have ever wanted to try
standards-based grading, but your
school uses points, percentages, and

letter grades, this hybrid is just the

thing.

WS2a
Saturday; 10-10:50
Unmasking Superheroes: The Science
Behind the Legends
Super speed, super strength, flight, and
more! Discover how to use superhero
examples to teach about science
concepts in your classroom!

WS1a

Saturday; 8-9:50

Introduction to Chemistry Learning Environments Anchored in Phenomena (ChemLEAP) This workshop invites teachers to explore the ChemLEAP curricular materials, and discuss teaching practices that allow students to make sense of phenomena using molecular models.

WS3a

Saturday; 10-11:50

Using Noticing, Wondering, and Connection Routines to Get Engagement and Discourse Do you value helping kids engage more deeply with the wonder of our world

AND with each other?

Do you want to draw students into the start of a unit?

Do you want to build deeper relationships with your students through

your content?

Let's explore a routine you can use on Monday to help you do all that! Participants will experience and practice a noticing, wondering, and connections routine to help your students access prior knowledge and lived experience that gets them talking with other students and with you. You will leave with scripts and templates to help you use this routine in your classroom.