

# Before we begin:

- We want to know who is here! Please introduce yourself in the chat: Name. School.
- Please mute your microphone to reduce background noise.
- We will leave time for Q & A. **Please submit your questions via the Google form that will be shared in the chat.**
- This presentation, along with the questions and answers, will be posted on the WESO website.



# Pentathlon

WESO 2026

**Event Supervisor:**  
Tom Colis

# Goals for this event:

01

## MATH SKILLS

Strengthen grade level appropriate math skills!

02

## TEAMWORK

Encourage positive interactions and good sportsmanship!

03

## HAVE FUN!

# Event Format

- GRADES: 2, 3, 4, 5
- TEAM SIZE: 5 participants (per grade)
- DURATION: 15 minutes (including instructions)

The detailed event description can be found at: <https://wesoscience.org/events/>

# EVENT FORMAT

## Overview

- Relay race style event.
- Each team member will complete one activity followed by one math problem.
- After each teammate completes their activity and math problem, the next team member will start their leg.
- A running time will be kept starting with the first team member until the last team member is finished. Scores will be calculated based on a combination of this completion time and the accuracy of the math problems.



# EVENT FORMAT

## Skills

- 5 different activities
- 1 will be stationary
- Simple skills like kicking a ball into a net or climbing thru a tunnel
- If multiple attempts are needed, they will only be allowed 3 attempts
- Activities may change between grade levels



# Images from 2025



# EVENT FORMAT

## Problem Solving Station

- 5 different math problems (1 per team member)
- Problem will be written on a piece of paper, on a clipboard, in a taped off square on the floor.
- Paper can be used for problem solving but answer must be recorded in the appropriate area.
- Must solve in 1 minute. There is a one minute timer in the workstation that is turned over by the timekeeper.
- Participants can place the clipboard on the ground or signal to timekeeper that they are finished.







# EVENT FORMAT

## Timers/Referees

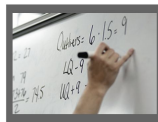
- Two time keepers per team will record the time for the entire heat. (Running clock)
- They will signal to student that they have either successfully completed the physical task or are out of attempts and can move on to the problem solving station.
- They will inform student if their 1 minute is up at the problem solving station.
- They will signal to the next teammate when it is their turn to start.

# MATH CONCEPTS

Problems will be developed from the grade level expectations in the MI Mathematics Standards

Found Here

<https://wesoscience.org/pentathlon/>



Michigan K-12 Standards  
**Mathematics**

# MATH CONCEPTS

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- **Second grade teams will not be given word problems. They are expected to be able to read simple instructional phrases (i.e. What time is it?).**
- **All problems will be reviewed by an AA elementary school teacher for grade level appropriateness and reasonable execution time.**

# Example 2nd grade

From the MI Math Standards:

**Add and subtract within 20.**

2. Fluently add and subtract within 20 using mental strategies.<sup>2</sup> By end of Grade 2, know from memory all sums of two one-digit numbers.

$$\begin{array}{r} 18 \\ - 2 \\ \hline \end{array}$$

Answer \_\_\_\_\_

# Example 2nd grade

From the MI Math Standards:

**Work with time and money.**

7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

What time is it?



Answer \_\_\_\_\_



# Example 5th grade

From the MI Math Standards:

- Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem.

**Bob and Michelle went on a 24 mile bike ride.**

**By lunchtime, they had ridden  $\frac{5}{8}$  of the total distance.**

**How many miles did they have left to ride after lunch?**

**Answer \_\_\_\_\_**

This will be filled out by the event supervisor in advance.

School \_\_\_\_\_

**Maira has 2 quarters, 1 dime, 3 nickels and 6 pennies. How much money does she have?**

**Answer: \_\_\_\_\_ cents**

This is an example of a 3rd grade question.

This will be filled out by the event supervisor in advance.

School \_\_\_\_\_

Natalie and Warren started swimming laps in the pool at 5:47. Natalie finished swimming her laps 27 minutes later. Warren finished swimming his laps 8 minutes after Natalie. What time did Warren finish his laps?

Circle the correct answer.

6:22

6:27

6:32

6:25

This is an example of a 4th grade.

# SCORING

- Base completion time will be determined by the time keepers.
- Adjustments to that time will be made as follows:
  - Each correct answer: minus 20 seconds
  - Each incorrect answer: plus 30 seconds
- Teams are ranked based on lowest to highest adjusted time.

## Example:

Base completion time:	300 seconds (5 minutes)
# correct answers X 20 (4 X 20):	- 80 seconds
# incorrect answers X 30 (1 X 30):	+ 30 seconds
Final time:	<hr/> 250 seconds

# Pentathlon Preview

A video showing the obstacle course and the specific physical activities will be available on the WESO website several days before the event.

The 2025 Preview video is posted under the Pentathlon Event right now.



# COACHING ADVICE

- Practice a variety of grade level appropriate math problems.
- Familiarize your team with the obstacle course layout and practice the sequence.
- Don't over coach your team!
- Make sure they support each other.
- Most importantly, make it fun!

# Common Questions/Answers

- Each school can only send one team of 5 students per grade.
- Teams have to be comprised of 5 different individuals.
- Teams can be made up of any combination of boys and girls.
- This is not a spectator event and coaches and parents will not be able to watch their teams compete.

# Other Coaching Questions

- When do I start having practices?
- Where do I practice?
- How often do I practice?
- What do I do if I have more kids than can compete at the event?

The answer to all of the above questions depends on you, your head coach and your individual school. WESO does not control how individual schools form their teams or conduct practices.

Questions after tonight?

## Use the WESO Discord Server

### WESO Discord Server

- Every WESO event will have its own channel
- Join the WESO server to submit your questions in the event chat
- Event supervisors or WESO board members will monitor the discussion and answer questions
- Event coaches can use the chat to exchange coaching ideas
- Go to [wesoscience.org/events/](https://wesoscience.org/events/) for details on how to join the WESO server and guidelines for its use



# QUESTIONS NOW?



- Please submit your questions now using the Google form that was shared with you in the chat.
- We will answer live and post all questions and written answers to the website following the meeting.

Thank you for serving as an event coach  
and helping us bring WESO to our  
community!