

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.



Aerodynamics

WESO 2026

Event Supervisors:

Shan Cook

Erin Rohde

Mo Abouelnaga

Goals for this event:

01

Design Process

What makes a paper airplane fly.

02

TEAMWORK

Encourage positive interactions and good sportsmanship!

03

FUN

Reintroduce a popular and fun event!

Event Format

- GRADES: 2, 3, 4, 5
- TEAM SIZE: 2 participants (per grade)
- DURATION: 30 minutes

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

EVENT FORMAT

Overview

- Students will construct paper airplanes in a classroom
- They will exit to a hallway and make 4 flights - 2 for distance and 2 for time.
- Best distance and time will be recorded.
- The students will be scored according to the following formula

longest distance throw (in meters) for the “distance plane”

+ longest time in the air for “time plane” (seconds multiplied by 5.5)

- Highest score wins

Construction Room

- Teams will be given 4 sheets of paper, 20 cm tape, 2 paper clips to make at least 2 and up to 4 airplanes.
 - Teams do not need to use all of these materials. They will not be given extras.
- Teams will be given scissors, a ruler and pencil to use as tools - these may not present on the airplane.
- No notes or designs are allowed to be brought into the event.
- Each plane can fly a maximum of 2 times.
- Grades 4 and 5 must incorporate a mystery object in their plane designs.
- The airplanes must provide an element of lift. Students are not allowed to make a paper ball and throw it as an “airplane”.
- No test flights are allowed.

Flight Line

- Flights will be made in a hallway at Pioneer High School.
- Students can make up to two flights per plane.
- Two flights will be for distance, two for time. Students will be told which one prior to launching.
- When launching, students must keep both feet on the ground. They can not walk or run up to the line when launching. If students jump or walk/run up that flight will get a score of 0.
- The hallway has fire extinguishers, lockers, doorways, etc. Those are “in play”. If the plane hits an obstacle and drops to the ground, its flight ends there. If the plane gets stuck, above the ground on an obstacle, the flight is repeated (a do-over).
- Event Volunteers will return the planes to the students for additional launches. Students should not retrieve the planes on their own unless told to do so.
- Planes will be quarantined after the four launches.
- New this year (2026) planes will NOT be returned at the end of the event.

COACHING ADVICE

- Read the event description
 - Materials given
 - No running up or jumping when launching
- Let the kids try out different designs
- Don't over coach your team!
- Make sure they support each other
- Most importantly, make it fun!

Questions after tonight?



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/ 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 back WESO to our community!