# **BEFORE WE BEGIN:**

- We want to know who is here! Please introduce yourself in the chat: Name and 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.

# MYSTERY ARCHITECTURE WESO 2025

EVENT SUPERVISORS: Anand A Raj S

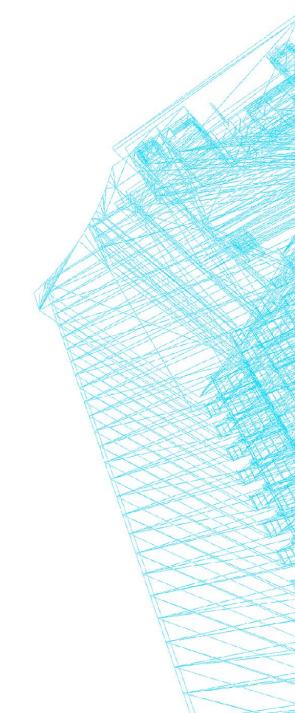




The objective of this event is to use the given materials to build the tallest free-standing tower that can hold a tennis ball on top until the measurements are recorded.

# **GOALS FOR THIS EVENT**

- Building skills
- Teamwork
- Fun



## **EVENT FORMAT**

**Grades**: 2,3,4,5

■ Team Size: 1-2 participants per grade

■ Duration: 30 mins

• The detailed event description can be found at:

https://wesoscience.org/events/

# **EVENT RULES**

- All students need to report 5 minutes before the session start time.
   The session will start and end on time. If the kids are late to the session, they will lose time. They will not be granted additional time and WILL miss critical instructions and material verification.
- Each team will be given a bag (similar in size to a Kroger/Meijer plastic grocery bag) of building materials. All teams in each grade will receive the same materials.
- The Supervisor will have a list of the materials and will read out the items and their quantities so that the students can verify before they start building. The bag containing the materials <u>cannot</u> be used for building and should be returned to the Supervisor.
- Every team will be provided with a pair of scissors (child safe) and three strips (one foot each in length) of masking tape (Scotch brand masking tape, 0.75 inch width max). The tape will hang from a piece of furniture and can be cut as needed. No extra tape will be provided. The participants will not be allowed to bring any tools.

# **EVENT RULES**

- There will be about 10 15 unique items with which the kids can build their structures. The quantities of each unique item is part of the 'mystery' of this event.
- Students do <u>not</u> have to use all the materials provided.
- Every team is provided with their own work/floor space (non-carpeted, generally tile).
- The structure must be built on the floor and should be freestanding (i.e., not attached to the floor with tape, or leaning against another object or person).
- No building materials are to extend above the load/tennis ball.

# **EVENT RULES: TIMING**

- The students will have **20 minutes** to complete their structure.
- Students are notified when to start and the timer is run down from that point onwards.
- The students are notified approximately every five minutes. A two-minute warning is provided before the end of the 20-minute session. After the 20 minutes are over, each team is requested to step away from the structure.

# **TESTING**

• Students will be provided with a WESO tennis ball if they need one for testing purposes during the competition.

Note: The 'WESO' tennis balls (measured for equivalency in weight) are the test balls used by supervisors to make the final measurements.

• If the structure falls during the trial prior to 20 minutes, the students can rebuild and carry out adjustments.

### **MEASUREMENTS**

- A measurement (height and maximum base) is with the WESO tennis ball load (placed by students) and will be recorded and considered for scoring.
- We suggest (and encourage) that the students ask for a measurement when they have a decent build (even before completion of event) so that they have something on record. If the structure holds the tennis ball (placed by students), that measurement will be recorded by the Supervisors. The students can continue building a taller structure provided it is within 20 minutes.
- Once completed, the team should inform the supervisors. They will be provided with the WESO tennis ball and that should be balanced by the students on top of their tower. Since no building materials are to extend above it, the top of the tennis ball will be considered the highest point of the tower. The tower must remain standing until the measurements are recorded.
- In case the structure falls at the end of the event, we will consider the best of the measurements they have on record. Even if the structure is intact at the end of the build, we will consider the best of the measurements they have on record.

# **MEASUREMENTS**

#### NOTE:

- We will have supervisors and sufficient volunteers in the test room. Students can raise their hand or voice a request for a 'measurement'.
- A reasonable number of requests can be made. Keep in mind that there will be several teams in the same room making requests and we will take them on a 'first come, first serve' basis.
- All this happens in the '20 min' build time and we do not stop the clock if they ask for a measurement.

# **SCORING**

- The supervisors will measure the height, width & length (max base) of the tower.
- The structure with the tennis ball has to be standing for the measurement to be recorded by the Supervisors.
- The tallest free-standing tower that can support the tennis ball wins.
- If none of the structures balance the ball, there will be no awards for that event.
- **Tie Break Criteria:** If there is a tie on the height, the structure with the smallest base width wins.

# MATERIALS TO BE BROUGHT TO COMPETITION

None

 All materials (including WESO tennis ball) and tools needed for the event will be supplied by WESO.

# TIPS FOR COACHING

- Use different types and shapes of materials during practice.
- Some examples are household materials like paper, pins, cups, straws, paper clips, etc.
- An ideal team would be comprised of 2 participants. It is difficult for one student to hold materials together and tape them to build a structure. Make sure your 2 students can work as a team and that they have a plan before they start.
- They will not be given additional supplies or tape.

# QUESTIONS AFTER TONIGHT? New for 2025!



- 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!