

Crave the Wave - (Online Event - Based on Team Schedule)

Description: This event tests participants' knowledge of waves. This event has a written test and may/may not include "hands-on" stations.



Participants per Team: 2

Spirit of the competition:

- It is a rules violation if coaches, parents, mentors, or spectators enter the competition area or communicate with the team members at any time during the competition. Violation of this rule will place the team below all other teams.

Teams need to bring: Pencils and an Internet enabled device for taking the test through Scilympiad. Optionally teams may bring a four-function calculator.

Safety Requirements: None

The Competition:

Students will take a written test to answer topic questions on the waves. The questions may include but are not limited to:

- Waves & Categories of waves
- Longitudinal, Transverse, Surface, Electromagnetic, Mechanical
- Understanding of Light, Sound, and Seismic Waves
- Properties of Waves
- Anatomy of a wave (Crest, Trough, Amplitude, Wavelength, Compression, Rarefaction)
- Frequency, Period, Speed, Wave equation
- Reflection, Refraction, and Diffraction
- Interference
- Doppler Effect

Scoring:

- Points will be awarded for each correct response.
- Ties will be broken by the accuracy or quality of answers to select questions chosen by the event leader prior to the competition.

Possible Resources:

Division A will not release previous tests, or the exact resources used by the Event Supervisor or test writer for any events. The listed resources are meant as a starting point. It is up to the competitor to research further.

- [Crave the Wave - Wiki - Scioly.org](https://www.scioly.org/wiki/Crave_the_Wave)