# BirdSO Mini Invitational
# Digital Structures C

George Sun

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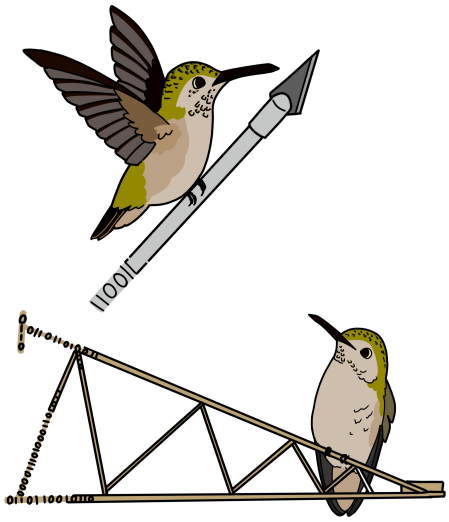

**Directions:**

Welcome to Digital Structures! Please read these instructions before starting this test. Teams that do not follow these instructions may be unable to compete or may be assessed Competition Violations.

1. Contents: This Scilympiad test contains specified nodes for the Area Loads (rule 3.c.), the magnitude of the Point Loads (rule 3.d.), and a place to submit your Estimated Load Supported (rule 5.e.i). to be used for tiebreaker. Please record these specifications elsewhere (e.g. on a sheet of paper) before clicking submit as you will not be able to access them again after submission. Note this Scilympiad test is intentionally only 5 minutes to ensure the Estimated Load Supported is submitted early in the event.
2. Licenses: As mentioned in rule 2.b., each team will need a SkyCiv license to compete. If you do not already have a license, you may purchase one at `skyciv.com/olympiad`. You will need the Science Olympiad add-on which you can enable by clicking through the following menus: Hi YourName > Account Settings > Software Settings > Science Olympiad [S3D] > On.
3. Competition Mode: You must turn on Competition Mode before starting this test. The time at which you turn on Competition Mode will be reported with your submission. Teams that do not turn on Competition Mode before starting this Scilympiad test may be assessed Competition Violations.
4. SkyCiv Submission: You must submit your structure results in SkyCiv within 45 minutes from when you start this Scilympiad test. You are responsible for keeping track of time. Submissions that are late (regardless of whether a technological issue caused the lateness) may be assessed Competition Violations.
5. Communication: During this event you should communicate with your partner via a method outside of Scilympiad such as Google Meet, Zoom, Facebook Messenger, FaceTime, etc. Out-of-browser time for this test will not be penalized.

This event will be run following rules at the national level, so your structure must contain the following four **Area Loads**.

| | |
|---|---|
| Area Load 1 | (x = 2.5 cm, y = 15.0 cm, z = 2.5 cm)<br>(x = 2.5 cm, y = 15.0 cm, z = -2.5 cm)<br>(x = -2.5 cm, y = 15.0 cm, z = 2.5 cm)<br>(x = -2.5 cm, y = 15.0 cm, z = -2.5 cm) |
| Area Load 2 | (x = -10.0 cm, y = 10.0 cm, z = 2.5 cm)<br>(x = -10.0 cm, y = 10.0 cm, z = -2.5 cm)<br>(x =.-15.0 cm, y = 10.0 cm, z = 2.5 cm)<br>(x = -15.0 cm, y = 10.0 cm, z = -2.5 cm) |
| Area Load 3 | (x = 15.0 cm, y = 10.0 cm, z = 2.5 cm)<br>(x = 15.0 cm, y = 10.0 cm, z = -2.5 cm)<br>(x =.10.0 cm, y = 10.0 cm, z = 2.5 cm)<br>(x = 10.0 cm, y = 10.0 cm, z = -2.5 cm) |
| Area Load 4 | (x = 20.0 cm, y = 5.0 cm, z = 2.5 cm)<br>(x = 20.0 cm, y = 5.0 cm, z = -2.5 cm)<br>(x = 15.0 cm, y = 5.0 cm, z = 2.5 cm)<br>(x = 15.0 cm, y = 5.0 cm, z = -2.5 cm) |

The specified magnitude for the Point Loads (rule 3.d.) is **12 N or 0.012 kN.**

Each of the four nodes of Area Load 1 must have a Point Load in the positive-z direction with this magnitude.