

MATERIALS SCIENCE C

Questions

These are sample questions/tasks/activities that will help prepare students for the 2026 season. This list is not all-inclusive and is representative of what students may be asked on tournament exams.

- a. What properties must a substance have if it is used to quench the fluorescence of a non-material?
- b. You have 3 sets of CdSe quantum dots of different sizes. You have a lamp and a spectrometer. How do you determine which quantum dots are the largest?
- c. Explain why diamond is a good thermal conductor, but a poor electrical conductor.
- d. Make Carbon Quantum Dots.
- e. Choose a material to quench Carbon Quantum Dots.
- f. Test a pseudo Gecko foot.