CYOC 2025 Summer Engineering Workshop Kicks Off with Innovation and Energy

By CYOC members: Evan Chen and Ruichen Feng

The CYOC 2025 Summer Engineering Workshop launched on Monday, July 7th at Cabin John Middle School, bringing together a group of curious and creative middle schoolers for a week of hands- on learning on 3D design, electrics circuit and Arduino programming.

Instructors Evan Chen and Ruichen Feng kicked off the workshop with a short introduction about the workshop content and schedule. The CYOC Director Ping Lu offered a speech of encouragement and highlighted the importance of engineering, teamwork, and innovation in shaping the future. Volunteers Fayuan Wen, Chuanfeng Wu and Bo Chen helped with the workshop activities.

Throughout the first day, students were introduced to the foundations of engineering through engaging activities in 3D design and 3D printing. Campers quickly formed teams, explored Onshape to model their own parts, and submitted their very first design of name tag for printing. They further learned more advanced function in Onshape such as revolve and sweep.

All workshop materials and updates are posted to the Google Classroom, where students can review lessons, submit work, and share questions. Instructors emphasized safety, collaboration, and critical thinking throughout the hands-on sessions.

During the morning break, students eagerly took advantage of the fresh air and sunshine by engaging in lively games of basketball and kickball. The basketball court echoed with the sounds of bouncing balls and cheering teammates as students practiced their shots and played friendly matches. Meanwhile, on the field, another group enjoyed an energetic game of kickball, laughing and sprinting as they took turns kicking and running the bases. The break provided not only physical activity but also a chance for students to bond, recharge, and return to class with renewed energy and focus.

As the week continues, students will deepen their design and programming skills while building toward larger team challenges. From custom 3D-printed parts to Arduino-controlled sensors, moving devices and programming, students are already demonstrating creativity, resilience, and a love for learning.

Stay tuned for more highlights from the week—including photos, project showcases, and student spotlights!