

July 12, 2024



The 4<sup>th</sup> week of Robotics Camp is in full swing! Our campers are showing nonstop motivation and creativity with their building, design, and problem-solving skills. The staff delights in watching your children explore their imaginations and come up with new ways to construct their robot!

On Tuesday, the counselors took the campers to the Cranbrook Institute of Science (CIS), where they explored all the treasures of the museum, including: the Rock and Mineral Exhibit, Ice Age Survivors, and interactive games.

On Wednesday, your children were taken to the Natatorium, where they had an opportunity to swim and socialize, while getting lots of exercise!

We hope you and your family will be able to visit today for Parent Visiting Day. Your children are anxious to show you what they have been working on this week.

#### **PARENTS OF ROBOTIC CAMPERS**

Please join us as we celebrate the culmination of your children's hard work this week in Robotics Camp on Friday, June 28<sup>th</sup>.

We are so proud of our campers and hope you will be able to be here as they show off their work.

#### **SHOW AND TELL 2024**

Parking will be in the 550 Lone Pine Rd. Parking Lot.

A staff member will be present to guide you to your location once you park.

WeDo & Boost	2:30 PM
Vex-Go	2:30 PM
Vex-IQ	2:15 PM

## WeDo & Boost '24



### **Franklin-**

We missed Franklin a lot! We are so glad he is back for another week. This week, Franklin tackled building the robot all by himself, and was so focused and hard working throughout the week. He finished his robot on Wednesday, and I hope to see him add on the extensions to his robot or start a new project.

### **Marcus and Lucius-**

Marcus and Lucius were inseparable all week. They are ultimately best friends at camp. One day Lucius was sick, and Marcus was very worried about where he was. The two of them enjoy building together, playing outside, and eating snack and lunch together. Marcus and Lucius match each others energy very well. This being Marcus's second week, he teaches Lucius a lot and helps him.

### **Finnegan-**

Finnegan is a funny camper to have this week. He always has a bright smile on his face and is ready to build. During breaks Finn likes to play with our fidget toys in which he really likes our miniature lava toy. Finn is one of our younger campers in the WeDo group, however he is not afraid to play with the older kids.

### **Axel-**

This is Axel's second week at robotics camp and we over having him back! Axel is a great camper playing and talking to just about everyone. With the extra experience from the first week Axel

made his robot more independently than before... we loved to see this growth. Axel is working very hard all week to finish his robot in time for visiting!

**Luca-**

Luca's 3rd week at camp has been amazing! He has built several of the special robots from the portal, and is now working on the conveyor belt robot. He loves to show off his dance moves every day during our dance party. Luca stays consistently focused and puts a lot of effort into building robots. He was reunited with a friend from his school at camp-

**Sanaya**

Sanaya - Sanaya is so cheerful and a wonderful camper this week! She was best friends with Lucy, playing tag and walking together during hikes. Even with a cast on her arm, she finished her robot with little help. She especially loved going swimming and visiting the museum!

**JT** - JT was such an enthusiastic and fun camper this week! He always found ways to include others when playing and had such a positive attitude all the time! He stayed focused and worked hard on his factory robot, and always made sure to help others. He loved playing tag with others during snack or lunch and enjoyed all the hands-on exhibits at the museum!

**Oscar-**

**Oscar** is a resilient camper! His cast has definitely made it harder for him to find pieces and build his robot- nevertheless, he is a hard worker and keeps up with the pace of other campers. Oscar had made great progress in building his robot and had a great time going to the science museum on Tuesday! **Jackson** -

Jackson was such a kind and respectful camper this week! He was super focused on building his factory robot, finding pieces quickly. His favorite activity was playing tag with others during breaks and exploring the interactive parts of the science museum!

**Max-**

Max started as a shy camper but really opened up over the past few days! He has patiently worked hard on his pull robot. Max is a focused builder, respectful to other campers and instructors, and always listens carefully to instructions. He had a fun time going to the Science museum playing with the ping pong ball machine. He also loved swimming on Wednesday.

**George-**

George's second week at camp has been great! He is such a focused camper and has been building more challenging robots this week, with less help from instructors. He built a little bee that flies around a flower and a car- all within 3 days! George loved playing with the HotWheels and the ball maze thing at the science museum.

**Grace -**

Grace was such a joyful and energetic camper all week! She loved to play with Finnegan as they were inseparable playing their mirror game and playing tag with others! She worked hard building her factory robot and loved coding the conveyor belt. She loved swimming at the pool and was a wonderful camper this week!

**Lucy-**

Lucy is such a sweet and kind camper and loved spending time outside! She was very focused and loved building her cat robot. She was such a great friend with all the girls and loved to run around and play tag with everyone!

**Avi-**

Avi enjoyed spending his week with his twin Talia and friend Ollie. Avi is always looking out for Talia as they are attached by the hip. He enjoyed building next to her and enjoyed swimming too, as he passed the swim test!

### **Talia-**

This week Talia worked very hard on building her robot as she was very focused all week. She enjoyed swimming and visiting the science museum with Avi and Ollie. Talia is a bright soul and always brightens up everyone around her. She is very caring, especially to her brother Avi. Ollie-

Ollie enjoyed spending time with Talia and Avi, as he said he knows them from playing tennis together. Ollie is a very funny camper always making the group laugh. He worked very hard to complete his robot and did it very independently as well. Aria & Ester- Although Arian and Ester came to camp halfway through the week, they have acclimated well to the environment and other campers. They both started building cat robots and are very focused and work hard. They made a lot of progress in just one day! They followed instructions very well and had a great time going swimming on Wednesday.



## VEX-GO '24



### **Eric C.**

Eric really enjoyed creating his robot that included a moving mechanism. This allowed him to move objects around. He really liked playing in our robotics soccer matches where he worked with other campers as either a goalie or striker.

### **Erik S.**

Erik had a fun time at the science museum and was really focused on his robots. He socialized well with the other kids during recess time and was always collaborating with his tablemates on his engineering ideas.

### **Drew**

Drew created a scoop mechanism that allowed him to easily move the soccer ball around in our robotics soccer matches. He was always supportive of other campers and cheered everyone on while he waited his turn to play.

### **Niyaa**

Niyaa always worked hard during build time to create and code her robot. She enjoyed playing in the robotics soccer matches with others, and created a moving robot that had a triangular arm that could move up and down.

### **Shravan**

Shravan was very respectful to all the other campers throughout the week. He focused well during build time and worked hard through any problems he faced. Other campers enjoyed talking to him during lunch and recess.

### **Omar**

Omar worked diligently at another week of robotics camp. He was very considerate of his peers, and socialized during our visit to the science museum. He liked talking to others about what parts of the exhibits he found the most interesting.

### **Audrey**

Audrey really enjoyed the hands-on physics exhibit at the science museum. She was fascinated to watch the chain reaction move throughout the room. She worked well during build time and was always collaborating with others to share ideas.

### **Colin**

Colin really enjoyed the robotics soccer matches as he created a robot that was perfect for the goalie position. He engineered longer arms that gave his robot a longer wingspan. He was always complimentary with his peers and enjoyed the dinosaur exhibit at the science museum.

### **Zyad**

Z worked diligently this week to create a moving robot during his time at camp. He coded a robot that could move objects into a hoop to score points. He loved talking to others at lunch and recess and sharing his trip to Toronto later this week.

### **Ayden**

Ayden really enjoyed acting as a head referee and striker for our soccer matches. He really enjoyed the rock and gem exhibit at the science museum and was fascinated to learn about the evolution of dinosaurs. He was very respectful and focused well during work time.

### **Carter**

Carter was always open to sharing building plans. He worked hard during build time and socialized with the other campers during lunch. He collaborated well with Luke and collaborated on his ideas.

### **Helena**

Helena was very social this week at camp and became friends with many other campers. She worked hard during build time to create her robot and enjoyed swim day a lot. She was very respectful throughout the week and collaborated with her tablemates for new engineering ideas.

### **Marlowe**

Marlowe continued to work well with others for another week at camp. She always remained respectful and created a robot that danced with her code. She listened to directions well and led the recess tag game with the other campers.

### **Layla**

Layla worked hard to create a robot that could drive around with a lot of speed. She was conscientious and respectful, and played well with others during recess and lunch. She always listened to directions and added on creative pieces to her robot to make it more colorful.

### **Rosie**

Rosie was a very kind camper to everyone. She engineered her robots with patience and care and communicated her new ideas well to other campers and instructors. She was always looking to be creative and make her robot more fun.

### **Rishi**

Rishi worked really hard this week to create his driving robot and was extremely happy when he finished building it. He enjoyed playing with others during recess and our end of day dance parties. He persevered well through engineering challenges and saw his projects to the end.

### **Logan**

Logan worked hard all week to create his robot that had a moving hand. He was extremely focused and kind to all the other campers. He socialized well with the other campers during recess and lunch, and was always respectful to everyone.

### **Aiden**

Aiden really enjoyed going off the diving board during swim day. He worked hard to determine why a gear kept popping out of his moving claw robot. He participated in the robotics soccer matches and worked well with other campers to create a respectful and collaborative team effort.

### **Luke**

Luke was very creative this week. After finishing his robot, he drew pictures to give context to his creations. He worked well with Carter and collaborated on his various ideas. He was constantly respectful towards other campers.



## Vex-IQ Week 4 '24



Our Vex IQ instructors Mr. Bobby, Ms. Grace, and Mr. Vik have all been looking forward to starting a great week of camp! All of the campers made this week exceptional, with everyone learning how to construct and program their robots for the VEX IQ competition.

While a few students came in with prior experience with VEX IQ, most were newly introduced, and each individual rapidly grew their understanding.

This season's competition is called "Rapid Relay". The object of the game is to score points by clearing switches, passing balls, and scoring balls. Campers could build a robot from instructions, called "Swish," or create their own design. Robots were programmed using a graphic software called VEX-code IQ, which is based on the Python programming language. **Loriel and Maryam** teamed up and decided to build an intake robot with a ramp to convey balls. They worked well and quickly got their new robot working during the first few days of the week. After completing their robot, they practiced driving and showed great interest in autonomous coding.

**Aaryan and Garden** teamed up and built their version of a Swish robot. They added bumper sensors to the back of the robot, which can detect the goal structure. In addition to driving practice, they also experimented with a few other robot builds.



**Emmet and Russel** teamed up to build a unique pushbot that intakes the ball and dunks it into the low goal. Although they did not have an existing model to reference, they were diligent in problem-solving and successfully completed their build.

**Adelaide joined Avery.** They practiced with the robot that has a set of intake rollers that convey balls from the ground to the lower goal and helped others learn how Rapid Relay is played.

**Veer joined Neil** to improve on an intake robot from the previous week. They added additional intakes in the front to help get balls. In addition, they built a basebot and developed their autonomous coding skills by working with sensors.

**Zachary and Nishansh** teamed up and customized their Swish robot. To improve the build, they built a mechanism on the robot that can adjust the tension on the rubber bands.

After finishing their modifications, they practiced driving to perfect their skills.

**Alexander and Tony** paid careful attention to detail as they built their robot, a version of the Swish. They practiced launching balls from different distances and also helped other teams during the week.

**Harley, Luke, and Brett** formed a team. They tried different bases and looked at different concepts before building a hybrid robot with a Swish intake and arm, but a different base with a chain drive.

**Hadi and Zade** worked together to build their version of the Swish. Their robot showed good attention to detail with the wires nicely laid out. Their driving practice showed attention to robot placement to score accurately on the field.

**Joe and Lio** worked on a launcher robot that was inspired from a design from the last session. It uses a linkage to prime and release the launcher and a fast drive base. They also experimented with the tank drive and arcade drive settings before deciding to use the arcade drive for their driving.

**Max and Jack** were back together this week. They worked on a unique robot with a four-bar lift and a front intake. They also spent some time coding and remodeling their autonomous code to improve their skills score. Since they were returners, Max and Jack also found time to program a new robot, which used a vision sensor to detect and follow a ball.

At the Cranbrook Institute of Science on Tuesday, campers exhibited enthusiasm, and were interested in all the museum has to offer. On Wednesday, the campers enjoyed a break from robotics and the heat at the Natatorium.

As week four of camp comes to an end, the campers had a very enjoyable and successful time exploring both engineering and robotics, while most importantly being able to make new friends and fun memories. They will finish the week by participating in a VEX IQ Rapid Relay tournament, where they can demonstrate their robots in official Teamwork Challenge rounds and Skills runs.