Parents/Guardians,

Welcome back from fall break! We are excited to kick start our 2nd quarter and fall learning experiences. Here are some items to share with you.

**2nd Quarter PBLs**

**9th Grade – Robotics**

9th graders will begin their 2nd quarter PBL the week of October 21. This unit will focus on robotics, which is a great unit to apply all four of the STEM foundations – Science, Technology, Engineering and Mathematics. Students will participate in teams to design, build and code VEX robots. Teams will either be using VEX IQ robots (for students with no or limited experience in robotics) or VEX EDR robots (a more advanced robot for students with a higher degree of experience). Either way, all students will experience the foundation of robotics and create robotics manuals for their unique designs.

**10th Grade – Creative Discovery Museum – STEM Elementary Lessons**

Starting the day students return from fall break, 10th graders will begin working with staff from the Creative Discovery Museum on creating STEM learning experiences for elementary age students. The Creative Discovery Museum staff will work with students throughout the semester as they build lessons for implementation with elementary schools in the spring. Our goal this year is for our students to lead high quality STEM lessons for over 2000 elementary students. This is an awesome experience where STEM students not only dive deeper into truly unpacking STEM concepts and learning what high quality means for business partners, but also impacting our community through service.

**11th Grade – Business Partner Projects**

Kickoffs for the 11th grade business partner projects begin the first week back from fall break. Project choices for this quarter include:

---EPB: How might we create an amazing EPB holiday window using digital fabrication, moving components, and lights to captivate visitors of all ages? (Build Phase)

---Creative Discovery Museum: How might we create a fun, colorful, activity-based machine to get kids excited about coding?

---Children’s Hospital at Erlanger: How might we create a reliable BraveBot dispenser to help kids at Erlanger Hospital feel braver?
---Filler: How might we improve prosthetic product quality by designing a test tool to identify problems early?

---UTC: How might we develop data collection and analysis methods to uncover patterns to help prevent, reduce, and treat concussion injuries?

---STEM School: How might we design and build a College Access Center to inspire STEM students to discover and pursue post-secondary education opportunities?

12th Grade – Inventanooga Set for January 9

12th grade teams are working on their solutions and prototypes this quarter as they prepare for Inventanooga. Inventanooga is our senior entrepreneurship business pitch competition that will take place January 9. Student teams will compete over two days to finalize earning their STEM IV credit, as well as see which teams will compete in the finals of Inventanooga to have the chance to win Inventanooga 2019-20 Champion honors. To learn more about the student team solutions and inventions, don’t miss the STEM Showcase on Friday, December 6. All the 12th grade teams will be on display with their project plans that evening.

To Bring for STEM 101 – Oct 17

STEM 101 is a night designed to help parents learn about Google Classroom, Powerschool Grading, and Tech Safety. The night is organized such that parents work through different tasks to learn about each of these items. STEM staff will be there that night to help facilitate the activities. We also have all the activities posted on our website under the STEM 101 link under the For Parents tab. We will meet in the STEM School Commons starting at 6pm on Thursday, October 17th. Please note: your student is welcome to attend with you!

Items to bring (however, we can reset both if you do not bring them):

- Your student’s email and password
- Your student’s Edgenuity user id and password

National Honor Society Induction – Oct 21

The annual National Honor Society induction ceremony will take place on Monday night, October 21. Ms. Millard and the National Honor Society members have sent out the invitations to all new inductee students. We look forward to recognizing the new inductees that evening at
the Bond Auditorium across campus in the Humanities building (HUM). Any parents with questions can contact Anna Millard at millard_anna@hcde.org.

Website Highlight – STEM 101

Each month I will highlight a portion of the school website for you in these emails. We have a lot of information about our school that can be found at the link stemschool.hcde.org and this will provide the opportunity to emphasize a particular item for you.

This highlight is for the STEM 101 night upcoming. The STEM 101 activities that parents will complete are posted on the website by clicking the “For Parents” tab and the link titled “STEM 101”. On this page parents can see all the items involved with STEM 101 and have virtual access to the activities. This page provides parents the opportunity to learn about Powerschool grading, Google Classroom assignments, and device safety from anywhere. These are the exact activities parents will complete at the STEM 101 evening.

Thank you for your support!

Dr. Tony Donen
Principal