Parents/Guardians,

Our Teacher Meet and Greet is almost here! We are excited to see you this upcoming Monday night. In the meantime here are some items we wanted to share with you.

**Thursday, September 12 – Picture Day for 9th, 10th and 11th Grade**

STEM Underclassmen Picture Day will be Thursday, September 12th, from 9:30am-1:00pm outside of the Riverside Conference Room Hallway. This is for 9th, 10th, and 11th grade students only - not 12th graders. All students are pictured in their STEM uniform that day.

**Monday, September 16 at 6:30pm – STEM Teacher Meet and Greet (Formerly Open House)**

Our STEM School Teacher Meet and Greet will take place on Monday, September 16th at 6:30pm. The Meet and Greet is an opportunity for all parents to learn more about your student’s teachers, classroom activities, and student opportunities. Parents will be assigned to a classroom for the evening where grade level teachers will rotate in and out of the classroom to speak with parents about their student’s classes and school activities. Parents will also have the chance to purchase a House Shirt for their student that evening. Shirts will be sold for $10 each (cash only). The House Committee (student heads of Houses) are excited for you to take part in the evening they have created for you.

Please note that teacher talks will start promptly at 6:30pm for both 9th and 10th grade parents. The first rotation for 11th and 12th grade parents will be an opportunity for these parents to purchase a House Shirt. Don’t worry; we will have a list of what House your student is in (Staupers, Tesla, Einstein or Mirzakhani).

**PBLs in Action**

You may have heard your student use the term PBL and wonder what that is. Below in the website highlight, you can learn a lot about what a PBL is, how we plan the PBLs, and what our units look like. As for what you may see right now, here are some highlights at each grade level.

9th graders are currently building analog fabricated pinball machines. This PBL unit investigates the essential concepts underlying the principles of conservation of energy by calculating and discussing potential and kinetic energy in their machine. Students are applying creativity and critical thinking to collaboratively design and construct a model tabletop pinball game with original features through analog fabrication. Within the game, students are analyzing the slope and angles of elevation used to create movement. Students also are creating a storyline for their game, incorporating elements of the story in the design and gameplay for the pinball machine.

10th graders are currently reimagining and innovating a piece of art from the Hunter Museum of Art. Teams are researching an art piece, investigating the historical time period of the piece
as well as the influences of the art. Student products include reconstructing a portion of the artwork using mathematical transformations, investigating the Periodic Table, documentation of the creative process, and presenting their chosen piece in Spanish. At the Hunter museum, students act as docents and present how their digital interpretation has both a connection and influence, visual and non-visual, to the original piece.

11th graders are working on one of five PBLs with varied community and business partners. The five challenges include the following:
--How might we create an amazing EPB holiday window using digital fabrication, moving components, and lights to captivate visitors of all ages?
--How might we help WestRock design and fabricate an engaging 3D display using digital fabrication tools to showcase personal transportation devices for sporting goods displays?
--How might we develop an Internet of Things(IoT)-based solution to identify and track near misses to prevent accidents and improve safety in Kenco warehouses?
--How might we use Fab Lab capabilities to develop innovative solutions to improve customer experiences for Adventure Sports Innovation?
--How might we use an underground bunker as a blank canvas to create an amazing, dynamic, music-driven kid-friendly light show for the Haunted Trail?

12th graders are working on creating their own STEM business ideas. They are working through the entrepreneurship design cycle and currently finishing their stage of empathy. Ultimately, teams will pitch their businesses in our annual pitch competition that has been renamed to Inventanooga!

Website Highlight – PBL (Project Based Learning)

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 our PBLs. Information on what a PBL is can be found on the website by clicking the “About Us” tab and the link for “PBL – Project and Problem Based Learning”. This link will provide some quick information as to what a PBL is. You can also click on the link for “PBL – Curriculum Units” for viewing all varied documents we use in designing our PBL units. In the “PBL Unit Plans in 18-19” section, there is also a link that will take you to a Google Drive folder. This folder contains examples of PBL units completed by students in the 2018-19 year.

Vaping – National Issue

As you may have read recently in the news, vaping is becoming a growing health issue and even resulted in deaths of users. In order to stay informed on this issue, below is an excellent link we wanted to share with you about vaping. The article comes out of Yale University. Please note that vaping and vaping devices are not allowed at school, and consequences for vaping or having a device are administered for students who fall in this category. However, we also know
that you may not be very familiar with vaping, as it began growing in popularity only in the last few years. We encourage you to take some time to read the article at this link to learn more and have conversations with your student about vaping. https://www.yalemedicine.org/stories/teen-vaping

Thank you for your support!

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