York Elementary School Presents:
"Egg-citing STEM!" 2018-2019

https://www.youtube.com/watch?v=n63tGkSzNrc ("After the Fall" - Video)

**All engineering challenges are for any student who attends school at York Elementary School (Pre K - 5th Grade).

Students who participate in these challenges will celebrate in a special **parade** at PBIS assemblies. They will also be up for special prizes if they turn in all proper work and score in one of the top positions.

October - Create a helmet for "Eggbert." -- DUE October 31st
Constraints:
The helmet can not cover more than ½ of the egg.
It must be able to come and off easily.
Eggbert must remain intact and not cracked after being dropped.
**Engineering Grand Challenge - Reverse Engineer the brain (keeping brain safe)

November - Design a Wall for "Eggbert" to sit on to protect him from bullies. -- DUE Dec. 7th
Constraints:
Wall must stand up on its own.
Wall cannot have tape or anything sticky on it to hold Eggbert.
Wall cannot be bigger than one foot by one foot.
Eggbert will need to stand upright.
**Engineering Grand Challenge - Secure cyberbullying (developing a way to protect humans from others bullying them online)

January - Develop a paper "virtual reality" world for Eggbert to live in… (it should look like a book) (Minecraft/Fortnite world) -- Due Feb.1
Constraints:
Eggbert must be noticeable.
Virtual Reality world needs to have a least 3 scenes or settings.
Eggbert needs to have a community (shelter, food, and family/friends)
**Engineering Grand Challenge - Enhance Virtual Reality

February - E WEEK, Engineering Fair
E- Week - Engineering Week (February 17th-23rd, 2019)
Invent - Amazing

Engineering Fair - February 22nd, 2019
See flyer for more details
Roller Coaster - Egg tested

March - Invent a modern home for Eggbert and his friends. It needs to fit in a downtown vibe. (Modern, small, but functional) - Due March 29th, 2019
Constraint:
Eggbert and 2 friends must fit inside and have multiple spaces to visit.
Since Eggbert is an egg, design should include a resting space, place for activities, and a bathroom.
**No egg cartons are allowed in this project of any kind.
Engineering Grand Challenge - Restore and improve urban infrastructure

April / May - Create a contraption that Eggbert (a student) can push with clean water to take it to villages without access.   ***Due: May 31st, 2019 (Grand Prize will be awarded)
Constraints:
Contraption must be easy to push through different terrains (grass, leaves, asphalt)
Student must be able to push it with at least a gallon of water inside.
Contraption cannot use typical water containers (jugs, bowls, containers that normally have water)
Engineering Grand Challenge - Provide clean access to water.