Brick League

WEEKLY UPDATES

SPRING SESSION DATES

March 1, March 8, March 29, April 12, April 19, April 26
MAY 3 makeup date

DONT FORGET

- Tonight is our last session!
- We are working on a virtual option for over the summer.
- We are working on a summer camp location, please let us know if you have any ideas or leads.
- Homeschool session coming this fall

FEEDBACK

We are so thrilled you are joining us on this fun STEM adventure together. We hope this league delivers educational challenges and lifelong friendships. If you have any feedback please email us at heybrickleague@gmail.com

Imagine. Invent. Inspire.

MARBLE RUN CHALLENGE- 5/3/23

ENGINEERING DESIGN PROCESS

For each weeks challenge we will follow the engineering design process. This weeks challenge is to design a LEGO gravity marble run.
We will test your design by reaching criteria: at least 3 turns/levels, one fun element along the route, and a minimum of 6 inches tall.
Building a Marble Run from LEGO teaches the fundamental concepts of engineering in a practical way. Students should understand that gravity, spatial awareness, and measurement are necessary to understand during this build. Playing with the Marble Run is completely open-ended. There are lots of ways to build and construct a LEGO Marble Run, so the possibilities are endless. We also need to adapt and change our plans as needed while we build. When building a Marble Run, kids need to consider the space available, the amount or type of pieces they have, and what the goals are. These are all spatial skills that will help children when they're older, especially with math and science.

- **Ask**- define the problem:
  - create a marble run with **3** turns, **1** fun element. and a min of **6** inches tall.
- **Imagine**- brainstorm possible solutions
  - What factors should be considered here? Height, speed, gravity, spatial thinking, slopes, bends, twists, turns, etc.
- **Plan**- think! sketch! label!
  - pick a brainstorm idea, and plan your build
- **Create**- make a prototype and test it
  - if it fails, modify your plan. Find out what others have done and see what works for them.
- **Improve**-how can you modify your design to make it better?
  - make your conclusion, iterate.