



# Brick League

WEEKLY UPDATES

## SPRING SESSION DATES

March 1, March 8, March 29, April 12, April 19, April 26

## DONT FORGET

- We have our make up class scheduled for the week following our final session.
- We have some room shifts and schedule changes due to filming, please pay attention to emails and texts in the upcoming weeks.
- Please feel free to utilize our feedback forum available on our website after each session. We value your experience and want to meet needs and make accommodations as needed for all.

## 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](mailto:heybrickleague@gmail.com)

Imagine. Invent. Inspire.



## STARSHIP ROCKET 4/19/23

### ENGINEERING DESIGN PROCESS

For each weeks challenge we will follow the engineering design process. This weeks challenge is to design a LEGO rocket to honor SpaceX launch of Starship and Super Heavy Rocket!

**We will test your design by reaching criteria: must weigh a maximum 4 ounces and height is age times two.**

We will build a rocket to resemble the Space X Starship and Super Heavy Rocket that launched today! Starship is a super heavy-lift launch vehicle by SpaceX. Standing at 390 ft tall, it is the tallest and most powerful launch vehicle ever built, and the first intended to be fully reusable. This offers cheaper ways to fly heavier payloads into space which expands our space exploration.

After this lesson, students should be able to:

Our goal is to create a minimum height and maximum weight for our own SpaceX Starship Heavy Rockets!

- **Ask-** define the problem:
- create a rocket with a max weight of 4 ounces, and min height of builders age times two.
- **Imagine-** brainstorm possible solutions
- What factors should be considered here? Foundation. Height, Weight/Materials used.
- **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. Did it make it? Was the tension too much or too little? Your angle incorrect for the path?
- **Improve-**how can you modify your design to make it better?
- make your conclusion, iterate.