



NASA's Commercial Crew Program Virtual Reality 360 Tour

Preparing to Launch America

Video link: <https://youtu.be/SUYuxZSaeH0>

Description

Get ready for an immersive virtual reality (VR) tour of NASA's Commercial Crew Program (CCP)! A NASA communications specialist provides an overview of the CCP while relaying historical insights and reviewing the CCP's vehicles and commercial partnerships with Boeing and SpaceX. Visit the facilities where new spacecraft are being built and the historical launch complexes where American astronauts are launching once again from NASA's Space Coast.



Next Gen STEM and the Commercial Crew Program

The CCP (<https://nasa.gov/exploration/commercial/crew/index.html>) plays an integral role in NASA's deep space exploration goals as it works with commercial partners to launch astronauts to the International Space Station from U.S. soil on American-built rockets and spacecraft.

NASA's Next Gen STEM CCP project is introducing immersive technology into classrooms. The 360° videos and VR field trips take students along on a journey into the heart of the CCP without leaving the classroom. The virtual field trips to NASA centers and the Boeing and SpaceX facilities showcase where next-generation, human-rated spacecraft and rockets are being developed and tested.

Follow this link to access NASA's CCP virtual field trips:

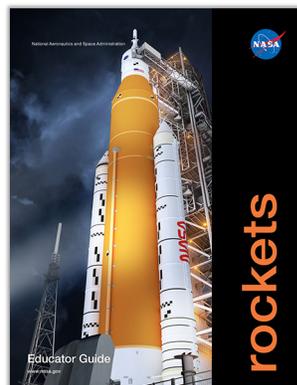
<https://www.youtube.com/playlist?list=PLTUZypZ67cdumL1V4yFWifoxwjb3rDCzb>

Build and Launch a Foam Rocket

The engineering design process (EDP) is crucial to mission success at NASA. The EDP is an iterative process involving a series of steps that engineers use to guide them as they solve problems: Ask, Imagine, Plan, Create, Test, Improve, and Share.

In this activity, students are challenged to design and build rockets made from pipe insulating foam and use them to investigate the trajectory relationship between launch angle and range in a controlled investigation.

<https://www.jpl.nasa.gov/edu/teach/activity/foam-rocket/>



Activity

Build and Launch a Foam Rocket

Grades

2 to 8

Duration

60 minutes

Subjects

- Engineering and Technology
- Measurement

Motion and Forces Standards

Next Generation STEM Science Standards (NGSS)

K-PS2-1

3-PS2-2

MS-ETS1-1

MS-ETS1-3

MS-ETS1-4

Common Core State Standards (CCSS) for Mathematics

4.MD.C.6

2.MD.A.1

NASA STEM Engagement

<https://nasa.gov/stem/nextgenstem/index.html>