



Space Science Programming Resources

STAR_Net hands-on activities were developed for library staff to use to provide STEM programs for different age groups. The activities rely on inexpensive materials, were designed to be easy to do, and can be flexibly implemented. Library and STEM professionals provided guidance in the development of each activity.



Planet Party

Visitors view planets, the Moon, and stars in the sky with the naked eye and binoculars or telescopes. Planning resources and tips for partnering with a local astronomical society are provided.

Credit: Halfblue/Wikipedia



Strange New Planet

In this simulation of space exploration, participants plan and carry out five missions to a “planet” and communicate their discoveries to their family or a friend.



Jump to Jupiter

Participants jump through a course from the grapefruit-sized “Sun,” past poppy-seed-sized “Earth,” and on to marble-sized “Jupiter” — and beyond! By counting the jumps needed to reach each object, children experience first-hand the vast scale of our solar system.

Credit: Enid Costley, Library of Virginia



[Trip to Mars](#)

Game players journey to Mars and at every step of their mission, from launch to a safe return to Earth, they are faced with critical decisions. By rolling dice, the participants determine their success — or failure — at every stage of exploration.



[Build a Space Colony](#)

Participants design technology to provide air to breathe, plentiful food, shielding from ultraviolet light, power, and more for space explorers. They construct a model of their technology from craft materials and incorporate it with other teams' designs into a model space colony

Credit: "Mooncolony" by NASA/SAIC/Pat Rawlings

[Teacher's Guide](#)

Download a four-page *Space Science Programming Teacher's Guide* and customize it with your library's information before disseminating it to local schools. Developed in collaboration with teachers, the guide provides information for connecting *STAR_Net* space science programs with classroom learning.