

## Design a Rover Challenge

Use the links below to research the history of moon exploration and the design of the lunar rover.

<https://moon.nasa.gov/exploration/history/>

<https://www.youtube.com/watch?v=zsftnWljYnA>

What are some of the characteristics of the lunar rover that make it ideal for the unique challenges of exploring on the surface of the moon?

Next, research a planet in our solar system that has yet to be explored using a rover vehicle. Design a 3D model of a rover, considering the specific and unique characteristics of the planet you chose.

Compare/contrast your rover to the existing moon rover. How are they the same? How are they different?

Links for researching planets in our solar system:

<https://spaceplace.nasa.gov/menu/solar-system/>

<https://nineplanets.org/kids/>

Sketch your planet rover and be sure to label the parts/materials:

Use your sketch to help you create a 3D model of your design. Suggested materials include cardboard, drinking straws, lifesavers (or other round candy), pencils, toothpicks, Legos, bottle lids, milk jugs etc.

Bonus: Write a creative story of your adventures exploring the planet in your rover. How far will you need to travel to reach the planet? How long will it take? What will you see/experience when you begin to explore the surface of your planet?