



BitBots + Space

Moon village in 4 steps

Grades k-3



+



Space News

Grown ups are designing a space [village on the moon](#). They are designing and making models for the houses, transportation and everything else we need in space. They need our help to understand what we need when travelling to space. How would your house look like? Your spaceship? Your garden? Your communication device?

Space Villages in process..



Class 1

Transportation on the Moon

Rolling Wheels?

Will cars have wheels? Will they hover?

Flying Objects?

Will there be airplanes or spaceships?

Or something completely new?

A train that flies?



Building Timeline:

During class:

- **Build for 30 min** during class and make a quick sketch of some vehicles for the moon village

In your own time:

- **Take them apart and make them better** (if you think they need improvement)
 - **Make different models of space vehicles**
 - **Design the roads** or other ways you think these vehicles should move.

Reading Material:

We would like the kids to focus over the week on research as well as building models:

Honet History: The Race to Space

When the Moon Forgot (by Jimmy Liao)

Class 2

Housing on the Moon

How will your house on the moon look like?

Do houses on the moon have windows?

Will there be garages for your vehicles?

Will there be elevators?

How do the doors look like?

Things to consider when building:

Air on the moon.

On the **moon**, there's no **air** to breathe, no breezes to make the flags planted there by the Apollo astronauts flutter. However, there is a very, very thin layer of gases on the **lunar** surface that can almost be called **an atmosphere**. Technically, it's considered an exosphere.

Building Timeline:

During class:

- **Build for 30 min** during class and make a quick sketch of some houses for the moon village

In your own time:

- **Take them apart and make them better** (if you think they need improvement)
 - **Make different models of space vehicles**
 - **Design the roads** or other ways you think these vehicles should move.

Reading Material:

Reaching for the Moon (by [Buzz Aldrin](#))



Class 3

Schools, Stores and Workspaces on the Moon

How would you make your school the best school ever?

What do you want to sell at stores and how would that look like?

Will objects be delivered by drones or will you go to the store?

Things to consider:

Travel Time from Earth to Moon

about 3 days

How long does it take to travel to the Moon? It takes **about 3 days** for a spacecraft to reach the Moon. During that time a spacecraft travels at least 240,000 miles (386,400 kilometers) which is the distance between Earth and the Moon. The specific distance depends on the specific path chosen.

Building Timeline:

During class:

- **Build for 30 min** during class and make a quick 3 dimensional sketch of a schools or another building

In your own time:

- **Take them apart and make them better** (if you think they need improvement)
 - **Make different models of different spaces**
 - **Design as many different buildings as you want.**



Class 4

Sports and Entertainment on the Moon

How will your public life on the moon look like?

Is there going to be a movie theater?

A basketball court?

A playground?

A fun park?

Things to consider:

Who were the last and first people traveling to the Moon

Neil Armstrong and **Edwin "Buzz" Aldrin** were the first of 12 human beings who walked on the Moon. Four of America's moonwalkers are still alive: **Aldrin** (Apollo 11), David Scott (Apollo 15), Charles Duke (Apollo 16) and Harrison Schmitt (Apollo 17)

Building Timeline:

During class:

- **Build for 30 min** during class and make a quick 3 dimensional sketch of a playground or another public space.

In your own time:

- **Take them apart and make them better** (if you think they need improvement)
 - **Make different models of different spaces**
 - **Design as many different buildings as you want.**

