

Build a World

Students will create an imaginary colony to help represent the services that nature provides for us all.

Any materials at hand!

Grades: 3-7 (\$ 15-60+ minutes

Introduction

Imagine you are an "interstellar colonist", on a mission to settle the newly discovered "planet Zork" (of course you might want to come up with your own name for this new planet).

Zork has no food, no water, and is a steamy 60 degrees Celsius - too hot to survive outside for humans. What will you bring on your mission to build a self-contained colony to allow you and others to survive, and for your mission to succeed? What services does nature provide us here on Earth that could help you survive on this inhospitable planet? Food, shelter, and water are a great start, but how will the nutrients be cycled and the wastes broken down?

What natural systems could help make things on Zork be more comfortable? What else do natural systems on this Earth of ours provide that allows civilization to prosper?

Resources

Here is a **list of nature's services** provided by Earth that allow life to exist on our amazing planet. Use this to come up with some of the requirements for the long-term survival of your colony.

Activity

Set up a small area in which to build your planetary colony. You will be building a micro-version of a colony (a small settlement or town) on a planet that has no natural resources, and a severe and harsh environment so you will need to survive inside a selfcontained planetary colony.

Materials: Use any materials at hand! If you are outdoors, collect pinecones, sticks, moss, bark, needles, leaves, and whatever else you can find to build your model colony. If you are building your colony indoors, simply use items you find around your house or your room. LEGO, Playmobil, tupperware (ask your parents first!). Empty, clean



Mariha Quinn with her Zorkian colony, complete with a greenhouse, water tank, library, houses, and art gallery.

containers or paper from the recycling, playing cards to make card shelters - the only limit is your imagination!

Think about:

- The critical needs for life what will you bring on your spaceship to help provide food, water, shelter, and air?
- Think about some of the other services from the **Nature's Services List**: decomposition, recycling, pollination, inspiration, food production. How can you build these services into the design of your new planet?
- Try to build in as many important services into your habitat as possible!

We would love to see a photo of your Zorkian Colony on our Facebook page.