

1st Grade-Space Exploration with Snoopy (Part 3- Hydroponics)



Essential Question: What challenges would astronauts face living on the moon?

What challenges will Snoopy face living on the moon? What will he eat? Where will he get his food? How will microgravity affect his bones and what does he need to do to make sure he is in tip top astronaut shape?

- 1-ESS1-1. Use observations of the sun, moon, and stars to describe patterns that can be predicted.
- 1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive
- K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
- K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.







Materials provided by the teacher for each student: One empty disposable water type bottle, two paper towels, bean seed (or seed of your choice)

Advanced preparation:

Have students draw a cutting line around their bottle as shown in the picture. Classroom teacher will need an exacto-knife or something sharp to poke a hole in the side of the bottles to make a place for kids to insert their scissors. Students will need to cut on the line around their bottle to make two pieces. Yes, they can cut it themselves

Program Connection Information

Please use an external microphone (conference style) rather than the integrated one in the computer for the audio for your class and locate it centrally in the room. It can be difficult for the Greenbush teacher to hear the students using the computer microphone and therefore it reduces the interactive nature of the lesson. It is fine to use the computer webcam for your video source.

All classes will take place using Zoom desktop video. If your building is already set up to use a desktop video application with a computer, simply open a browser and enter https://greenbush.zoom.us/j/5337714346 in the URL space. You may need to download Zoom launcher software (free download) if you don't already have it. This needs to be done in advance of the lesson.

If using a Polycom video conferencing unit (or any legacy type video conferencing unit) to connect to a ZOOM conference, make sure the unit is in "encrypted mode" then dial the following IP on the internet:162.255.37.11 or 162.255.36.11 and once connected, they will ask for a MEETING ID: enter 533 771 4346 (for Sheila at Science Center).

It's always a good idea to touch base with your district technology facilitator prior to your program to make sure all systems/equipment are in place and operational and that there aren't any firewalls in place that might prevent you from connecting to Zoom.

Once you connect, you will enter a Zoom waiting room. Your Greenbush teacher will admit you into the final meeting room.

If you have questions, please call Sheila Sandford at Greenbush, 620-724-6281, or email at sheila.sandford@greenbush.org (best method of contact).