

Northwest Earth and Space Sciences Pipeline

University of Washington

Box 352400
Seattle, WA
98195-2400

206-543-1943
nwessp@uw.edu
nwessp.org

nwessp @



Northwest Earth and Space Sciences Pipeline is funded by the NASA Science Mission Directorate, NASA Award NNX16AB86A.



Educator PD — October 8–9, 2021

Clock hours

Pre-work = 5 clock hours

Half day (day 1 — October 8) = 3 clock hours

4–7 p.m.

Home-fun = 1 clock hour

Full day (day 2 — October 9) = 6 clock hours

8:30–11:30 a.m. / 1-hour lunch break / 12:30–3:30 p.m.

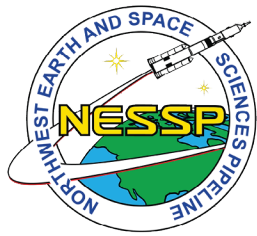
Total = 15 STEM Clock Hours

Pre-Work

- Assemble the robot
- Check robot battery level
- Have your computer ready (pre-loaded with LEGO education software)
- Charge the drone
- Review the Mission Development Log (MDL) — You'll be creating your own MDL through the workshop, so have your copy (analog or digital!) at hand when we meet on Friday!
 - [Click here for the Google Doc version](#)
 - [Click here to download the Microsoft Word version](#)
- Read "[Why icy worlds?](#)" Be prepared to share around these prompts:
 - What questions do you have?
 - What questions do you think your students might have after reading this?

To receive your stipend

1. Return your payment information form (sent via email with the agenda) to djcolvin@uw.edu ASAP (if you have not already).
2. [Make an appointment with](#) Daniel to relay your Social Security Number, which is required to receive a stipend. Slots are available Friday, October 8, and Monday, October 11.



Northwest Earth and Space Sciences Pipeline

University of Washington

Box 352400
Seattle, WA
98195-2400

206-543-1943
nwessp@uw.edu
nwessp.org

nwessp @



Northwest Earth and Space Sciences Pipeline is funded by the NASA Science Mission Directorate, NASA Award NNX16AB86A.

DAY 1 — Friday, October 8, 2021		
Time	Schedule (in PDT)	Description
15 min	4–4:15 p.m.	Introductions and Logistics Expectations for Learning
15 min	4:15–4:30 p.m.	Why Icy Worlds
10 min	4:30–4:40 p.m.	Ways to Participate in ROADS on Icy Worlds
20 min	4:40–5 p.m.	Important VOCAB! Structure of <u>Companion Course</u> / Structure of <u>Challenge</u>
30 min	5–5:30 p.m.	Challenge Map (Unit 1 Lesson 5) Last 3 minutes — record in your MDL
15 min	5:30–5:45 p.m.	BREAK (Optional activity —measure an 8'x10' rectangle to visualize the challenge map's size!) Come back from break with your robot!
15 min	6:00–6:15 p.m.	Intro to Robotics (Unit 4 Lesson 3)
30 min	6:15–6:45 p.m.	Robotics
20 min	6:45–7 p.m.	Home-Fun Explanation Robot fun time
5 min		Last 5 minutes: record in your MDL

Home-fun

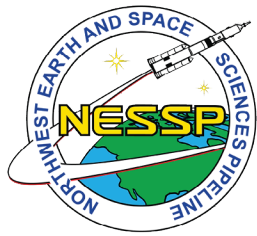
Choose one of these lessons to read before tomorrow morning:

- Unit 1 Lesson 3
- Unit 2 Lesson 2
- Unit 3 Lesson 1

Think about these questions:

- What is something you would want to point out to a teacher who didn't read this lesson?
- What questions do you have about this lesson?
- What modifications might you make so that this lesson is better for you and your students?





Northwest Earth and Space Sciences Pipeline

**University of
Washington**

Box 352400
Seattle, WA
98195-2400

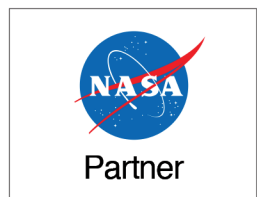
206-543-1943
nwessp@uw.edu
nwessp.org

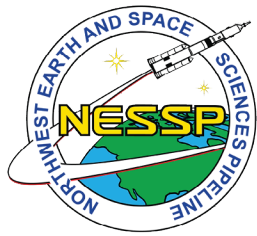
nwessp @



DAY 2 — Saturday, October 9, 2021 (morning)		
Time	Schedule (in PDT)	Description
30 min	8:30–9 a.m.	Welcome Back and Robot Wrap Up Last 3 minutes: record in your MDL
45 min	9–9:45 a.m.	Context setting for map: Geology (Unit 2). New part: Density (Unit 2, Lessons 1 and 2)
15 min	9:45–10 a.m.	BREAK?
40 min	10–10:40 a.m.	Extremophiles and Limits of Life (Unit 3) Last 3 minutes — record in your MDL
20 min	10:40–11 a.m.	Look back at everything you wrote in your MDL today. Connections between activities? Questions about icy worlds Questions about student MDLs
30 min	11–11:30 a.m.	End of morning Q+A Tasks for after lunch <ul style="list-style-type: none"> • Home-Fun discussion! • Bring your charged drone
60 min	11:30 a.m. – 12:30 p.m.	LUNCH

Northwest Earth and Space Sciences Pipeline is funded by the NASA Science Mission Directorate, NASA Award NNX16AB86A.





Northwest Earth and Space Sciences Pipeline

University of Washington

Box 352400
Seattle, WA
98195-2400

206-543-1943
nwessp@uw.edu
nwessp.org

nwessp @



DAY 2 — Saturday, October 9, 2021 (afternoon)		
Time	Schedule (in PDT)	Description
20 min	12:30–12:50 p.m.	Breakout rooms of choice to capture the prompts from the home-fun
20 min	12:50–1:10 p.m.	Respond to questions Last 3 minutes: record in your MDL
15 min	1:10–1:25 p.m.	Drone Intro
30 min	1:25–1:55 p.m.	Extended break and drone practice time
10 min	1:55–2:05 p.m.	Drone Skills Showcase Record in your MDL
15 min	2:05–2:20 p.m.	Challenge Zoom Out
15 min	2:20–2:35 p.m.	How do you get credit?
10 min	2:35–2:45 p.m.	Who is Horizon and what do they do Horizon Survey: Please do before you leave
45 min	2:45–3:30 p.m.	Wrap up Q+A; Stipend info

Northwest Earth and Space Sciences Pipeline is funded by the NASA Science Mission Directorate, NASA Award NNX16AB86A.

Disclaimer statement

"The material contained in this document is based upon work supported by a National Aeronautics and Space Administration (NASA) grant or cooperative agreement. Any opinions, findings, conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of NASA."

