



PennState
Outreach

Readiness
Institute

Hope Moonshot Lesson Plan

*"If our hopes can make it to the moon,
then our hopes can become true on Earth."*

Justin Aglio, Ed.D., senior director, Readiness Institute at Penn State

Our goal is to collect messages of hope from students, educators, and members of the global community and then send those messages to the moon to create a lasting reminder that the hopes of today can become the reality of tomorrow.

The Hope Moonshot is presented by the [Readiness Institute at Penn State](#) and [Global Moonshots in Education](#).

Submitted hopes will be saved on an SD card that will be placed in a **durable storage capsule** created for space travel. In 2021, this capsule will be **delivered to the moon's surface** on the Peregrine Lander, built by [Astrobotic Technology, Inc.](#), a space robotics company based in Pittsburgh, Pennsylvania.

Check the [Hope Moonshot webpage](#) regularly after the **submission deadline of March 1, 2021**, for:

- mission updates from Astrobotic
- information about the virtual launch party in 2021
- mission images and videos from Astrobotic
- a printable certificate commemorating your participation

*"Our mission is to enable every person
to reach their fullest potential."*

Esther Wojcicki, Ph.D., CEO and founder, Global Moonshots in Education

Materials

- videos (*provided*)
- presentation deck (*provided*)
- submission form (*provided*)
- paper, markers, and pencils
- internet-connected computer, smartphone, or tablet

Key Vocabulary

Hope — a feeling of expectation and desire for a certain thing to happen

Moonshot — an extremely ambitious project undertaken to achieve a monumental goal

Activities (25–48 minutes)

Grades K–5

(Note: you may skip directly to activity 8 to submit hope.)

1. **Show:** video introduction (3 minutes)
2. **Ask:** what does the word “hope” mean to you? (2–5 minutes)
3. **Show:** video — National Geographic Kids (3 minutes)
4. **Discuss:** what do you think the astronauts hoped for when they traveled to the moon? Why? (2–3 minutes)
5. **Explain:** presentation deck (7–12 minutes)
6. **Think:** brainstorm individually about your hope by writing it down, drawing a picture, or thinking to yourself. (2–6 minutes)
7. **Pair:** share your hope with a partner or group. (2–6 minutes)
8. **Share:** submit your hope. (2–6 minutes)
Deadline — March 1, 2021

Grades 6–12

(Note: you may skip directly to activity 7 to submit hope.)

1. **Show:** video introduction (3 minutes)
2. **Ask:** what does the word “hope” mean to you? (2–5 minutes)
3. **Show:** video — JFK’s Moonshot: Then and Now (3 minutes)
4. **Explain:** presentation deck (7–12 minutes)
5. **Think:** brainstorm individually about your hope by writing it down, drawing a picture, or thinking to yourself. (2–6 minutes)
6. **Pair:** share your hope with a partner or group. (2–6 minutes)
7. **Share:** submit your hope. (2–6 minutes)
Deadline — March 1, 2021
8. **Optional:** share your hope on social media with the hashtag **#HopeMoonshot**. (2–6 minutes)