

CineSpace 2021-2022 Activity Guide



Waking Dream (6:45 minutes)

FIRST PLACE

Isil Bengi and Laurens Heijs, Belgium



Aylin is a 30-year-old woman who escapes her oppressive life through a fantasy world in space; her only friend is a goldfish. One day she receives a job offer over the phone, and despite resistance from her verbally abusive mother, Aylin decides to move on and start a new life.

1. Illustrate a scene of yourself as an astronaut. If that fantasy doesn't fit your personality, illustrate yourself in another far-reaching career that might yet be realized for you in the future.
2. Read more about the real life as an astronaut using these websites:
<https://www.dkfindout.com/us/space/life-in-space/>
<http://www.spacepedia.com/space-exploration/human-spaceflight/life-in-space/>
And this video
https://www.youtube.com/watch?v=glDOR_iYy5U (*Or we could use the NASA video:
<https://www.youtube.com/watch?v=3VoeRAR0YgE>)
Then write three sentences describing what you would love about being an astronaut, and three sentences describing what you imagine you would hate. Elaborate on one item in each list, explaining in detail why you feel the way you do.
3. Aylin uses fantasy to escape, but also as a creative process. Describe in detail one way that you have used fantasy as a way to cope, and how it helped you to move your life forward, during the pandemic. Explain how you will carry that self-knowledge into your post-pandemic life.

Test, Fail, Test Again (3:06 minutes)

SECOND PLACE

Tim Hamilton, New Zealand



A young man questions what it means to be an explorer, imitating the qualities of astronauts. He builds model rockets and tests them, hoping one day he might be able to launch himself into space.

1. Build your own model space capsule replica (from sheets or cardboard or other found materials) and sit inside. Describe how being inside your model capsule changes your thinking, and list three ideas that your thoughts lead you to.
2. Check out this video in which a NASA engineer explains rocket science:
<https://www.youtube.com/watch?v=Q65H3W13xWo&list=PLTUZypZ67cdutqjndBUWMXLBs5PO>

[nUmDT&index=19](#) Then make a “rocket” using a film canister (or other similar container) with water and an fizzing antacid tablet inside. <https://www.youtube.com/watch?v=VvcKogZGBkA> Perform an experiment to determine how much of a tablet to use as well as how much water to achieve maximum height with your rocket. Share your findings by writing a paragraph summarizing what you learned. (NOTE: Unlike this DIY Host, be sure to wear safety glasses!)

OR build a replica of a NASA rocket, with these instructions (no it doesn't fly 😞):

https://www.nasa.gov/sites/default/files/atoms/files/0772_diy_sls_-_artemis_10222020_with_pics.pdf

3. List three ways in which pretending or imagining the life of a scientist or an explorer might actually help you become a better scientist or explorer. Describe in detail the importance of each of these qualities in the field of science.

Prove the Impossible (2:50 minutes)

THIRD PLACE

Louise Nessralla, United States



In 2019, the first all-female spacewalk was conducted. The plans to get more women into space are currently in motion through the Artemis Program. This film introduces us to female space explorers, from pioneer scientists to newly inducted astronaut candidates.

1. Have you ever considered working for the National Aeronautics and Space Administration (NASA)? Draw an illustration of the important role you might occupy in the pursuit of science – either on Earth, or in space – including the tools you might need.
2. Women have faced many obstacles to becoming astronauts – down to the simple fact that NASA produced an inadequate number of spacesuits in a suitable size for women. Think of another career in which women faced many challenges to success; list the obstacles that women faced in breaking into that career.

3. Engineers who designed spacesuits had to be creative, imaginative, and practical to create the first suits for spaceflight or moonwalks. Design a space glove for use in one of NASA's upcoming missions by visiting this website. Here is one example:

<https://www.sciencefriday.com/educational-resources/design-a-glove-fit-for-an-astronaut/>

Future Galaxy Explorer (6:00 minutes)

BEST EDUCATIONAL FILM on SPACE and SCIENCE

Adolpho Navarro and Amy Navarro, United States



A story from the point of view of an 8-year-old girl training to become a future astronaut in hopes of being the first female to step foot on the Moon. It's a story about how all things are possible no matter the challenge.

1. Create your own "spacesuit" with items from your wardrobe and found material. Read about what it feels like to walk without the laws of gravity that prevail on Earth. Using a smartphone or other camera, ask someone to film you walking in "space" and describe what feels different about walking in that world while the camera rolls.
2. How does the life of 8-year-old in this film compare with the life of 30-year-old Aylin? (from the first film WAKING DREAM)? List three ways in which their lives are the same, and three ways in which their lives differ. What do you conclude from these similarities/differences? Explain your thoughts about the two characters, and whether you think they will succeed.

The Future Is Female (3:57 minutes)

FILM THAT BEST DEPICTS UNITY AND INCLUSION IN SCIENCE

Ella Saini, Canada



The Future is Female talks about the brilliant women at NASA that are working on the Artemis Project and the first all-female spacewalk.

1. Create a collage that depicts inclusion in science careers – people from different backgrounds, different ethnic groups and genders, each actively pursuing different science-based careers.
2. Research a woman who has had an impact on your life, or has been significant inspiration. Write a brief biography, and describe how her work continues to matter to you.
3. Research the Artemis Missions, and describe NASA's goals for these space missions. Describe how these missions help all women and persons of color back on Earth.

[The Phobos Bounce](#) (5:52 minutes)

Eric Whitfield, United States



An intrepid astronaut takes a 97-million-mile road trip off the beaten path to Mars, where he discovers an unexpected inhabitant.

1. Have you ever been on a road trip when you ended up in an unintended place? Describe it with words and pictures. Were you scared? What was the outcome?
2. Research the reasons that humans cannot survive life on Mars. Then list the special modifications that the man in the geodesic dome must have installed to survive.
3. Write the next chapter in this story about the astronaut flying through space in his convertible car – what happens when the astronaut and the man in the dome meet? Was it friendly or unfriendly? Create a whole new ending to this story.

Comet Time Machine (5:00 minutes)

Jared Hedges, United States

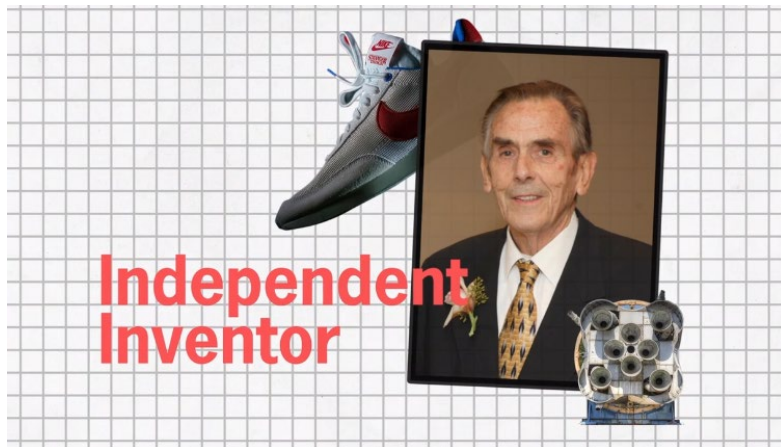


Using a 1983 interview of NASA Senior Scientist Dr. Nancy Boggess, and a variety of archival footage, this filmmaker contemplates the nature of comets, space, time, and human origins.

1. Dr. Nancy imagines a lot about comets, some of which ends up coming true. Name something you would like to see happen in the future, something that isn't yet scientifically possible or maybe even wildly fantastical - and draw a picture of that wished-for outcome.
2. The size of a comet or meteorite, as well as the composition of the soil it lands in, can make a difference in the size and depth of the crater that is made. Visit this website and perform either the main experiment or one of the variations listed at the end to better understand how craters are created. https://www.sciencebuddies.org/science-fair-projects/project-ideas/Astro_p010/astronomy/craters-and-meteorites
3. There's a lot of discussion lately about comets falling to Earth, but comets and meteoroids have been crashing around the galaxy for millions of years - and some of them have even landed on Earth. Check out this map: (<https://sites.wustl.edu/meteoritesite/items/meteorites-in-the-united-states/>) Then write a fictional story of what happens when a meteorite lands in your community.

Apollo to Air: How NASA Engineer Frank Rudy Shaped Modern Athletic Footwear (5:00 minutes)

Ashwin Mathews, United States



How NASA Apollo Engineer Frank Rudy retired to become an independent inventor, and reshaped modern athletic footwear using tech he learned at NASA.

1. Be like Rudy and design a new shoe... beginning with a drawing. What materials might make the sole of your shoe cushy and comfortable, or is your shoe designed for a special purpose? Make a prototype, or draw a detailed picture of the shoe, and explain why your material will work.
2. By the time he died, Rudy owned countless patents and designs, and was a wealthy man, but he was turned down many times by companies who doubted his new shoe technology. Think of a time when somebody doubted your own good idea, and describe what you did to overcome those obstacles.
3. Some people argue that we should not be spending billions of dollars on space exploration when we have so many people living in poverty on Earth. Read these articles,

<https://www.nasa.gov/specials/60counting/tech.html>

<https://science.howstuffworks.com/innovation/inventions/top-5-nasa-inventions.htm>

and write a paper supporting or refuting space exploration as a means to creating a better life here on Earth.

Perseverance (5:29 minutes) -

Ryan Larkin, United States



Astronomy student Allie is on the verge of failing Astronomy due to remote learning burnout, but she agrees to tutoring only after her teacher Ms. Hoffman reveals that she's experiencing many of the same issues.

1. Both student and teacher are having a difficult time with their responsibilities of remote learning. List two things that you dislike about remote learning; list two things you suppose your teachers dislike most about remote learning. Finally, list what you like BEST about remote learning.
2. This film's title is borrowed from the Mars Rover named Perseverance. What are two actions that Allie takes that demonstrate her perseverance. What two things does Ms. Hoffman do to prove her own perseverance. Who did you sympathize with the most?

[The Day the Earth Smiled](#) (3:13 minutes)

Shrawani Pal, India



Magnificent NASA footage and animations are used to describe the beginning of time, explores the Big Bang, and questions whether we really are alone in this universe.

1. This narrator suggests that maybe there are other planets out there with life on them. Draw one of those undiscovered planets, including what the creatures and other life there might look like. Write a detailed description of the landscape and/ or one of the creatures you drew.
2. The definition of a simile is: “a figure of speech involving the comparison of one thing with another thing of a different kind, used to make a description more emphatic or vivid.” The narrator uses simile in the script, such as describing the Big Bang as “hotter than 90’s Leo DiCaprio,” or the swift increase of the universe as “a growth spurt faster than the one you expected the summer before junior year.”
Now finish this sentence with a simile: *This Covid-19 Pandemic is as maddening as...*

[Halley’s Comet](#) (3:17 minutes)
Henry DaCosta, United States



The visit from Halley’s Comet is a once-in-a-generation event that spans all of time, leading humans to wonder about the universe and all of its mysteries. Halley will return again in 2061 – will we let this celestial body teach us, or will we wonder why we didn’t do more?

1. Figure out how old you will be in 2061, then describe the life that you imagine at that age, and what you hope will have changed on Earth regarding our world and climate change.
2. Halley’s Comet will be here again in less than forty years. List three important environmental policies that must happen, if we hope that our planet will survive climate change. How would you begin to act now, to see these policy changes?
3. Most people think that the tail of a comet always trails behind the comet, but this is not true. Research how the tail of a comet is formed. Then draw a diagram, or make a short video, describing how the tail can sometimes lead the comet rather than follow it.

[Pale Blue Dot](#) (3:25 minutes)
Paul Breslin, United States



As the Earth warms, institutions fail, and existential threats mount, these words that Carl Sagan spoke decades ago are more prophetic than ever. In this film, people of different ages, ethnicities, genders and backgrounds to re-read *The Pale Blue Dot*, paired with NASA archival historical footage.

1. Does this film make you feel small? The photo of Earth (which is the pale blue dot in this speech) was taken billions of miles away, but the speech was meant to inspire. How? Consider one important thing that you can do today to improve the future of our planet.
2. Carl Sagan was very interested in the possibility of extraterrestrial life. Here's what a NASA Astrobiologist had to say about whether aliens exist:
<https://www.youtube.com/watch?v=iWrTGAReUdE&list=PL2aBZuCeDwIQiDSAaW1y0mOU8FC2f8v3g&index=16>
3. Carl Sagan wrote *The Pale Blue Dot* in 1994, as part of a lecture on exploration, and he died two years later in 1996. Before he died, Sagan said, "If we don't put our house in order, we'll never be able to explore the cosmos." Explain what Sagan meant by that, and how you intend to change your life to abide by Sagan's statement.

For help with answering some of these questions, please use the following link for guidance:

https://www.nasa.gov/mission_pages/station/research/experiments/explorer/

<https://www.nasa.gov/>

<https://www.nasa.gov/nasa-at-home-for-kids-and-families>