## NASA's First Woman to Perform a Spacewalk Dr. Kathryn Sullivan

### Part I – Research and Gather Facts

Give us 10 facts about your scientist. Cite your sources below.	<ol> <li>Dr. Sullivan was 1 of 6 women in a class of 35 astronauts selected in 1978 to be Space Shuttle astronauts</li> </ol>
	2 She was the 3 <sup>rd</sup> woman to fly in space
	3 She is an Earth scientist and has a PhD as
	a geologist and an oceanographer.
	4. She and David Leestma, another
	astronaut, figured out that it was possible
	to refuel satellites in orbit without killing
	the crew on the shuttle by contaminating
	them with leaks of fumes. This was the
	first spacewalk done by a woman
	astronaut.
	5. The gloves she wore in space are in the
	Smithsonian National Air and Space
	Museum in Washington, D. C.
	6. She flew three missions, and she spent a
	total of 532 hours of time in space before
	leaving NASA to do other things.
	7. Dr. Sullivan became the chief scientist at
	A dministration (NOAA) and was the
	Administration (NOAA) and was the administrator of NOAA
	8 She spent ten years as president and CEO
	of the Center of Science and Industry
	(COSI) in Columbus Ohio
	9. For five years she was the first director of
	the Battelle Center for Mathematics and
	Science Education Policy at The Ohio
	State University.
	10. "In 2020, Dr. Sullivan made history again
	by becoming the first woman to visit the
	deepest spot in the oceans, the Challenger
	Deep in the Mariana Trench, seven miles
	below the surface of the Pacific Ocean."

### Let's have a chat with our AI Dr. Kathryn Sullivan

Just like me, you will use 3-5 questions listed below to input into an AI platform and see what answer you AI platform gives. After ALL of the research you have done on your scientist, do you feel the answers are accurate and reflect the answer the real scientist would provide? During your oral presentation, be prepared to defend your answers. Again, those questions are:

- What made you choose science as a profession?
- What achievements are you most proud of in your career?
- How does your work help others?
- What were your toughest obstacles and how did you overcome it?
- Who were your mentors in the science community?
- How do you give back to the next generation of scientists?

Here are my answers. I suggest you use either ChatGPT, Grok, or Microsoft Copilot. I used ChatGPT.

# What made you choose science as a profession?

"From a very young age, I was deeply curious about how things worked. I didn't set out thinking, *I want to be a scientist*—instead, I was just endlessly fascinated by the world around me. I'd spend hours reading maps, exploring the natural world, and asking questions that didn't always have easy answers. That curiosity led me to geology and oceanography, where I discovered the thrill of exploration—not just across space, but deep within our own planet.

Science, to me, has always been about solving puzzles, uncovering hidden stories in rocks, oceans, or the stars. When I joined NASA, that same sense of exploration carried me to space. Becoming a scientist wasn't a single decision—it was the natural result of always wanting to understand the "why" and "how" of the universe. That drive to discover is what made science my life's work."

### How does your work help others?

"Throughout my career—whether as a geologist, astronaut, or later leading NOAA (the National Oceanic and Atmospheric Administration)—my work has always centered on understanding our planet and sharing that knowledge to benefit others. When I flew on the space shuttle and conducted the first spacewalk by an American woman, I was helping to test systems and gather data that supported future missions, laying the groundwork for today's exploration.

Later, when I worked with Earth observation satellites and ocean monitoring systems, my focus shifted to using science to protect our planet and help people prepare for challenges like climate change, natural disasters, and environmental shifts. The data we gather from space and sea can save lives—by improving weather forecasting,

guiding policy, and helping communities make smarter, safer decisions.
In short, science isn't just about discovery—it's about service. Whether looking out at Earth from space or diving into oceanic research, I've always believed in using knowledge to make life better for others."
What were your toughest obstacles and how did you overcome it?
"One of the toughest obstacles I faced was simply being taken seriously in fields where women were still rare—whether in science, engineering, or space exploration. When I became part of NASA's first class of female astronauts in 1978, there were people who doubted whether women belonged in space at all. Some questioned our strength, our abilities, or even our presence in the room.
But I didn't let those doubts define me. Instead, I focused on doing the work—mastering the science, learning the spacecraft systems, and showing through performance that I belonged. I believed that competence speaks louder than criticism.
Another major challenge was the mental and physical preparation it takes to go into space. It's demanding, and there's no room for shortcuts. I had to push through self-doubt and moments of fear by staying focused on the mission, trusting my training, and relying on the strength of my team.
Obstacles are part of any meaningful path. What matters most is how you meet them—with determination, integrity, and the belief that you have something valuable to contribute."

I want YOUR Opinion!	In YOUR opinion, what's one of the coolest facts about your scientist?
Now that you have researched your scientist, come up with a few questions that YOU think are relevant, reflective, and important for us to know as we conclude this project. You should have 3-5 questions to share with us.	"In 2020, Dr. Sullivan made history again by becoming the first woman to visit the deepest spot in the oceans, the Challenger Deep in the Mariana Trench, seven miles below the surface of the Pacific Ocean." ~Dr. Rodgers
	What made YOU choose this particular scientist?
	"Women aren't talked about in space history or science very much so to find out about Dr. Sullivan was tremendously fascinating. It makes me want to research more women in science." ~Dr. Rodgers
	What achievements are YOU most proud of when you think of this particular scientist?
	"I find it fascinating that Dr. Sullivan was the first woman to do a spacewalk for the United States. The courage that must have taken is inspiring to me, and so many thing could have gone wrong. So much was riding on her success so I can only imagine the pressure she was under. It truly inspires ME personally." ~Dr. Rodgers

## Bibliography:

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