

# Dorothy 'Dottie' Metcalf-Lindenburger



Photo - NASA, via Wikimedia Commons

Dorothy is also known as Dottie. She was born in America in May 1975. Dottie always dreamed of going into space and becoming an astronaut.

As a teenager, Dottie attended Space Camp and knew that someday in the future, she wanted to be involved in a space program.

She worked as a science and astronomy teacher for five years. One day, Dottie was researching a pupil's question about space on the Internet when she found out that NASA was advertising for a new educator astronaut. Along with 8000 other teachers, she applied for the job. Dottie was selected by NASA in May 2004 and by 2006, she had completed her astronaut training.

On April 5<sup>th</sup> 2010, Dottie went on her first mission to space on a shuttle named Discovery. She was the engineer for the mission, in charge of looking after all of the equipment. She worked with 13 people from space agencies around the globe. There were astronauts from Russia, Japan and the USA. The mission was to take supplies to the International Space Station (ISS) and lasted for 15 days.

Her message to everyone: "Make bold dreams...because you never know where your journey will take you."

Dottie wants to encourage people to follow big dreams. She believes that all children should be taught STEAM at school. These subjects are science, technology, engineering, arts and maths. She has inspired lots of children to work hard on these subjects.

Dottie loves playing music, singing, art, hiking and running marathons.



## Did You Know?

She has run 19 marathons!

# Questions

1. Where was Dottie born?

England .....

Spain .....

America .....

Australia .....

2. What was Dottie's ambition from an early age?

To become a vet .....

To become a writer .....

To become a doctor .....

To become an astronaut .....

3. Match up the phrases:

Attending Space Camp

she went on her first mission to space.

She applied for the job

she had completed her astronaut training.

By 2006,

inspired her to become an astronaut.

In 2010,

along with 8000 other teachers.

4. How did Dorothy see the advertisement for educator astronauts?

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# Questions

5. What was the name of the space shuttle that Dorothy completed her first mission on?

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6. How long did her first mission last?

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7. List the hobbies Dorothy has.

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8. How would you describe Dottie in two words? Explain your answer using evidence from the text.

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# Answers

1. Where was Dottie born?  
**America**
2. What was Dottie's ambition from an early age?  
**To become an astronaut**
3. Match up the phrases:
  - Attending Space Camp - **inspired her to become an astronaut.**
  - In 2010 - **she went on her first mission to space.**
  - By 2006 - **she had completed her astronaut training.**
  - She applied for the job - **along with 8000 other teachers.**
4. How did Dorothy see the advertisement for educator astronauts?  
**Dorothy saw the advertisement for educator astronauts whilst looking up an answer to a question online.**
5. What was the name of the space shuttle that Dorothy completed her first mission on?  
**Dorothy completed her first mission on Discovery.**
6. How long did her first mission last?  
**Her first mission lasted 15 days.**
7. List the hobbies Dorothy has.  
**Dorothy enjoys: playing music, singing, art, hiking and running marathons.**
8. How would you describe Dottie in two words? Explain your answer using evidence from the text.  
**Children's answers may include brave, adventurous, clever etc. Children must support their opinion using the text. For example: I think that Dorothy is determined because she wanted to be an astronaut when she was young and she worked hard to make her dream come true.**

# Dorothy 'Dottie' Metcalf-Lindenburger



Photo - NASA, via Wikimedia Commons

Dorothy, also known as Dottie, was born in Colorado, America, in May 1975. She always dreamed of going into space and was chosen to train as an astronaut.

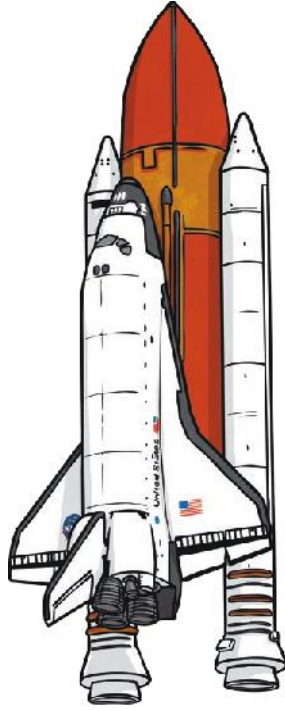
As a teenager, Dottie attended Space Camp and knew from that moment that someday in the future, she wanted to be involved in a space program. Visits to a planetarium also further ignited her passion for space. During this visit, Dottie learned about Voyager's discoveries (a space probe). Dottie can also remember her parents helping her to search for comets and watching for lunar eclipses through a telescope she'd received for Christmas.

Having achieved a degree in geology, Dottie worked as a high school science and astronomy teacher for five years. She enjoyed teaching her students about the many discoveries made by the Hubble telescope. One day, she was researching a pupil's question about how astronauts go to the toilet in space, when she found out that NASA was advertising for a new educator astronaut. Along with 8000 other teachers, she applied for the job. Dottie was selected by NASA to be a mission specialist in May 2004; by 2006 she had completed her astronaut training.



Dottie's astronaut training included water survival training and learning about the International Space Station (ISS).

# Dorothy 'Dottie' Metcalf-Lindenburger



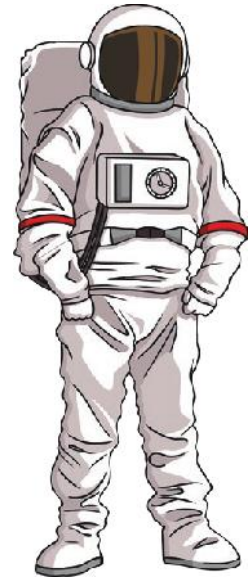
On April 5th 2010, Dottie went on her first mission to space on a shuttle named Discovery. She was the engineer for the mission, in charge of looking after all of the equipment. She worked with 13 people from space agencies around the globe. There were astronauts from Russia, Japan and the USA. The mission, which lasted for 15 days, was to take supplies to the ISS, including new crew sleeping quarters. On the return mission, Discovery brought back science results and lots of rubbish!

Dottie wants to encourage people to follow big dreams.

'Make bold dreams...because you never know where your journey will take you.'

She believes that all children should be taught STEAM at school; these subjects are science, technology, engineering, arts and maths. She has inspired many children to work hard on these subjects.

She retired from NASA in 2014.



## More Fascinating Facts

- Dottie loves playing music, singing, art and hiking.
- Dottie has completed 19 marathons.
- She is the first student to have attended Space Camp and gone on to become an astronaut.
- During her first mission, she orbited Earth 238 times!

# Questions

1. Which subjects did Dottie teach?

science and maths .....

science and art .....

science and astronomy .....

science and space .....

2. Name one thing she searched for using her telescope.

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3. She enjoyed teaching her students about discoveries made by which telescope?

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4. What was Dottie's role on the Discovery mission?

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5. In Dottie's quote, what do you think she means by 'Make bold dreams'?

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6. List the STEAM subjects:

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# Questions

7. What was Voyager?

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8. Do you think space exploration is important? Explain your reasons.

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9. What word would you use to describe Dorothy? Explain your reasons fully using the text.

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# Answers

1. Which subjects did Dottie teach?  
**science and astronomy.**
2. Name one thing she searched for using her telescope.  
**Accept either a comet or a lunar eclipse.**
3. She enjoyed teaching her students about discoveries made by which telescope?  
**She enjoyed teaching her students about discoveries made by the Hubble Telescope.**
4. What was Dottie's role on the Discovery mission?  
**Dottie's role on the Discovery mission was to be an engineer and look after all of the equipment.**
5. What do you think Dottie meant by 'bold dreams'?  
**Children's answers will vary but must make reference to the idea that the dreams are ambitious. For example: I think bold dreams means big dreams. In other words, it is best to set yourself challenging goals.**
6. List the STEAM subjects:  
**The STEAM subjects are science, technology, engineering, arts and maths.**
7. What was Voyager?  
**Voyager was a space probe.**
8. Do you think space exploration is important? Explain your reasons.  
**Children's answers will vary but must be fully explained. For example: I think that space travel is important because when Discovery returned from space, it came back with lots of data for scientists.**
9. What word would you use to describe Dorothy? Explain your reasons fully using the text.  
**Children's answers will vary but must be explained using the text. For example: I would describe Dorothy as 'talented' because she was the first Space Camp cadet to become a real-life astronaut, and when 8000 teachers applied for a job at NASA she was the one who got it.**

# Dorothy 'Dottie' Metcalf-Lindenburger



Photo – NASA, via Wikimedia Commons

Dorothy, also known as Dottie, was born in Colorado, America, on 2nd May 1975. From an early age, she was fascinated by space and dreamed of travelling there one day.

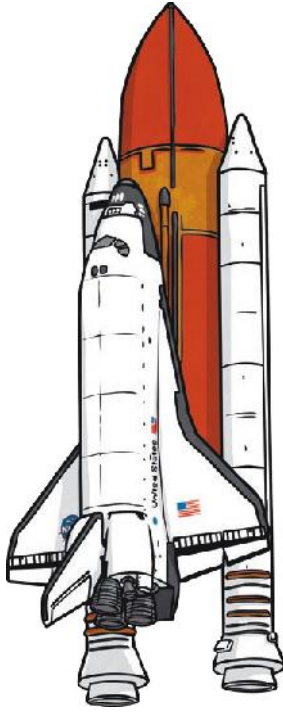
As a teenager, Dottie attended Space Camp and knew that someday in the future she wanted to be involved in one of NASA'S space programs. Visits to a planetarium further ignited her passion for space. During this visit, Dottie learned about Voyager's discoveries (a space probe). She can also remember her parents helping her to search for comets and watching for lunar eclipses through a telescope she'd received for Christmas. Her parents were teachers of science and maths and Dottie believes this is the reason why she liked these subjects so much at school.

Having achieved a degree in geology in 1997, she completed her teaching qualifications and began working as a high school science and astronomy teacher in 1999. Dottie enjoyed teaching her students about the many discoveries made by the Hubble telescope. One day, she was researching a pupil's question about how astronauts go to the toilet in space, when she found out that NASA was advertising for new educator astronauts. Along with 8000 other teachers, Dottie applied for the job and her application was successful. She was selected by NASA to be a mission specialist in May 2004; by 2006 Dottie had completed her astronaut training. Before her first mission, she worked on other tasks at the Astronaut Office's Station Branch, such as updating computer networks.



Dottie's astronaut training included water and wilderness survival training and learning about the space shuttle and International Space Station (ISS).

# Dorothy 'Dottie' Metcalf-Lindenburger



On April 5th 2010, she went on her first mission to space on a shuttle named Discovery. She was the engineer for the mission, in charge of looking after all of the equipment. Dottie worked with 13 people from space agencies around the globe. There were astronauts from Russia, Japan and the USA. The mission, which lasted for 15 days, took supplies to the ISS, including new crew sleeping quarters. On the return mission, Discovery brought back science results and rubbish!

In 2012, Dottie went on an underwater exploration mission on board the Aquarius underwater laboratory in the Atlantic Ocean. Once she had spent a whole day underwater, she became officially known as an 'aquanaut'. Dottie and the rest of the team didn't return to the surface for 12 days. The aim of the mission was to simulate a mission to an asteroid in the future.

She believes that all children should be taught STEAM at school. These subjects are science, technology, engineering, arts and maths. Dottie has inspired students to work hard on these subjects.

'Make bold dreams...because you never know where your journey will take you.'

She retired from NASA in 2014.

## More Fascinating Facts

- Dorothy loves playing music, singing, art and hiking.
- Dottie has completed 19 marathons.
- She is the first student to have attended Space Camp and gone on to become an astronaut.
- During her first mission, she orbited Earth 238 times and there was a live link-up with Earth where the astronauts could speak with students.
- She is the lead singer in an astronaut rock band!

# Questions

1. In which US state was Dottie born?

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2. Dottie achieved a degree in which subject?

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3. Why do you think Dottie had to do wilderness survival training to become an astronaut?

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4. Fill in the missing years in the table:

Event	Missing Year
She embarked upon an underwater exploration mission.	
She achieved her degree.	
She completed her first mission.	
She began working as a teacher.	
Dottie was born.	
She retired from NASA.	

5. What was the purpose of her underwater exploration mission?

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# Questions

6. Suggest a definition for an 'aquanaut'.

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7. In Dottie's quote, what do you think she means by 'Make bold dreams'?

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8. Describe Dottie in three words. Explain the reasons behind your choices.

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9. Do you think space exploration is important? Explain the reasons behind your answer.

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10. Dottie retired in 2014. What do you predict she might do next and explain your reasons?

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# Questions

## Extension Task

Dottie's student asked how astronauts go to the toilet in space. Find out the answer and write it below:

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# Answers

- In which US state was Dottie born?  
**Dottie was born in Colorado.**
- Dottie achieved a degree in which subject?  
**Dottie achieved a degree in geology.**
- Why do you think Dottie had to do wilderness survival training to become an astronaut?  
**Children's answers will vary but must be fully explained. Answers will link to the idea that the conditions could be unpredictable on missions. For example: I think Dottie had to do wilderness survival training to prepare herself in case she had to survive in harsh conditions. If there had been a problem with the launch or return journey, Dottie could have ended up parachuting down into an inhospitable environment.**

- Fill in the missing years in the table:

Event	Missing Year
She embarked upon an underwater exploration mission.	2012
She achieved her degree.	1997
She completed her first mission.	2010
She began working as a teacher.	1999
Dottie was born.	1975
She retired from NASA.	2014

- What was the purpose of her underwater exploration mission?  
**The purpose of the underwater exploration mission was to simulate a mission to an asteroid.**
- Suggest a definition for an 'aquanaut'  
**Children's answers will vary but should make reference to links between an astronaut and being underwater. For example: An aquanaut is an explorer who stays underwater for a minimum of one day.**

# Answers

7. What do you think Dottie meant by 'bold dreams'?
- Children's answers will vary but must make reference to the idea that the dreams are ambitious. For example: I think bold dreams means big dreams. In other words, it is best to set yourself challenging goals.**
8. Describe Dottie in three words. Explain the reasons behind your choices.
- Children's answers will vary but must be supported by an explanation. For example: I think Dotty is adventurous because she was able to explore space and underwater. I also think that she is inspirational because she was the first ever Space Cadet to become a real-life astronaut.**
9. Do you think space exploration is important? Explain the reasons behind your answer.
- Children's answers will vary but must be fully explained. For example: I think that space travel is important because when Discovery returned from space, it came back with lots of data for scientists.**
10. Dottie retired in 2014. What do you predict she might do next and explain your reasons?
- Children's answer will vary but must be justified. For example: I predict that Dottie will return to teaching because she believes that all students should be taught the STEAM subjects.**