

An educators' guide to

The

Stars Beckoned:

Edward White's Amazing Walk In Space

Written By: **Candy Wellins**

Illustrated By: **Courtney Dawson**

This guide is designed for students in grades K-5.
Teachers may adapt any lesson as they see fit for their own students.





ABOUT THE BOOK

A lyrical picture book biography of Edward White, the first American to walk in space--and an ode to the beauty and wonder of the stars that brought him there.

Edward White
loved the night,
lived where stars were big and bright.

The evening sky--
so wide, so high.
Made him wonder. Made him sigh.

Edward White was the first American astronaut to walk in space. But before his spacewalk, he was just a boy who loved the stars. As he grew up, he would look up at the night sky in wonder--he knew that, one day, he would visit the stars themselves. In this touching and poignant picture book biography, we see how Edward's passion for

the stars shaped the course of his life, and how he came to realize, even in the depths of space, what was ultimately most important to him--his family.

With backmatter containing photos and more information on Edward's life, Candy Wellins and Courtney Dawson deliver a book that is as much a feast for readers' eyes as the stars were for Edward's.



ABOUT THE AUTHOR

Candy Wellins (candywellins.com) is a former elementary school teacher who now spends her days as a full-time mother and author. Her debut picture book, *Saturdays Are for Stella*, was named a Kirkus Best Picture Book of 2020. Follow her on Twitter @candy_wellins and on Instagram @candywellins.



ABOUT THE ILLUSTRATOR

Courtney Dawson is a freelance illustrator with a great love for drawing, reading, and most kinds of ice cream. She has a background in animation and a deep love for picture books. You can follow her on Instagram @courtneyjdee.

PRAISE FOR THE STARS BECKONED

"The right stuff for children with the stars in their eyes." --Kirkus Reviews

"An introduction to a space pioneer that's ideal for the youngest nonfiction readers." --Publishers Weekly

BEFORE READING

- 1 Identify the title, author and illustrator of the book. What does the author do (writes the words)? What does the illustrator do (draws the pictures)?
- 2 Read the title and look at the cover. What do you think this book will be about? Who do you think the person is on the cover? Can you predict what the book will be about based on the title and cover illustration?
- 3 Do you think this is going to be a true (nonfiction) story or a made up one (fiction)? Why do you think so? What are the differences between fiction and nonfiction stories?
- 4 Discuss what the word beckoned (to encourage someone to come nearer) means. How do you think stars can beckon someone? What sort of things might beckon you?



WHILE READING

- 1 This story is written in rhyme. Can you identify the rhyme pattern in these opening lines:
Edward White (A)
Loved the night (A)
Lived where stars (B)
Are big and bright. (A)
- 2 The author uses a lot of words that rhyme with Edward's last name, White. Can you make a list of all the "ite" words you hear? Can you think of any other words that rhyme with white? Can you think of any words that rhyme with your name? (It's ok if it's only a made-up word.)
- 3 Why does Edward resist going in when he is ordered in from his spacewalk? Why do you think "his heart broke, so slow, so slow?" Why is he sad if he has always dreamed of walking in space?
- 4 Make a list of connections you have while reading. Be sure to include text-to-self, text-to-text and text-to-media connections.

AFTER READING



- 1 Read the historical note. Compare the writing in the historical note to the writing of the story. How are they different? What new information did you learn about Edward's life?
- 2 Compare the photograph of Edward and his family on page 30 to the illustration on page 27. Courtney Dawson used the photograph to create the illustration. How are the two images similar? How are they different? Why do you think she chose to recreate this image?

VOCABULARY



Find the following words in the story and discuss what they mean.

Sigh A long, deep, audible breath

Resist To withstand the action or effect of

Cadet A young trainee in the armed service

Challenges Tasks or situations that require special abilities

Tethered To tie with a rope so as to restrict one's movements

Swooned To faint from extreme emotion

Enraptured To give intense pleasure to

Adored To love and respect deeply

Squealed To make a long, high-pitched cry or noise

Lunar Having to do with the moon.

WRITING/RESEARCH

1

Try writing a lyrical biography. You can use the rhyme structure of *The Stars Beckoned* (AABA) or a different structure.

2

The stars beckoned Edward from a young age. Think about what beckons you. Write a story, poem or journal entry about the thing/person that beckons you.

3

On the last page of the story, the author writes "With a blazing, brilliant shine, the brightest stars are most divine." Research different stars and find the names of some of the brightest ones in our universe. Write a report on your star. What makes some stars brighter than others?

4

Turn Edward's life into a play. Write a script and act out his life story.

5

Pretend you go on a spacewalk. Write a descriptive paragraph about what it is like. Think about what you would notice with all five senses. Think about what emotions you might feel (excited, nervous, scared, etc).

6

Edward is considered a space pioneer. What does the word pioneer mean?

A

Write an essay explaining why Edward is a space pioneer.

B

Who would you consider a pioneer today? Write an essay explaining why.



NASA

Edward White poses with a rocket.



On June 3, 1965 Edward White became the first American to step outside his spacecraft and let go, effectively setting himself adrift in the zero gravity of space. For 23 minutes White floated and maneuvered himself around the Gemini spacecraft while logging 6500 miles during his orbital stroll. White was attached to the spacecraft by a 25 foot umbilical line and a 23-ft. tether line, both wrapped in gold tape to form one cord. In his right hand White carries a Hand Held Self Maneuvering Unit (HHSMU) which is used to move about the weightless environment of space. The visor of his helmet is gold plated to protect him from the unfiltered rays of the sun.

NASA

1

BUILD A TELESCOPE

Decorate paper towel tubes or cardboard mailers with paint, stickers or paper. Use your new telescopes to look up at the night sky just like Edward liked to do.

2

STUDY THE STARS

Print a set of constellation cards like the ones found here:

<https://www.123homeschool4me.com/constellation-flashcards>

(It is important to note that some constellations can only be seen in the northern or southern hemisphere. Please make sure to choose constellations that can be viewed wherever you live.)

- ★ Assemble your constellation cards into a Passport booklet. Color or stamp each constellation as you find it in the night sky.
- ★ Use the cards to make BINGO boards and try to find a BINGO in the sky.
- ★ Build a constellation. Use one of the following building materials to make a constellation. For a challenge, identify the stars that make up the constellation.
 - ★ Pipe cleaners and pony beads
 - ★ Mini marshmallows and toothpicks
 - ★ Star stickers and black paper



MAKE A MAP OF THE EARTH'S ATMOSPHERE AND LABEL IT

- ★ **A** Troposphere: (Roughly 7-12 miles above Earth) Clouds and weather are formed in the troposphere and airplanes fly here.
- ★ **B** Stratosphere: (13-30 miles above Earth) The stratosphere contains the Ozone layer, a protective, invisible blanket that shields us from the Sun's most harmful UV rays.
- ★ **C** Mesosphere: (31-55 miles above Earth) Meteors break up in the Mesosphere.
- ★ **D** Thermosphere: (56-500 miles above Earth) This is considered outer space. Edward White's spacewalk occurred in the thermosphere.



DO SPACE WALK MATH

Edward started his space walk above Hawaii and ended over Florida, a distance of roughly 4600 miles on Earth. His space walk took 20 minutes to cover that distance.

Compare Edward's speed to the speeds of people, animals and vehicles on Earth.

Make a graph of your findings.

- ★ **A** Calculate how long it would take you to walk that far? (Most kids can walk between 1-5 miles per hour)
- ★ **B** A car traveling on the highway goes about 65mph. How long would it take a car to go 4600 miles? (70.7 hours)
- ★ **C** A cheetah can run 80mph at top speed. How long would it take a cheetah? (57.5 hours)
- ★ **D** The cruising speed of a commercial airplane is 550mph. How long would it take an airplane to fly from Hawaii to Florida? (8.3 hours)



NASA

Gemini IV lifts off with astronauts Edward White and James McDivitt on board.

SOCIAL STUDIES

1 Edward was the first American to walk in space, but the second person to do so. Two months before Edward, Soviet Cosmonaut Alexei Leonov walked in space.

Research the two spacewalks and compare and contrast them.

- A On which date did each spacewalk occur?
- B How long did each spacewalk last?
- C What was the name of each mission?
- D What other accomplishments were made on their respective missions?

2 Edward's spacewalk is contained on the Golden Record, a 12 inch, gold-plated disk that was sent into Space on the Voyager 1 mission in 1977. The Golden Record is a time capsule which contains important sounds and images of life on Earth. It is now outside our solar system and is the farthest man-made item in space.

- A Research the sounds and images that are on the Golden Record. Write an argument for why each selection is an important reflection of life on Earth. (Alternately, students can debate the merits of including certain images or sounds.)
- B Plan your own Golden Record. Choose 10 sounds and images that you think should be included.
- C A lot has changed since the Golden Record was launched in 1977. Choose 5 new sounds and images that have been created since that time to include on a new Golden Record.

3 Edward was a member of NASA Group 2 (also known as the Next Nine after the original Mercury 7). Research who the other members of this group were and write biographies of each including their NASA accomplishments.



The second group of pilot astronauts chosen by NASA. These astronaut pilots are (kneeling left to right) Charles Conrad, Jr., Frank Borman, Neil A. Armstrong, and John W. Young; (standing in the back row - left to right) Elliot M. See, James A. McDivitt, James A. Lovell, Jr., Edward H. White II, and Thomas P. Stafford.

NASA



NASA

Gemini IV astronauts Edward White, left, and James McDivitt.



Edward's mission was part of the Gemini IV flight. Learn more about the Gemini missions. Write reports on each mission and what they accomplished. Use your research to create a timeline.



What was the goal of the Gemini missions?



How many Gemini missions occurred?



What were the accomplishments of each?



How many astronauts flew on each mission? (How is this relevant to the name Gemini?) Who were the astronauts of each mission?



In which years did the Gemini missions occur?



Edward was the first Texan to travel into space. Since then, 19 other Texans have been to space. Research who they were and what their accomplishments were.

SOCIAL EMOTIONAL LEARNING



WORK HARD, DREAM BIG

Edward had a dream of being close to the stars, but it was hard work, not luck that made his dream come true. As you read the story, make a list of all the things Edward does to make his dream come true. (Be sure to include information from the back matter too.)



SET SHOOTING STAR GOALS

Think about things you'd like to accomplish. Write your goal on a cut-out star and use tissue paper or ribbon to attach a tail. Hang your goals where everyone can see (sharing your goals helps keep you accountable). You can set goals for different areas like summer reading, academics, sports, or healthy habits.



CREATE A FIVE-POINTED GOAL

Cut out a large, five pointed star. Write one goal in the middle of the star (e.g. I want to get better at basketball.). On each of the five points, list a strategy for helping you achieve your goal (Take 50 shots every night, talk to my coach, practice with my brother, join a team, read a book about basketball).



NASA

The Gemini-Titan IV prime crew, astronauts Edward White (left), pilot, and James A. McDivitt, command pilot, pictured aboard the NASA Motor Vessel Retriever in the Gulf of Mexico.

ART

- 1 Glue popsicle sticks together to make a star. Decorate it with paint or glitter. You can even attach a string so you can hang it up.
- 2 Use oil pastels on black paper to create a picture of the night sky.
- 3 Edward White's spacewalk was commemorated on a US postage stamp in 1967. You can see the stamp here: <https://postalmuseum.si.edu/exhibition/one-giant-leap-for-mankind-preparing-for-manned-spaceflight/project-gemini-1965-1966>
Create your own postage stamp that celebrates Edward's life or accomplishments.
- 4 Illustrator Courtney Dawson used real photographs of Edward to create the art in this book. Use one of the photographs in the back of the book (or a photograph of Edward that you find online) and try to recreate the image in your art.

PHYSICAL EDUCATION



NASA

The Gemini IV prime crew, astronauts James McDivitt (left), command pilot; and Edward White, pilot, during water egress training at Ellington Air Force Base, Texas.

- 1 Edward White was considered by some to be the fittest person to ever become an astronaut. Did you know that NASA did not have a gym for its astronauts until Edward suggested it? Create a workout routine that uses no extra equipment. Include activities like running, walking, sit-ups, push-ups, bear crawls and jumping jacks.
- 2 Before Edward was an astronaut, he was almost an Olympian! Edward ran hurdles and missed the 1952 Olympic team by less than one second. Create your own hurdle course. On a track or open field, set out hurdles (you can use logs or plastic cones as well). Practice leaping over the hurdles as you race against classmates.
- 3 Edward was also an All-American soccer player in college. As a class play a game of soccer in his honor.