

## Ellen Ochoa Astronaut Study Guide

**CHBiographies**

**Recounts the story of each woman's flight into space, including personal information, background, and flight experience, and outlines the process involved in becoming an astronaut.**

**Describes the early life and education of the engineer as well as her work at NASA, where she has helped build spacecraft that can map the moon and monitor climate change, and designed missions to bring soil and rocks back from Mars.**

**A Kid's Guide to Latino History features more than 50 hands-on activities, games, and crafts that explore the diversity of Latino culture and teach children about the people, experiences, and events that have shaped Hispanic American history. Kids can:**

- \* Fill Mexican cascarones for Easter**
- \* Learn to dance the merengue from the Dominican Republic**
- \* Write a short story using &quot;magical realism&quot; from Columbia**
- \* Build Afro-Cuban Bongos**
- \* Create a vejigante mask from Puerto Rico**
- \* Make Guatemalan worry dolls**
- \* Play Loteria, or Mexican bingo, and learn a little Spanish**
- \* And much more**

**Did you know that the first immigrants to live in America were not the English settlers in Jamestown or the Pilgrims in Plymouth, but the Spanish? They built the first permanent American settlement in St. Augustine, Florida, in 1565. The long and colorful history of Latinos in America comes alive through learning about the missions and early settlements in Florida, New Mexico, Arizona, and California; exploring the Santa Fe Trail; discovering how the Mexican-American War resulted in the Southwest becoming part of the United States; and seeing how recent immigrants from Central and South America bring their heritage to cities like New York and Chicago. Latinos have transformed American culture and kids will be inspired by Latino authors, artists, athletes, activists, and others who have made significant contributions to American history.**

**Play-Doh Pioneer: Joseph McVicker**

**Brilliant Women Who Made a Difference**

**The First American Woman to Walk in Space**

**Let's Celebrate Independence Day**

**Astronaut Mae Jemison**

**NASA's Astronaut Health Care System**

The Roadmap series works as a year-long companion to earning higher grades, as well as passing the high-stakes 6th Grade Social Studies Ohio Proficiency Test that is necessary for grade level promotion. This book has been designed according to the specific standards set forth by the state of Ohio. Now parents can work with their kids to both improve their grades and pass these important tests. The experts at The Princeton Review have analyzed the OPT, and this book provides the most up-to-date, thoroughly researched practice possible. TPR breaks the test down into individual skills and provides lessons modeled after the OPT to familiarize students with the test's structure, while increasing their overall skill level. The Princeton Review knows what it takes to succeed in the classroom and on tests. This book includes strategies that are proven to raise student performance. TPR provides:

- Content review, detailed lessons, and practice exercises modeled after the actual exam
- Test-taking skills and social studies essentials such as using charts and graphs and reading maps
- 2 complete practice OPTs

Margaret Hamilton wrote the computer software that helped humans land on the moon. Learn about Hamilton's fascinating career, from working as a computer scientist at MIT to her role in the moon landing.

Learning from Latino Role Models provides teachers with instructional resources that can be easily used in classroom settings so that they are culturally responsive to their Latino students. The book has two parts: Part I offers 20 sets of activities designed around Latino role models, and aims to help students learn how Latinos offer unique contributions to this nation. It is expected that these resources can help Latino schoolchildren find inspiration to realize their own goals. Part II offers 20 sets of activities around select picture books that reflect the Latino community and cultural heritage. The activities are designed to help children come to identify with the stories' controlling themes as they address Latino culture, history, values, and experiences. In all, the instructional sets are complete with questions that motivate critical thinking; activity ideas that reinforce the meaning or the intended message of the story; and vocabulary to enhance students' communication skills. Additionally, each set comes with corresponding worksheets for the students to complete.

Profiles the life of the first Hispanic woman to become an astronaut including information about her childhood, education, and career with NASA.

Aerospace Engineer Aprille Ericsson

Physical Science for Kids

Inspire Students through Biographies, Instructional Activities, and Creative Assignments

100 Hispanics You Should Know

Smart, Sharp, and Ready for (Almost) Anything

Multicultural Science and Math Connections

Discusses the requirements for becoming an astronaut.

Read Along or Enhanced eBook: Every 4th of July, we celebrate the United States of America, the "land of the free." Learn the story of our country's beginnings and how our courageous Founding Fathers broke away from royal rule with the Declaration of Independence.

Kathy Sullivan wanted to go everywhere. She loved blueprints and maps. She loved languages and the ocean. She didn't like the question, "What do you want to be when you grow up?" She wanted to explore and do exciting things that girls weren't supposed to be able to do. Only men had the exciting jobs. Kathy liked fishing and swimming; flying planes and studying what she decided to do with her life. She followed her heart and eventually became a NASA astronaut and the first woman to walk in space. Kathy wanted to see the whole world and so she did: from space! Backmatter includes further information about Dr. Sullivan and her career, as well as other famous firsts made by women astronauts.

Presents the Space Shuttle as a utilitarian craft, focusing on its origins, operations, and importance to many scientific missions.

The Space Shuttle

The First Hispanic Woman Astronaut

Matter

Anders Celsius

Read Along or Enhanced eBook

*Matter: Physical Science for Kids from the Picture Book Science series gets kids excited about science! What's the matter? Everything is matter! Everything you can touch and hold is made up of matter—including you, your dog, and this book! Matter is stuff that you can weigh and that takes up space, which means pretty much everything in the world is made of matter. In Matter: Physical Science for Kids, kids ages 5 to 8 explore the definition of matter and the different states of matter, plus the stuff in our world that isn't matter, such as sound and light! In this nonfiction picture book, children are introduced to physical science through detailed illustrations paired with a compelling narrative that uses fun language to convey familiar examples of real-world science connections. By recognizing the basic physics concept of matter and identifying the different ways matter appears in real life, kids develop a fundamental understanding of physical science and are impressed with the idea that science is a constant part of our lives and not limited to classrooms and laboratories. Simple vocabulary, detailed illustrations, easy science experiments, and a glossary all support exciting learning for kids ages 5 to 8. Perfect for beginner readers or as a read aloud nonfiction picture book! Part of a set of four books in a series called Picture Book Science that tackles different kinds of physical science (waves, forces, energy, and matter), Matter offers beautiful pictures and simple observations and explanations. Quick STEM activities such as weighing two balloons to test if air is matter help readers cross the bridge from conceptual to experiential learning and provide a foundation of knowledge that will prove invaluable as kids progress in their science education. Perfect for children who love to ask, "Why?" about the world around them, Matter satisfies curiosity while encouraging continual student-led learning.*

*In this engaging biography, readers will learn about the pioneer of Play-Doh, Joseph McVicker. Follow the story from McVicker's childhood, his education at Brown University, joining his father's company Kutol Products, and his reinvention of the company's Kutol Wall Cleaner as Play-Doh. Learn how Play-Doh is made, who came up with the name, the role of Captain Kanagroo in Play-Doh's success, and about other Play-Doh products. McVicker's family, retirement, and pursuits in examining life's big questions are covered. Sidebars, historic family photos, and a glossary enhance readers' understanding of this topic. Additional features include a table of contents, an index, a timeline and fun facts. Aligned to Common Core Standards and correlated to state standards. Checkerboard Library is an imprint of Abdo Publishing, a division of ABDO.*

*The 21st Century Junior Library Women Innovators series highlights the contributions of women to STEM fields. Patricia Bath and Laser Surgery examines the life of this important woman and her contributions to ophthalmology and laser surgery. Sidebars encourage readers to engage in the material by asking deeper questions or conducting individual research. Full color photos, a glossary, and a listing of additional resources all enhance the learning experience.*

*While watching Star Trek on television as a child, Mae Jemison was certain she would one day visit space. As an adult, she made this dream a reality when she became the first black female NASA astronaut. Jemison became a medical doctor before applying for NASA's Space Shuttle program. Then, in 1992, she blasted off on the shuttle Endeavour and conducted scientific experiments to test the effects of space on human bone cells. Jemison has dedicated her life to science education and to finding ways to use technology to help communities around the world. Find out how Jemison's passion for science led to her many impressive achievements.*

*Middle School Projects and Activities*

*Patricia Bath and Laser Surgery*

*Hispanic Scientists*

*The Power of Knowing What You Don't Know*

*Reading Instruction for Diverse Classrooms*

*The Latino Student's Guide to STEM Careers*

**Meet the social, emotional, and educational needs of gifted students with the fifth edition of this classic bestseller. Support the social, emotional, and educational needs of gifted students with the fifth edition of *The Gifted Teen Survival Guide*, a one-of-a-kind book full of sage advice to help teens understand themselves, relate well with others, and reach their potential in life. The fifth edition continues to be the ultimate teen guide to thriving in a world that doesn't always support or understand high ability. Based on surveys from more than 1,400 teens, *The Gifted Teen Survival Guide* covers the topics that gifted teens want and need to know about. Full of surprising facts, cutting-edge research, revealing quizzes and survey results, step-by-step strategies, inspiring quotes and stories, and insightful expert essays, the guide gives readers the tools they need to appreciate their giftedness as an asset and use it to make the most of who they are. The fifth edition has been revised to meet the needs of gifted students today, including: Updated information about changes in education and in society, such as: the thinking about twice-exceptionality and multiple intelligences terminology of autism spectrum disorder equity in gifted programs and underserved gifted students homeschooling gender and sexuality mental health New research findings about brain development in gifted teens A wealth of additional resources including books, publications, associations, programs, websites, and much more Sections on concepts such as mindfulness, meditation, introversion, and intensities Exploration into school-related topics, such as online schooling, taking a gap year after high school, going to college, and finding scholarships Up-to-date guidelines for socializing online and using social media With more than a quarter million copies in print, *The Gifted Teen Survival Guide* is essential reading for gifted teens, their parents, teachers, counselors, and anyone who cares about smart, talented, curious young people. Part of Self-Help for Teens® *Free Spirit* is the leading publisher of learning tools that support teens' social and emotional health.**

**Mentorship is a catalyst capable of unleashing one's potential for discovery, curiosity, and participation in STEM and subsequently improving the training environment in which that STEM potential is fostered. Mentoring relationships provide developmental spaces in which students' STEM skills are honed and pathways into STEM fields can be discovered. Because mentorship can be so influential in shaping the future STEM workforce, its occurrence should not be left to chance or idiosyncratic implementation. There is a gap between what we know about effective mentoring and how it is practiced in higher education. *The Science of Effective Mentorship in STEM* studies mentoring programs and practices at the undergraduate and graduate levels. It explores the importance of mentorship, the science of mentoring relationships, mentorship of underrepresented students in STEM, mentorship structures and behaviors, and institutional cultures that support mentorship. This report and its complementary interactive guide present insights on effective programs and practices that can be adopted and adapted by institutions, departments, and individual faculty members.**

**This book is an essential resource that Latino/a students and families need to make the best decisions about entering and succeeding in a STEM career. It can also serve to aid faculty, counselors, and advisors to assist students at every step of entering and completing a STEM career. • Offers current, fact-based information about the importance of Latinos/as entering STEM fields of study • Provides a comprehensive array of information on diverse STEM majors that Latino/a students and families can use to make informed decisions about entering a STEM field of study • Presents current qualitative and quantitative research findings on what has been shown to influence Latino/a student success as well as personal testimonials of Latino/a students' success in STEM**

**This title discusses how sports stadiums are built, including engineering, design and construction.**

***The Horn Book Guide to Children's and Young Adult Books***

***The Science of Effective Mentorship in STEM***

***Summary of Activities of the Committee on Science and Technology U.S. House of Representatives, January 2, 2009, 110-2 House Report 110-935, \****

***Resources in Education***

***Harcourt Science***

***Summary of Activities of the Committee on Science and Technology, U.S. House of Representatives, for the One Hundred Tenth Congress***

This practical, teacher-friendly book provides indispensable guidance for implementing research-based reading instruction that is responsive to students' diverse cultural and linguistic backgrounds. Structured around the "big five" core topics of an effective reading program—phonemic awareness, phonics, fluency, vocabulary, and comprehension—the book explains tried-and-true teaching strategies for fostering all students' achievement. Key topics include engaging diverse students in classroom discussion, involving families in learning, and assessing and teaching new literacies. Numerous classroom examples demonstrate a wide range of easy-to-implement lesson ideas and activities for students at different grade levels, including struggling learners. Issues specific to English language learners are woven throughout the chapters.

Students explore and practice brilliant discoveries from othe civilizations through readings and activities in this book.

Meet 100 Hispanics from around the world and throughout history who have lived amazing lives. This guide covers well known celebrities, such as actress Rita Moreno, activist César Chavéz, and musician Pablo Casals as well as more obscure individuals, such as Ellen Ochoa (inventor and first Hispanic female astronaut), Agustin Lara (a renowned Mexican composer), and Jose Capablanca (one of the greatest chess players of all times). Many of these individuals have made significant contributions to science, literature, politics, and other fields of human endeavour. Some more notorious, but equally fascinating characters are included as well. Brief biographical sketches are accompanied by bibliographies of resources, where readers can find more information. Grades 6-12.

Give kids a chance to find out more about Astronauts like Neil Armstrong and Sally Ride. They will learn about the first man on the moon, explore the parts of a space suit, find out what astronauts do during their days off and more. Engaging photos, exciting graphics, and a fun quiz at the end of each book will keep them learning. Aligned to Common Core Standards and correlated to state standards. Super Sandcastle is an imprint of Abdo Publishing, a division of ABDO.

Research-Based, Culturally Responsive Practice

Ellen Ochoa, Carlos A. Ramírez, Eloy Rodriguez, Lydia Villa-Komaroff, Maria Elena Zavala

Ellen Ochoa

More than 50 Activities

A Kid's Guide to Latino History

Astronaut and Inventor

**A STEM-focused addition to the #1 New York Times bestselling *She Persisted* series! Throughout history, women have been told that science isn't for them. They've been told that they're not smart enough, or that their brains just aren't able to handle it. In this book, Chelsea Clinton introduces readers to women scientists who didn't listen to those who told them "no" and who used their smarts, their skills and their persistence to discover, invent, create and explain. *She Persisted in Science* is for everyone who's ever had questions about the world around them or the way things work, and who won't give up until they find their answers. With engaging artwork by Alexandra Boiger accompanying the inspiring text, this is a book that shows readers that everyone has the potential to make a difference, and that women in science change our world. This book features: Florence Nightingale, Rebecca Lee Crumpler, Ynes Henrietta Julietta Mexia, Grace Hopper, Rosalind Franklin, Gladys West, Jane Goodall, Flossie Wong-Staal, Temple Grandin, Zaha Hadid, Ellen Ochoa, Dr. Mona Hanna-Attisha & Mari Copeny, and Autumn Peltier, Greta Thunberg & Wanjiru Wathuti Praise for *She Persisted*: " [A] lovely, moving work of children's literature [and a] polished introduction to a diverse and accomplished group of women." —Publishers Weekly, starred review "Exemplary . . . This well-curated list will show children that women's voices have made themselves emphatically heard." —Booklist "[*She Persisted*] will remind little girls that they can achieve their goals if they don't let obstacles get in the way." —Family Circle "We can't wait to grab a copy for some of the awesome kids in our lives . . . and maybe some of the grown-ups, too." —Bustle "A message we all need to hear." —Scary Mommy Praise for *She Persisted in Science*: "This inspiring collective biography provides a host of role models for young readers." --School Library Journal**

Highlights the life and career of astronaut Ellen Ochoa, the first Hispanic woman in space.

When Ellen Ochoa was young, male American astronauts walked on the moon. But girls were not allowed to be astronauts. Girls didn't often study science either—but Ochoa didn't let that stop her. In high school, Ochoa loved math and science. In college, she studied physics and engineering, and later she became a scientist and inventor. Eventually NASA began accepting women into their astronaut training program. While there, Ochoa developed technology, became the first female Hispanic American astronaut, and logged 1,000 hours in outer space. Learn about Ochoa's hard work and perseverance on her journey toward becoming a scientist, inventor, and astronaut.

Brief biographies of five Hispanic American scientists of this century.

Women Astronauts

Pioneering Astronaut

How Did They Build That? Stadium

Result of an Independent Review : Hearing Before the Subcommittee on Space and Aeronautics, Committee on Science and Technology, House of Representatives, One Hundred Tenth Congress, First Session, September 6, 2007

Summary of Activities of the Committee on Science and Technology, U.S. House of Representatives for the ... Congress

Roles, Missions and Accomplishments

*#1 New York Times Bestseller "THIS. This is the right book for right now. Yes, learning requires focus. But, unlearning and relearning requires much more—it requires choosing courage over comfort. In Think Again, Adam Grant weaves together research and storytelling to help us build the intellectual and emotional muscle we need to stay curious enough about the world to actually change it. I've never felt so hopeful about what I don't know." —Brené Brown, Ph.D., #1 New York Times bestselling author of Dare to Lead The bestselling author of Give and Take and Originals examines the critical art of rethinking: learning to question your opinions and open other people's minds, which can position you for excellence at work and wisdom in life Intelligence is usually seen as the ability to think and learn, but in a rapidly changing world, there's another set of cognitive skills that might matter more: the ability to rethink and unlearn. In our daily lives, too many of us favor the comfort of conviction over the discomfort of doubt. We listen to opinions that make us feel good, instead of ideas that make us think hard. We see disagreement as a threat to our egos, rather than an opportunity to learn. We surround ourselves with people who agree with our conclusions, when we should be gravitating toward those who challenge our thought process. The result is that our beliefs get brittle long before our bones. We think too much like preachers defending our sacred beliefs, prosecutors proving the other side wrong, and politicians campaigning for approval--and too little like scientists searching for truth. Intelligence is no cure, and it can even be a curse: being good at thinking can make us worse at rethinking. The brighter we are, the blinder to our own limitations we can become. Organizational psychologist Adam Grant is an expert on opening other people's minds--and our own. As Wharton's top-rated professor and the bestselling author of Originals and Give and Take, he makes it one of his guiding principles to argue like he's right but listen like he's wrong. With bold ideas and rigorous evidence, he investigates how we can embrace the joy of being wrong, bring nuance to charged conversations, and build schools, workplaces, and communities of lifelong learners. You'll learn how an international debate champion wins arguments, a Black musician persuades white supremacists to abandon hate, a vaccine whisperer convinces concerned parents to immunize their children, and Adam has coaxed Yankees fans to root for the Red Sox. Think Again reveals that we don't have to believe everything we think or internalize everything we feel. It's an invitation to let go of views that are no longer serving us well and prize mental flexibility over foolish consistency. If knowledge is power, knowing what we don't know is wisdom.*

Astronaut Ellen OchoaLerner Publications™

*Ellen Ochoa's has a passion for engineering, space, and science. Readers will find out how Ochoa used this passion to earn a doctorate from Stanford and become the first Hispanic American female in space. Learn how she uses this passion to inspire students of all ages to work hard in school and follow their dreams.*

*"Explores the life of Ellen Ochoa, including her childhood in California, her rise through the ranks in NASA, several space shuttle missions, and becoming the first Latino woman in space"--Provided by publisher.*

*To the Stars!*

*Roadmap to 6th Grade Social Studies, Ohio Edition*

*She Persisted in Science*

*Space Engineer and Scientist Margaret Hamilton*

*Learning from Latino Role Models*

*Astronaut Ellen Ochoa*

Scientists can change the world! Anders Celsius helped us understand temperature. This title introduces budding scientists and engineers to Anders Celsius whose discoveries changed the course of science. Photos and illustrations bring the stories of this great mind to life, and a quiz lets readers test their newfound knowledge. Aligned to Common Core Standards and correlated to state standards. Applied to STEM Concepts of Learning Principles. Super Sandcastle is an imprint of Abdo Publishing, a division of ABDO.

Meet Ellen Ochoa, history's first Hispanic female astronaut! Follow Ochoa's story as she works at NASA's Ames Research Center while attempting to become an astronaut. Her persistence pays off when she is chosen to be astronaut on her third try! Learn about her accomplishments from her space shuttle missions through her retirement as the director of the Johnson Space Center. Infographics, historic photos, and a glossary enhance readers' understanding of this topic. Additional features include a table of contents, an index, a timeline and fun facts. Aligned to Common Core Standards and correlated to state standards. Checkerboard Library is an imprint of Abdo Publishing, a division of ABDO.

Think Again

Astronaut Handbook

Astronauts

The Gifted Teen Survival Guide

Ellen Ochoa: Dynamic Space Director