



Counted Out

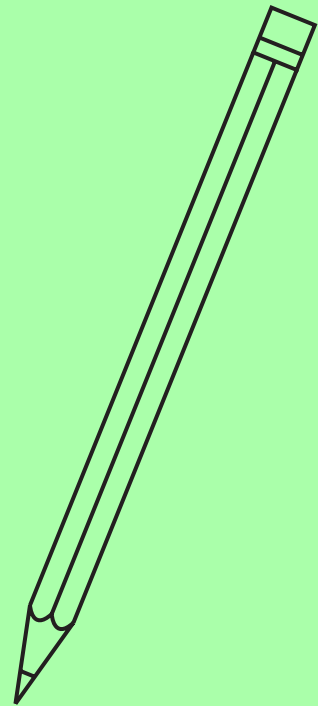
STUDY GUIDE

Content written by **Paul Rendón**

Designed by **Camille Gwise, Jay Tiong, Soph Schultz Rocha, Keith Zwölfer**

All SFFILM Education materials are developed in alignment with California educational standards for media literacy. SFFILM Education welcomes feedback and questions on all printed study materials.

More info at sffilm.org/education



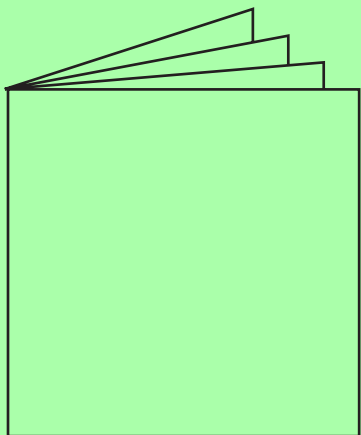
SFFILM
education





Index

02	About the Film
03	Presenter Bio
04	Discussion Questions & Essay Prompts
06	Activities
08	Beyond the Classroom
11	Documentary Guide
12	Media Literacy Resources
13	Common Core Standards
15	California Media Literacy Standards





About the Film

In the United States, math is a gatekeeper. In an increasingly algorithm-and-data driven 21st century, assumptions made about a child's mathematical ability affect their odds of finding future success with those already suffering under systemic racism, patriarchy, and/or the cycle of poverty and incarceration presumed to have fewer skills. This revealing and urgent documentary weaves together a mosaic of voices and stories across generations and professions to explain the detrimental effects of declining math skills on civic participation, legal rulings, and fulfilling careers. Further, the film challenges and demystifies mathematics education and an equation of inclusion is solved when the idea that only some of us can be "math people" is divided by zero – not allowed.

Recommended Grades: 6–12

DIRECTOR

Vicki Abeles

EXECUTIVE PRODUCERS

Nancy Blachman, Coyote Foundation

PRODUCERS

Vicki Abeles, Amy Ferraris, Lisa Fruchtmann, Michael Chandler

(USA 2024) English, 89 mins

Teaching the Film

When integrating **Counted Out** into your classroom curriculum, consider using the provided study guide as a versatile tool to engage students in meaningful discussions about math education, equity, and social justice. Start by watching the documentary together, encouraging students to reflect on the diverse perspectives presented and how they relate to their own experiences with math. Use the discussion questions provided in the study guide to spark conversations about the importance of math skills in various aspects of life, the barriers some people face in accessing quality math education, and the potential solutions for creating a more inclusive learning environment. Encourage students to think critically about how they can advocate for equitable math education within their own communities and beyond. Additionally, utilize the study guide's activities and supplementary resources to reinforce key concepts and deepen students' understanding of the film's themes. By incorporating **Counted Out** into your teaching, you can empower students to become advocates for educational equity and positive change in their world.

Subject Areas

- **Career Path Training**
- **Computer Science**
- **Economics**
- **Journalism**
- **Math**
- **Peer/Youth Issues**
- **Social Justice**
- **Social Studies**



Presenter Bio



Vicki Abeles

Vicki Abeles (Director and Producer) is a filmmaker, parent, attorney, and passionate education advocate. She directed the award-winning documentaries **Race to Nowhere** and **Beyond Measure** and brought the films to millions of viewers around the globe by focusing on outreach and social impact. She is the author of the NYT best-selling book **Beyond Measure: Rescuing an Overscheduled, Overtested, Underestimated Generation**. Additional film credits include Associate Producer on the Sundance favorite **Miss Representation** (2011) and Associate Producer on **Plastic Man: The Artful Life of Jerry Ross Barrish** (2014). Continuing to bring communities together around the power of stories, Vicki's work as an Impact Producer for Chasing Childhood and High School 9-1-1, along with hosting the national live-stream event, "State of the Kids: Uniting for Youth Mental Health," she has built alliances across the world to empower kids to thrive.



Discussion Questions & Essay Prompts

Middle School Discussion Questions

Remember: you don't have to know everything about math to answer these questions. Just do your best to explain what you think and why you think it. Your essay should have an introduction, a few paragraphs where you talk about each question, and a conclusion where you sum up your ideas.

1. Essay Prompt

Before viewing the film:

- Read the following and take notes on it as you watch the film: In the film "Counted Out," a math professor named Erika Bullock talks about how important math is in our everyday lives. She mentions that it starts with something called "Algebra 1." She says taking Algebra 1 is like catching a train at a train station. Once it leaves, you either catch it or you don't. And if you miss it, it's hard to catch up." But what does that mean?

After viewing the film

Write an essay in which you include the following:

- Explaining the Quote: What do you think Professor Bullock means when she says that math is like catching a train at a train station. Imagine you're explaining this to a friend who doesn't know much about math. Use simple language and examples to help them understand.
- Sharing Your Opinion: Do you think math is really that important? Why or why not? Share your thoughts and try to explain why math might be useful in our lives, even if it's not always easy.
- Thinking about Missing the "Train": Professor Bullock says that if you miss the "Algebra 1 train," it's hard to catch up. But what does that mean for someone who hasn't taken Algebra 1 yet? Do you think it's something you should be thinking about? Explain your thoughts.
- Brainstorming Solutions: Let's say some students find math tricky, and they're worried about missing this "Algebra 1 train." What could schools or teachers do to help? Think about different ways students could learn math that might be more fun or easier to understand.

2. How does the movie **Counted Out** show us why math is important in our lives, especially for people facing challenges like racism, poverty, or inequity?
3. The movie says that anyone can be good at math. How does it try to convince us that being good at math is not just for some people?
4. The movie talks about different people's stories and views on math. How does hearing from lots of different people help us understand why math is important for everyone?
5. Can you think of any times in the movie where not being good at math caused problems in someone's life? How did that make you feel?
6. When we learn math in school, do you think everyone gets the same chances to do well? Why or why not?
7. What do you think schools and teachers can do to make math more interesting and easier for everyone, no matter who they are?
8. Did anything in the movie surprise you or make you think differently about math? What was it, and why did it surprise you?
9. How do you think the ideas in **Counted Out** could help make sure everyone has a fair chance to learn math and succeed in life?
10. After watching the movie, do you feel like you want to help make sure everyone gets a good math education? If so, what are some things you could do to make a difference?
11. If you could tell your friends one thing you learned from the movie, what would it be, and why do you think it's important for them to know?



Discussion Questions & Essay Prompts

High School Discussion Questions

Remember: you don't have to know everything about math to answer these questions. Just do your best to explain what you think and why you think it. Your essay should have an introduction, a few paragraphs where you talk about each question, and a conclusion where you sum up your ideas.

1. Essay Prompt

Before viewing the film:

- Review the following quote based on mathematics professor Erika Bullock from the film: "Mathematics is like the gateway into our economic system. There are certain points of math that we use that are like checkpoints. The biggest one is Algebra 1. Imagine it like catching a train at a train station. Once it leaves, you either catch it or you don't. And if you miss it, it's hard to catch up."

After viewing the film

Write an essay in which you:

- Summarize Professor Bullock's viewpoint on the role of mathematics, particularly algebra, in our economic system.
 - Reflect on whether you agree or disagree with Professor Bullock's perspective. Support your stance with personal experiences, observations, or additional research.
 - Discuss potential implications of missing the "algebra train" in terms of educational opportunities, career prospects, and socioeconomic mobility.
 - Propose strategies or reforms that could help ensure equitable access to algebra education and mitigate the consequences of falling behind in math proficiency.
2. How does the documentary **Counted Out** shed light on the societal implications of declining math skills, particularly in the context of systemic racism, poverty, or inequity?
 3. In what ways does the film challenge the notion that only certain individuals are inherently "math people"? How does it advocate for a more inclusive approach to mathematics education?
 4. The documentary weaves together various voices and stories across generations and professions. How does this

mosaic of perspectives contribute to the overall narrative of the film?

5. Can you identify any specific examples from the film where limited math proficiency has had tangible consequences on civic participation, legal rulings, or career opportunities?
6. Reflecting on your own experiences with math education, do you feel that there are inherent biases or barriers that have influenced perceptions of who can succeed in mathematics? How might these be addressed?
7. What role do you think policymakers, educators, and communities should play in ensuring equitable access to quality math education for all students, regardless of background?
8. The documentary highlights the importance of embracing a more holistic approach to math education. How might educators integrate real-world contexts and diverse perspectives into their teaching to make math more accessible and engaging?
9. Were there any moments or insights from the film that particularly resonated with you? Why do you think they stood out?
10. How might the messages conveyed in **Counted Out** influence broader conversations about educational equity and social justice?
11. After watching the documentary, do you feel more compelled to advocate for changes in math education policy or practices? If so, what specific actions do you think could make a difference?
12. Is there a dream in your heart that can be achieved by studying mathematics?



Activities

Middle School Activities

1. Math Mosaic Project

Objective: To explore the diverse applications of mathematics in various professions and daily life.

Activity Description: Divide students into small groups and assign each group a specific profession or aspect of daily life (e.g., architecture, sports, cooking, finance). Have students research and create a presentation or poster showcasing how mathematics is utilized in their assigned area. Encourage creativity and diversity in their presentations to highlight the interconnectedness of math with different fields and to challenge stereotypes about who can excel in math.

2. Math and Social Justice Discussion

Objective: To analyze the documentary's themes of systemic racism, patriarchy, poverty, and incarceration through the lens of mathematics education.

Activity Description: Screen excerpts from the documentary **Counted Out** that address issues related to systemic inequalities in math education. Lead a guided discussion asking students to reflect on how these issues impact individuals' access to opportunities and success in society. Encourage students to brainstorm potential solutions or actions they can take to advocate for equitable math education for all students, regardless of their background or socioeconomic status.

3. Mathematics in Art Exhibition

Objective: To explore the intersection of mathematics and art and promote creativity in problem-solving.

Activity Description: Organize a mathematics in art exhibition where students create artworks inspired by mathematical concepts. Provide a list of mathematical themes such as symmetry, tessellations, fractals, or Fibonacci sequences, and encourage students to choose one or more themes for their artworks. Students can work individually or in small groups to create paintings, sculptures, digital art, or other forms of artistic expression that incorporate mathematical principles. Host a gallery event where students present their artworks and explain the mathematical concepts behind them, fostering appreciation for the beauty and versatility of mathematics.

4. Mathematical Escape Room Challenge

Objective: To promote teamwork, critical thinking, and problem-solving skills through a mathematical escape room challenge.

Activity Description: Design a series of math-themed escape room puzzles or challenges for students to solve collaboratively. Set up stations around the classroom or school, each with a different puzzle related to a specific mathematical concept or problem-solving strategy. For example, students might have to decipher coded messages using mathematical operations, solve logic puzzles, or complete geometry-based tasks. Provide clues or hints along the way to guide students if they get stuck. The goal is for students to work together to solve all the puzzles within a set time limit and "escape" the room. This hands-on and engaging activity encourages active learning and reinforces key mathematical skills in a fun and interactive way.



Activities

High School Activities

1. Math and Legal Rulings Debate

Objective: To critically analyze the role of mathematics in legal decisions and explore the implications of math literacy on justice and equity.

Activity Description: Divide the class into two groups and assign each group a controversial legal case where mathematical evidence played a significant role (e.g., voting rights, sentencing disparities). Provide resources related to the cases and allocate time for both groups to prepare arguments supporting their stance on the case. Then, conduct a debate where students present their arguments, considering both the mathematical aspects and the broader societal implications. Encourage students to think critically about how mathematical reasoning can influence legal outcomes and contribute to or challenge systemic injustices.

2. Mathematics and Career Exploration Workshop

Objective: To explore diverse career paths that require mathematical skills and challenge stereotypes about who can succeed in math-related fields.

Activity Description: Invite professionals from various careers (e.g., STEM fields, finance, data analysis, engineering) to participate in a panel discussion or Q&A session with students. Prior to the event, students can research different careers that involve mathematics and prepare questions for the panelists. During the workshop, panelists can share their personal experiences, discuss the importance of mathematical skills in their professions, and provide insights into how students can pursue similar career paths. This activity aims to inspire students by showcasing diverse role models and illustrating the real-world relevance of mathematics beyond academic settings.

3. Data Analysis and Social Justice Project

Objective: To analyze real-world data sets and explore how mathematics can be used to address social justice issues.

Activity Description: Provide students with access to various data sets related to social justice topics such as income inequality, racial disparities in education or healthcare, environmental justice, or access to resources. Working individually or in small groups, students will select a data set and conduct a comprehensive analysis using mathematical tools and techniques such as statistical analysis, data visualization, and modeling. Students will then present their findings to the class, discussing the implications of their analysis for addressing systemic inequalities and advocating for social change. This project empowers students to apply their mathematical skills to real-world issues and encourages them to become informed and engaged citizens.

4. Mathematics and Game Design Workshop

Objective: To explore the mathematical principles behind game design and develop computational thinking skills.

Activity Description: Introduce students to the fundamental concepts of game design, such as probability, algorithms, optimization, and geometric transformations. Students will then work in small groups to design and create their own simple games, incorporating mathematical elements into the gameplay mechanics and rules. Encourage students to experiment with different mathematical concepts and strategies to make their games challenging yet engaging. Once the games are completed, students can playtest each other's games and provide feedback on gameplay and mathematical accuracy. This hands-on activity fosters creativity, problem-solving, and collaboration while demonstrating the practical applications of mathematics in the field of game design.



Beyond the Classroom

To further the study of the documentary **Counted Out** and explore its themes, here are some additional resources suitable for middle school and high school students:

Websites and Articles

For Students

Websites:

- Coolmath.com <https://www.coolmath.com/> Features fun math games, puzzles, and explanations of math concepts suitable for middle and high school students.
- PBS Learning Media <https://www.pbslearningmedia.org/> Offers a collection of educational resources, including videos, interactive lessons, and articles, covering a wide range of subjects including math.
- IXL Math <https://www.ixl.com/math/> Offers interactive math practice exercises aligned with Common Core standards for grades K-12.

Articles:

- Scholastic Math Magazine <https://math.scholastic.com/> Scholastic offers a math magazine designed for grade 6-9 students, covering math topics with engaging articles and activities.
- Science News for Students – Math <https://www.sciencenewsforstudents.org/topic/math> Provides articles on various math topics written specifically for students, with clear explanations and examples.
- Math is Fun - Middle School <https://www.mathsisfun.com/> Math is Fun offers a section specifically designed for middle school students, with articles, puzzles, and explanations of math concepts.
- National Geographic Kids – Math <https://kids.nationalgeographic.com/math> National Geographic Kids offers articles and activities related to math concepts and real-world applications suitable for middle school students.

For Teachers

- National Council of Teachers of Mathematics (NCTM) <https://www.nctm.org/> Provides resources for teaching mathematics and promoting high-quality math education.
- Mathematical Association of America (MAA) <https://www.maa.org/> Offers resources for students interested in pursuing mathematics beyond the classroom.
- Learning for Justice <https://www.learningforjustice.org/> Provides resources and materials for teaching about social justice issues, including those related to education and equity.
- Edutopia <https://www.edutopia.org/> Offers articles, videos, and resources on various topics related to education, including math education and equity in schools.



Beyond the Classroom (Cont.)

Online Courses and Tutorials

- Khan Academy <https://www.khanacademy.org/> Offers free online courses covering a wide range of subjects, including mathematics.
- Coursera <https://www.coursera.org/> Provides online courses on mathematics, computer science, economics, and other related subjects.
- Code.org <https://code.org/> Offers resources and tutorials for learning computer science and coding skills, which are increasingly important in the 21st century.
- Brilliant <https://www.brilliant.org/> Offers interactive courses in mathematics, science, and engineering, encouraging problem-solving and critical thinking skills.
- Desmos <https://www.desmos.com/> Provides a free online graphing calculator and classroom activities to support math learning and exploration.

Books and Reading Materials

For Students

- *The Boy Who Loved Math: The Improbable Life of Paul Erdos* by Deborah Heiligman - A picture book biography suitable for middle school students that tells the story of the eccentric mathematician Paul Erdos and his love for numbers.
- *The Number Devil: A Mathematical Adventure* by Hans Magnus Enzensberger - A novel suitable for middle school and early high school students that presents mathematical concepts in a fun and engaging narrative format.
- *Math Curse* by Jon Scieszka and Lane Smith - A humorous picture book suitable for upper elementary and middle school students that explores the ubiquity of mathematics in everyday life.
- *Chasing Vermeer* by Blue Balliett - A mystery novel suitable for middle and early high school students that incorporates mathematical puzzles and codes into the plot.
- *The Calculus Diaries: How Math Can Help You Lose Weight, Win in Vegas, and Survive a Zombie Apocalypse* by Jennifer Ouellette - A non-fiction book suitable for high school students that explores the practical applications of calculus in various real-world scenarios.
- *Math Doesn't Suck: How to Survive Middle School Math without Losing Your Mind or Breaking a Nail* by Danica McKellar - A guidebook aimed at middle school girls that provides tips and strategies for navigating and succeeding in math class.

For Teachers

- "The Mathematics of Love: Patterns, Proofs, and the Search for the Ultimate Equation" by Hannah Fry - Explores the role of mathematics in understanding human behavior and relationships.
- "Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy" by Cathy O'Neil - Examines the societal impact of algorithms and data-driven decision-making.
- *How Not to Be Wrong: The Power of Mathematical Thinking* by Jordan Ellenberg - Explores how mathematics shapes our everyday lives and decision-making processes.
- "Mathematical Mindsets: Unleashing Students' Potential through Creative Math, Inspiring Messages and Innovative Teaching" by Jo Boaler - Discusses the importance of fostering a growth mindset in mathematics education.



Beyond the Classroom (Cont.)

Other Films and Documentaries

- **Hidden Figures** - A film that highlights the contributions of African American women mathematicians to the space race.
- **Stand and Deliver** - A film based on the true story of a high school math teacher who inspires his students to excel in mathematics against the odds.
- **The Story of Maths** (TV Series) - A four-part documentary series that explores the history and evolution of mathematics across cultures and civilizations.
- **Navajo Math Circles** - A documentary showcasing a community-based approach to teaching mathematics and problem-solving skills in Navajo Nation.

Discussion and Reflection Activities

- Host a panel discussion or debate on the role of mathematics education in promoting equity and social justice.
- Assign reflective writing prompts for students to explore their own beliefs and attitudes towards math and its impact on their future opportunities.

Community Engagement

- Encourage students to volunteer or participate in activities that promote math literacy and education, such as tutoring programs or math clubs.
- Organize a community screening of the documentary followed by a discussion on how to address the issues raised in the film at the local level.



What is a documentary?

A documentary is a film whose goal is to capture truth, fact or reality as seen through the lens of the camera. But there are many kinds of documentaries, and not everyone's idea of truth is the same. The Scottish filmmaker **John Grierson** coined the term "documentary" in 1926 to describe American filmmaker **Robert Flaherty's** romanticized culture studies, but nonfiction filmmaking dates back to the earliest motion picture reels.

The definition of documentary expanded as filmmakers experimented with technology and the goals of nonfiction. Avant-garde documentarians, like **Dziga Vertov** in the 1920s, believed that the mechanical eye of the camera gave a truer image of reality than the human eye and pointed his lens at newly industrialized cities. **Leni Reifenstahl's** propaganda films from Nazi Germany used the nonfiction form to convey a political message, a slanted truth

The international cinema vérité or observational movements of the 1960s attempted to remove authorship from the documentary. The observational filmmaker hovered like a "fly on the wall" watching the world without commentary. Modern documentaries often seek to raise awareness about a social, environmental or political issue, guiding their audiences toward civic participation and activism.

While watching a documentary, it is important to remember the core concepts of media analysis: who made the film, for what audience and why? The nonfiction format can be deceptively subjective, as all filmmaking involves an inherent selection process: in the images that are shot, the music and narration that accompanies them and, most significantly, the way in which they are all edited together. Media literacy means always analyzing a documentary for its message and authorial intent.

Even though they are nonfiction films, most modern documentaries structure their content around a traditional story arc: with a beginning, middle, and end, as well as characters, and a conclusion, theme or thesis to impart to the audience. Documentary filmmakers begin their projects with an idea or an issue that they wish to explore more deeply. Through research and planning, they develop a comprehensive plan before they begin shooting.

A BRIEF TIMELINE OF THE DOCUMENTARY

- 1895
The Lumiere brothers develop the first motion picture film reel, capturing brief unedited clips of life around them called 'actualities.'
- 1900-1920
Travelogue or 'scenic' films become popular showcasing exoticized images from around the globe.
- 1926
Dziga Vertov, with the Soviet Kino Pravda movement, released the experimental nonfiction film, **Man With A Movie Camera**.
- 1939
John Grierson collaborated with the Canadian government to form the National Film Board of Canada, with the initial goal of creating Allied propaganda in support of war.
- 1960s
The 'cinema vérité' movement began in Europe, followed by the 'direct cinema' in the US. Portable cameras and sync sound allowed filmmakers to capture intimate footage with minimal intervention.
- 1968
The Argentine film, **La Hora de los Hornos**, opened the door to activist cinema of the 1970s, using film as a tool to counter capitalist politics in Latin America.
- 1988
Independent Television Service (ITVS) was founded.
- 2000s
The widespread use of digital cameras and editing software made the documentary medium more affordable to independent filmmakers.
- Present Day
The term 'documentary' comes to encompass a wide range of nonfiction cinema. Contemporary filmmakers continue to push the boundaries of truth in film and to explore new avenues and applications for the medium.



Media Literacy Resources: Screening with Meaning

We live in a world where technology mediates a large portion of human interaction and the exchange of information. Every projected image, every word published on a page or a website, and every sound from a speaker reaches its audience through the language of the medium. The ability to parse the vast array of media messages is an essential skill for young people, particularly in a mainstream commercial culture that targets youth as a vulnerable, impressionable segment of the American marketplace. Many students already have a keen understanding of the languages different media use and the techniques they employ to inspire particular emotions or reactions, but they often lack the skill or awareness to fully deconstruct the messages they continuously receive. Analysis of a media message, or any piece of mass media content, can best be accomplished by first identifying its principal characteristics:

1. **Medium:** the physical means by which it is contained and/or delivered
2. **Author:** the person(s) responsible for its creation and dissemination
3. **Content:** the information, emotions, values or ideas it conveys
4. **Audience:** the target audience to whom it is delivered
5. **Purpose:** the objectives of its authors and the effects of its dissemination.

Students who can readily identify these five core characteristics will be equipped to understand the incentives at work behind media messages, as well as their potential consequences. Media literacy education empowers students to become responsible consumers, active citizens and critical thinkers.

MEDIA LITERACY STANDARDS

MEDIUM

All Media Is Constructed.

- What is the message, how is it delivered and in what format?
- What technologies are used to present the message?
- What visual and auditory elements comprise the media content?
- What expectations do you bring to the content, given its medium and format?

AUTHOR

All Media Is Constructed by Someone.

- Who is delivering the message?
- Who originally constructed the message?
- What expectations do you have of the content, given its author(s)?

CONTENT

Media Is A Language For Information.

- What is the subject of the media message?
- What information, values, emotions or ideas are conveyed by the media content?
- What tools does the author employ to engage the viewer and evoke a response?
- To what extent did the content meet your expectations, given the format/author?

AUDIENCE

All Media Messages Reach an Audience.

- Who receives the message?
- For whom is the message intended?
- What is the public reaction to the media content and/or its message?
- What is your reaction to the media content and/or its message?
- How might others perceive this message differently? Why?

PURPOSE

All Media Messages Are Constructed for a Reason.

- Why was the message constructed?
- Who benefits from dissemination of the message? How?
- To what extent does the message achieve its purpose?
- What effect does the message have on the audience it reaches, if any?



Common Core Standards

1. Mathematics Standards:

Grade 6-8:

- a. CCSS.Math.Content.6.RP: Understand ratio concepts and use ratio reasoning to solve problems.
- b. CCSS.Math.Content.8.EE: Expressions and equations: work with radicals and integer exponents.
- c. CCSS.Math.Content.8.EE.A.1: Know and apply the properties of integer exponents to generate equivalent numerical expressions.
- d. CCSS.Math.Content.8.EE.B.5: Graph proportional relationships, interpreting the unit rate as the slope of the graph.

High School:

- e. CCSS.Math.Practice.MP4: Modeling with mathematics: Apply mathematical models to solve real-world problems.
- f. CCSS.Math.Content.HSS.ID: Statistics and probability: Interpret linear models.
- g. CCSS.Math.Content.HSA.REI.A.2: Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.
- h. CCSS.Math.Content.HSA.CED.A.2: Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- i. CCSS.Math.Content.HSA.CED.A.4: Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.

2. Mathematical Practice Standards:

- a. MP.2: Reason Abstractly and Quantitatively: Students can apply algebraic concepts to interpret mathematical situations and represent them symbolically.
- b. MP.4: Model with Mathematics: Students can use algebraic equations and functions to represent and solve real-world problems, as highlighted in the documentary's emphasis on the practical applications of algebra.

3. College and Career Readiness Anchor Standards for Mathematics:

- a. A-CED.2: Create equations that describe numbers or relationships: Students can create equations in context to represent relationships between quantities, which is fundamental in algebraic problem-solving.

4. English Language Arts Standards:

Reading Informational Texts:

- a. CCSS.ELA-Literacy.RI.7: Analyze how a text makes connections among and distinctions between individuals, ideas, or events.
- b. CCSS.ELA-Literacy.RI.6: Evaluate the advantages and disadvantages of using different mediums to present a particular topic or idea.

Writing:

- c. CCSS.ELA-Literacy.WHST.6: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- d. CCSS.ELA-Literacy.WHST.7: Conduct short as well as more sustained research projects based on focused questions.

4. Social Studies Standards:

Civics and Government:

- a. CCSS.ELA-Literacy.RH.11: Analyze the role of citizens in the U.S. political system.
- b. CCSS.ELA-Literacy.RH.10: Evaluate the effectiveness of various forms of civic participation.

Economics:

- c. CCSS.ELA-Literacy.RH.9: Understand how economic decisions are made in a market economy.
- d. CCSS.ELA-Literacy.RH.8: Analyze the impact of economic decisions on individuals and society.



Common Core Standards (Cont.)

6. Social Justice Standards:

Justice:

- a. CCSS.ELA-Literacy.RH.3: Analyze how issues of justice affect individuals, communities, and societies.
- b. CCSS.ELA-Literacy.RH.4: Evaluate strategies for achieving justice in society.

Diversity:

- c. CCSS.ELA-Literacy.RH.2: Analyze how cultural, societal, and historical contexts shape individual and group perspectives.

7. Career Path Training Standards:

Career Exploration:

- a. CCSS.ELA-Literacy.RH.5: Investigate various career paths and evaluate their potential for personal fulfillment and societal contribution.
- b. CCSS.ELA-Literacy.RH.6: Develop communication, collaboration, and critical thinking skills necessary for success in diverse career fields.

8. Computer Science Standards:

Computational Thinking:

- a. CCSS.ELA-Literacy.RH.12: Apply computational thinking practices to solve real-world problems.
- b. CCSS.ELA-Literacy.RH.13: Analyze the societal impacts of technology and computing.



California Media Literacy Standards

1. Standard 1: Development of Media Literacy Skills:

- a. 1.1 Analyze Media Messages: Students analyze the techniques used in media messages to influence, persuade, or inform an audience.
- b. 1.2 Create Media Messages: Students create media messages for specific purposes and audiences, using appropriate forms, tools, and technologies.

2. Standard 2: Development of Critical Thinking Skills:

- a. 2.1 Evaluate Media Messages: Students evaluate media messages for credibility, bias, accuracy, and relevance to the intended audience and purpose.
- b. 2.2 Analyze Media Ownership and Regulation: Students analyze how media ownership and government regulations influence media content and access to information.

3. Standard 3: Development of Creative Communication Skills:

- a. 3.1 Use Media Tools and Technologies: Students effectively use media tools and technologies to create, edit, and distribute media messages.
- b. 3.2 Communicate Ideas Creatively: Students communicate ideas creatively through a variety of media forms, such as video production, digital storytelling, or multimedia presentations.

4. Standard 4: Development of Social Responsibility Skills:

- a. 4.1 Understand the Impact of Media on Society: Students understand how media messages can shape attitudes, beliefs, and behaviors in society.
- b. 4.2 Advocate for Media Literacy: Students advocate for media literacy education and the responsible use of media in their communities.