



# MAX EINSTEIN

REBELS WITH A CAUSE

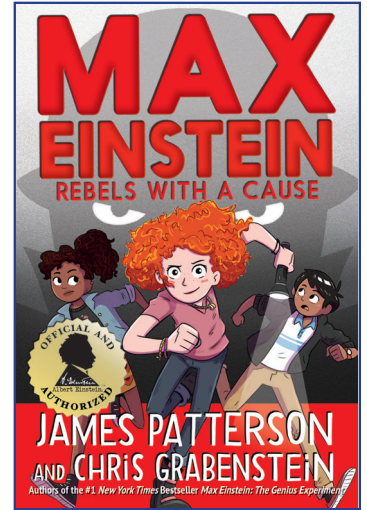
## Classroom Guide



# MAX EINSTEIN: REBELS WITH A CAUSE

## Classroom Guide<sup>\*</sup>

---



### Introduction to the Guide

Dear Educators,

Max Einstein is back, making the world a better place one mission at a time in *Max Einstein: Rebels with a Cause* by James Patterson and Chris Grabenstein. This is the second book in the Max Einstein series, following the #1 *New York Times* Bestseller *Max Einstein: The Genius Experiment*. This book will open your students' eyes to the needs of the world and encourage them to figure out how they, like Max, can help make it a better place for all—while having fun!

Max Einstein is a twelve-year-old girl who is part of the Change Makers Institute (CMI), the main goal of which is to help those in need. However, Max can't do this alone! She needs her team of child geniuses to bring their unique strengths to the challenges they face. Together, they defy unfair rules in new countries and escape Dr. Zimm and the Corp. Max and her friends use their knowledge of science, technology, engineering, and math (STEM) to make a positive impact on the lives of others.

This educator's guide encourages students to be their own “rebels with a cause.” Whether they are studying another rebel, Mahatma Gandhi, or creating their own robot to solve the problems of the world, your students will learn how to have a more positive impact on those around them while having a blast. Max and the Change Makers Institute will live in your classroom long after your students finish the book!

<sup>\*</sup> Common Core standards and activities may be adapted to fit your individual classroom needs, ages, abilities, and learning styles.

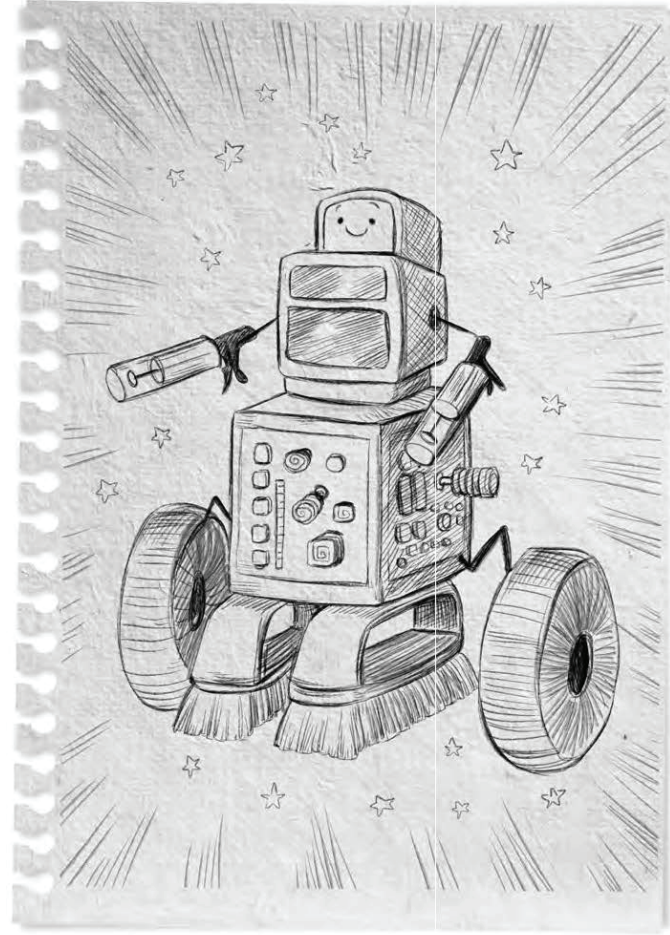
## INTERDISCIPLINARY ACTIVITIES

# A Robot to Change the World

✓ **Subjects:** reading, writing, art, STEM

**Materials:** article about Pepper the Robot,  
reproducible/writing template

In *Max Einstein: Rebels with a Cause*, we meet Lenard, the robot created by the Corp to catch Max and bring her to Dr. Zimm, who wants Max to build a quantum computer for the Corp. Lenard, who is using his power for evil, is trying to tap into databases all around the world and use science and technology to find Max. In this four-part activity, each student will create their own robot, whose purpose will be to use its power for good to solve a problem or issue that means something to the student.

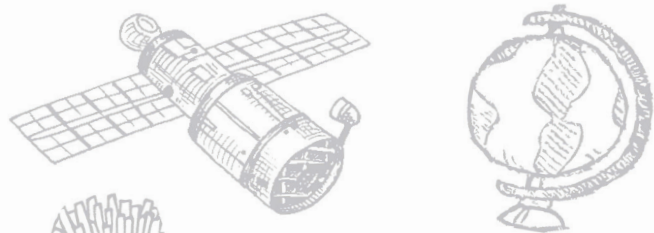


### Part 1: Building Background Knowledge

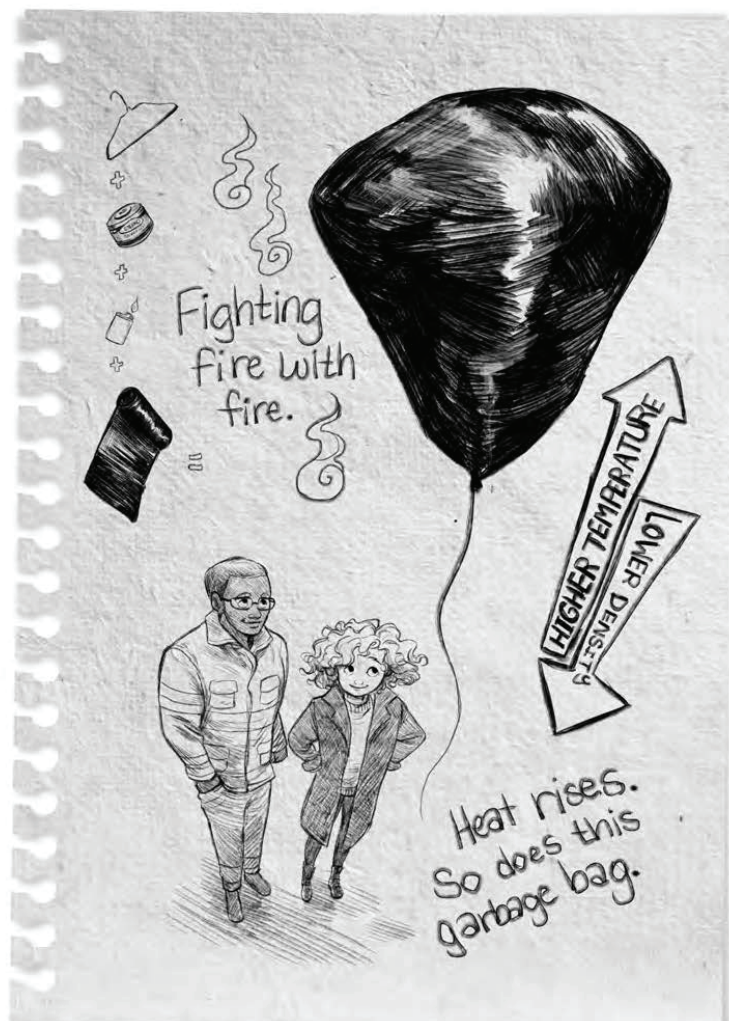
Before students can create their robot, they will learn about other robots that were created to solve a problem. With this new knowledge, students can begin to form ideas to create their own robot. For the first part of the activity, students read two articles and highlight information about the robots and their purpose. Students take information from each article and answer questions as a class.

**1. Give students time to choose and read an article from the list provided. While reading, have them highlight specific details about the robots and how they solve the problems they were created to solve.**

- Mail Dog: Robotic Dog ‘Spot’ Could Deliver Your Next Package  
<http://stem-works.com/external/article/1640>
- Floor Washing Robots Revolutionising Cleaning for Big Businesses  
<http://stem-works.com/external/article/1214>
- 5 Intriguing Uses for Artificial Intelligence (That Aren’t Killer Robots)  
<http://stem-works.com/external/article/1590>
- Is the Personal Robot Finally Here?  
<http://stem-works.com/external/article/1160>



2. When students are finished reading and highlighting, have them form groups with other students who read the same article. Have them discuss the information they found and choose three important details from the article to share with the class.
3. For the final step, have the whole class gather and reveal what they learned about robots by sharing the three details each group generated. Wrap up the activity by asking your students what the pros and cons of robots doing human jobs are. In other words, how might robots/artificial intelligence benefit humans and how might they harm humans and human experience?

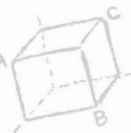


## Part 2: A Robotic Story

Now that students have learned about a couple of robots that were created to solve a problem, they are going to apply that knowledge by creating their own fictional robot in a story—a kinder, more helpful Lenard. The robots will be heroes in the stories by solving problems or issues that are meaningful to the students.

1. Students choose a problem or issue they would like their robot to solve. For example, a robot that puts an end to bullying in schools or a robot that does chores—like cleaning the smelly bathrooms in your home!
2. Students plan out their story using the template provided below.
3. Once the template is complete, students can begin writing a story about their robot solving their chosen problem. You may want to share the structure of a fictional story with your students and remind them to refer back to their template.

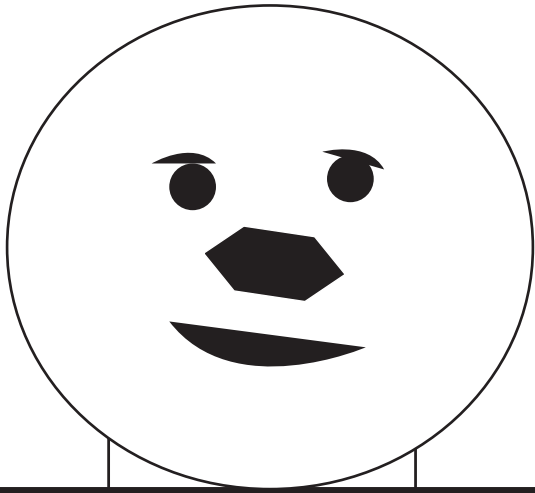
- The **beginning** of the story creates the **setting** (where and when) and introduces your cool robot.
- In the **middle**, describe the **problem** you need your robot to solve and some conflicts it may experience.
- In the **end**, you will include the **resolution**—how your robot (hopefully!) saves the day!





Name\_\_\_\_\_

Class Period:\_\_\_\_\_



**NAME OF YOUR ROBOT**

**DRAW YOUR ROBOT**

**PURPOSE**

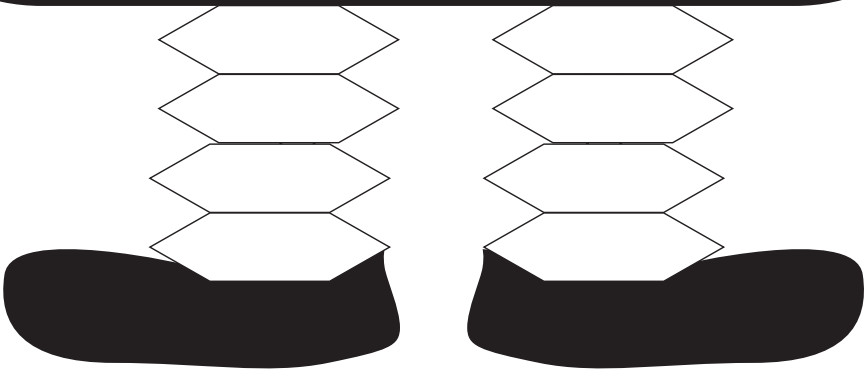
What problem or issue  
does it solve?

**SKILLS**

What can your robot do?

**GLITCHES**

Are there any issues/conflicts with your robot?



### Part 3: Model Robots

Your students have tapped into their imaginations and created robots that helped them solve a problem.

However, the robots only exist on paper. Allow time for your students to bring their robots to life by building a 3-D model of it using whatever found materials they can get their hands on! Challenge them (by offering bonus points) to get their robot to move.

Upcycle away!



### Part 4: Celebrate the Robots

Put the students' writing and robots on display around the school!

Celebrate your students' creativity and their efforts to make the world a better place, one robot at a time!

#### Common Core Anchor Standards

CCSS.ELA-LITERACY.CCRA.W.6

Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

CCSS.ELA-LITERACY.CCRA.W.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCSS.ELA-LITERACY.RST.6-8.9

Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.

# Max's Playlist

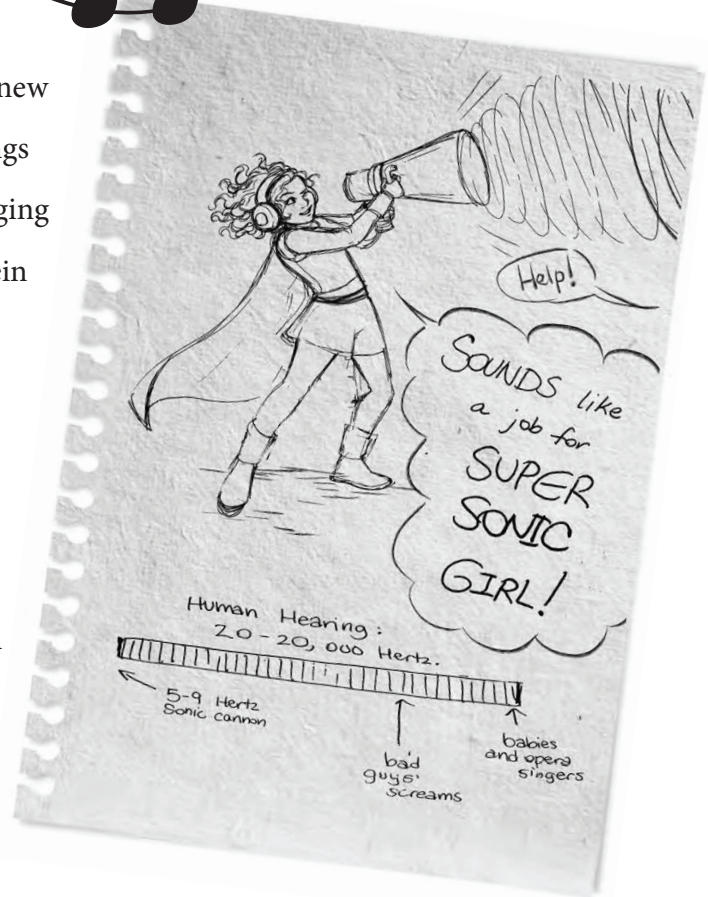
✓ **Subjects:** reading, music

**Materials:** technology with access to internet



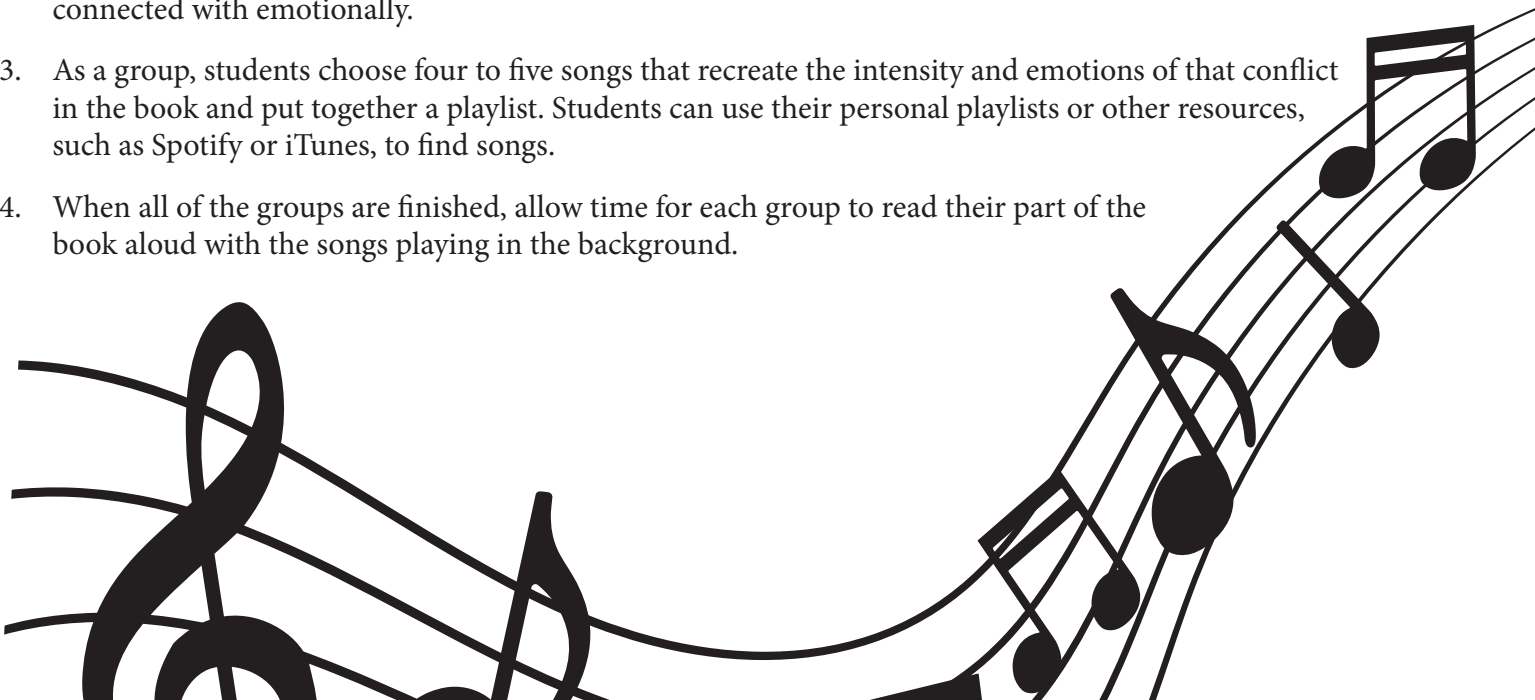
*Max Einstein: Rebels with a Cause* has so many exciting parts!

Whether Max is escaping Dr. Zimm and Lenard or flying to a new country to solve a problem, she is constantly on the move! Songs are a great way to help us get through the exciting and challenging times in our lives! When James Patterson and Chris Grabenstein write their books, they create intense conflicts that produce strong feelings for the reader. For this activity, your students will each create a playlist that summarizes a part of the book or a scene that evoked emotion and was memorable for them. By challenging your students to connect music to parts of the book, they will understand the book on a deeper level through sound and emotions along with written words. Plus, it's just fun to listen to music!



## Directions:

1. Divide students into groups of three.
2. Within their groups, students discuss and then agree upon a part of the book that was intense and that they connected with emotionally.
3. As a group, students choose four to five songs that recreate the intensity and emotions of that conflict in the book and put together a playlist. Students can use their personal playlists or other resources, such as Spotify or iTunes, to find songs.
4. When all of the groups are finished, allow time for each group to read their part of the book aloud with the songs playing in the background.



## Share this example to get groups started:



**Intense part of the book:** Siobhan and Max are running from two members of the Corp in New York (58)

- Men exit from the RV  
🎵 “Bad Guy” by Billie Eilish
- Max and Siobhan run through campus  
🎵 “Eye of the Tiger” by Survivor
- Max and Siobhan create a subwoofer to let out loud noises and distract the men from the Corp  
🎵 “Radioactive” by Imagine Dragons
- Max returns to her room to get her suitcase  
🎵 “Safe and Sound” by Taylor Swift

Now that students have shared their songs and parts of the story, have students share the similarities and/or differences they noticed among the songs and scenes from *Max Einstein*. Did groups choose similar songs? Why, do you think? Could the same song represent more than one part of the book? Why or why not?

Don't let the hard work and creativity of your students stop there! Collect all of the songs and create a playlist to play for your students in the classroom. You will find them remembering their friend Max throughout the school year! Extend this activity even further—encourage your students to remember a moment or “scene” from their own lives that had intense emotions and have them create a personal playlist to share with their classmates.

### Common Core Standards

CCSS.ELA-LITERACY.CCRA.R.2

Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

CCSS.ELA-LITERACY.CCRA.SL.2

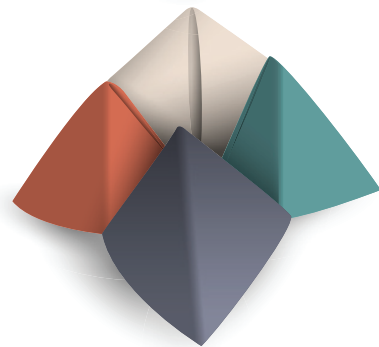
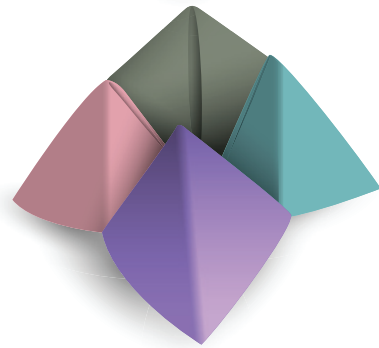
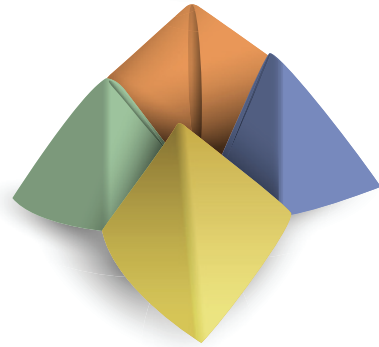
Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.



# Cootie Catcher

✓ **Subjects:** reading, art

**Materials:** reproducible cootie catcher, paper, writing tools, scissors



There are so many elements that go into a good story!

*Max Einstein: Rebels with a Cause* takes readers on an exciting adventure with Max and her friends. For this activity, students will create a cootie catcher to experience the elements of the story (i.e., setting, characters, plot, theme) by playing a game.

The elements of the story will come alive through their cootie catcher!

Your students won't want to stop talking about *Max Einstein: Rebels with a Cause*.

## Make Your Own Cootie Catcher

1. Print out enough copies of the cootie catcher for each student.
2. Cut out the cootie catchers along the dark line. It will form a square.
3. Fold the square by connecting one corner to the opposite corner. Unfold the paper.
4. Now, fold the other corner by connecting it to the opposite corner. The folds will create an X.
5. Take one corner and fold it to the middle of the square where the lines intersect.
6. Continue with each corner until you have created another square.
7. Flip over your cootie catcher. Fold the square in half lengthwise.
8. Students will insert their fingers under the flaps, and the corners will meet in the middle.
9. Now it's time to play!
  - a. The student asks their partner to choose either setting, characters, story, or plot.
  - b. Then the partner chooses a number listed.
  - c. The student holding the cootie catcher will move the cootie catcher the number of times indicated.
  - d. Finally, the students will flip up the paper, revealing one of the questions.
  - e. They will ask their partner the question.
  - f. Now the partners switch.

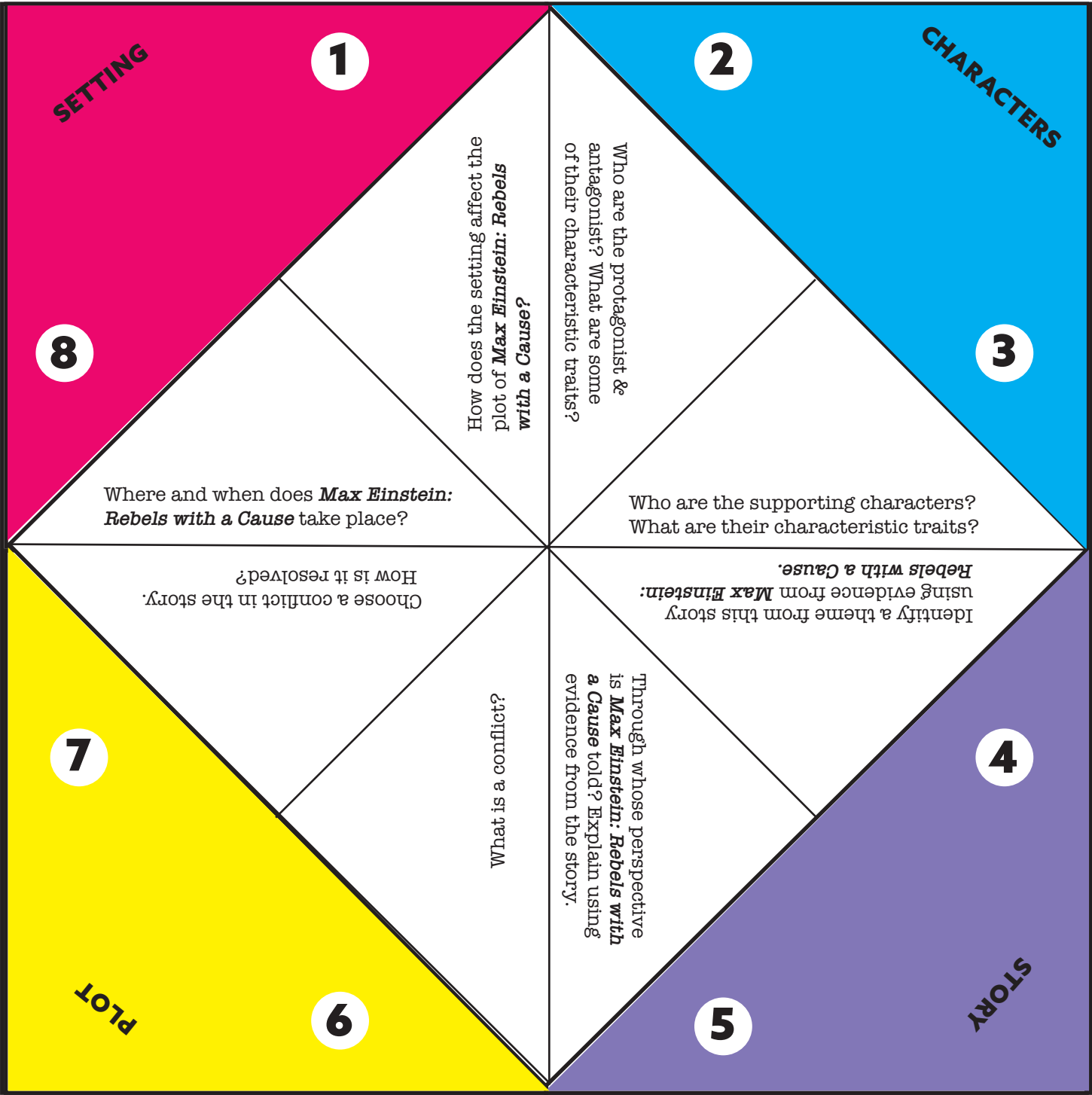
### Common Core Standards

CCSS.ELA-Literacy.CCRA.R.3

Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

CCSS.ELA-Literacy.CCRA.W.9

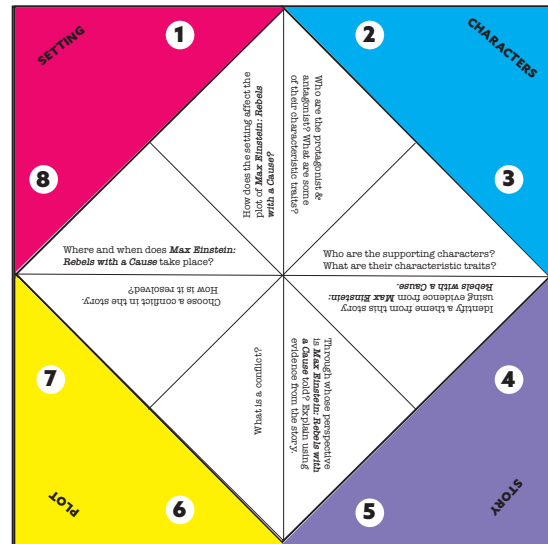
Draw evidence from literary or informational texts to support analysis, reflection, and research.



# Your students won't want to stop playing with their cootie catchers, and they don't have to!

You can expand this activity by allowing students to choose characters from the book or the different places Max and her genius friends travel to by writing them out on a new cootie catcher. See suggestions below!

- Which character are you most like? Explain.
- Which character are you least like? Explain.
- Which character would you like to be friends with? Why?
- Which character would you definitely NOT want to be friends with? Why?
- Where would you travel to so you could help others?
- Where would you travel to because it's just an awesome place to travel?



## Sources

10 Cootie Catcher Templates. (n.d.).

Retrieved from <https://www.sampletemplates.com/business-templates/cootie-catcher-template.html>

Kid's Cootie Catcher Craft. (n.d.).

Retrieved from <https://www.squiglyplayhouse.com/ArtsAndCrafts/Crafts/CootieCatchers.html>

## Common Core Anchor Standards

### CCSS.ELA-LITERACY.CCRA.R.1

Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

### CCSS.ELA-LITERACY.CCRA.R.5

Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.



# Change-Maker: Mahatma Gandhi

✓ **Subjects:** reading, writing, speaking and listening

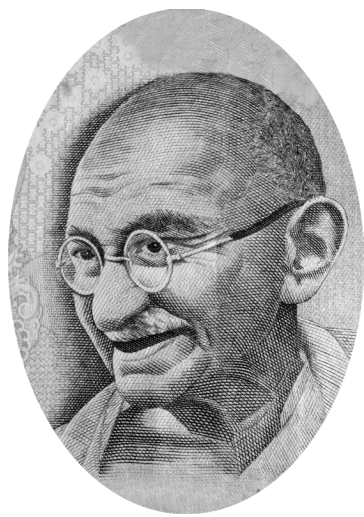
**Materials:** resources on Mahatma Gandhi (technology or books),  
materials for presentations (multimedia or posters)



While helping Vihaan in India, Max begins to learn about Vihaan's hero, Mahatma Gandhi. Also while in India, Max and the CMI team meet Madeira James, who is making a documentary about the worldwide water crisis (184). Max hopes the documentary will help the members of the Change Makers Institute achieve their goal of inspiring change on a global level just like Einstein and Gandhi. For this activity, students will become directors creating a documentary about Mahatma Gandhi to inform audiences about how he changed the world and to inspire others to be rebels with a cause.

## Who is Mahatma Gandhi?

The purpose of this documentary is for students to learn more and share about Mahatma Gandhi and the challenges he faced in his life while changing the world for the better.



1. Before beginning their documentary, have your students research some information about what elements are included in a documentary and list them as a class.

### Here are some resources to get them started:

<https://www.desktop-documentaries.com/documentary-structure.html>

<https://www.dummies.com/photography/video/how-to-structure-your-documentary-film/>

2. Divide the class into groups of four. Have groups research and learn more about Mahatma Gandhi (either digitally or from books). Have students use the following questions to help them focus their research.
  - a. Who is Mahatma Gandhi? When was he born? When did he die?
  - b. What challenges did he face in his lifetime?
  - c. Why is Gandhi still remembered today? How did he influence the world we live in today?

## Here are some good starting points to begin the research:

<https://www.britannica.com/biography/Mahatma-Gandhi>

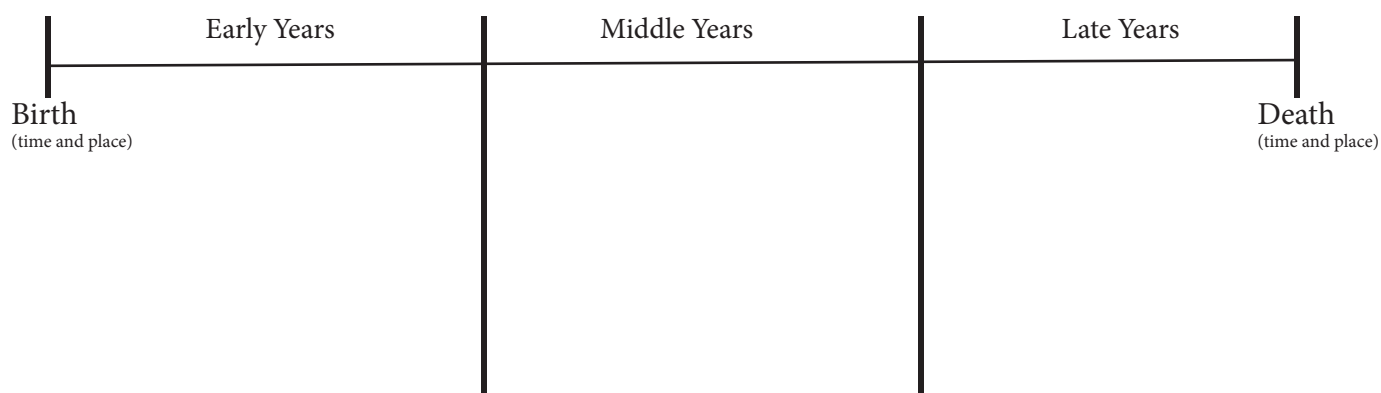
<https://www.history.co.uk/biographies/mahatma-gandhi>

<https://www.history.com/topics/india/mohandas-gandhi-video>

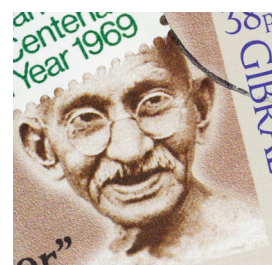
## Here are some resources to get them started:

<https://www.scholastic.com/teachers/blog-posts/alycia-zimmerman/student-documentaries-nonfiction-comes-life/>

3. Working in their groups, have students complete a timeline on poster paper of Gandhi's life.



4. Students will take the information from their timeline and create a documentary about Mahatma Gandhi. They can determine how they want to create their documentary presentations (i.e., multimedia, physically acting out the important parts of his life).
- Encourage students to include pictures of Gandhi, as well as famous quotations.
  - Students can add music to the background.
5. Celebrate Mahatma Gandhi by having students share their documentaries with the class.
6. Allow some time to debrief this activity with students. Consider asking some of the following questions:
- What surprised you?
  - How did Gandhi respond when facing challenges?
  - Who else in history shares the same/similar characteristics or qualities with Gandhi?



## Going Beyond Gandhi

Gandhi once said, “Be the change you want to see in the world.”

Encourage your students to be their own change-makers. They can create their very own Change Makers Institute, just like the one Max and her friends are a part of! The club could take place in the classroom or after school.

- ⇒ Students could determine issues they want to change either at school or in their community.
- ⇒ The club could problem-solve how to fix those issues and make their school or community a better place for all by taking steps to help others.

### Common Core Anchor Standards

#### CCSS.ELA-LITERACY.CCRA.W.2

Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

#### CCSS.ELA-LITERACY.CCRA.W.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

### Sources:

Documentary Structure | The Three-Act Documentary. (n.d.).

Retrieved from <https://www.desktop-documentaries.com/documentary-structure.html>

How to Structure Your Documentary Film. (n.d.).

Retrieved from <https://www.dummies.com/photography/video/how-to-structure-your-documentary-film/>

?

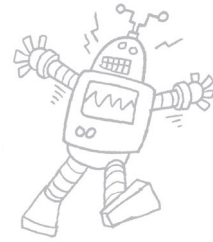
?

?

?

## Essential Questions

1. How does the CMI choose its projects? What would you want the CMI to do to make your city or town better? What other projects in the world would you want the CMI to fund?
2. How has Max's life been shaped by not having a home or family?  
How has having friends changed Max?
3. Why are people greedy?
4. Which character would you not want to be friends with? Why?
5. Why would Lenard be more successful than Dr. Zimm? What are the benefits of being a robot?  
What are the benefits of being a human?
6. How do you define evil? Can someone become evil? Why or why not?
7. Which character are you most like? Explain why.
8. What might life be like for someone who is a genius like Max or a billionaire like Ben?  
What challenges and benefits might they experience? Would you like to be either? Why or why not?
9. Do you think Klaus is a leader? Why or why not?
10. Sometimes Max breaks rules. Are there times when it is okay to break the rules?  
What examples can you give that justify breaking rules?



?

?

?

