

A Curriculum Guide to

Ada Lace and the Impossible Mission

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About the Book

Third grader and inventor extraordinaire Ada Lace has a new social studies teacher—who loves group projects. While most of the class has constructed regular dioramas with clay and construction paper, Ada, her best friend Nina, and sometimes nemesis Milton have built a complex scale model of a historic silver mine. But when Milton reveals that he added his “old Milton touch” on their project right before turning it in, Ada worries that he has sabotaged their work. In a desperate attempt to save their project, Ada and Nina use their combined creative and technical prowess to perform a heist and break into their teacher’s supply closet after school. Do the two friends have what it takes to deceive the school’s security system? Or will they get caught trying to pull off this seemingly impossible mission?

Discussion Questions

The discussion questions below particularly address the following English Language Arts Common Core State Standards: (RL.1.1-4, 7) (RL.2.1, 3, 4, 7) (RL.3.1, 3, 4, 6, 7) (RL.4.1-4, 7) (RL.5.1-4) (RI.1.1-4, 7) (RI.2.1-4, 6, 7) (RI.3.1-4, 7) (RI.4.1-4, 7) (RI.5.1-4) (SL.1.1.B, 2, 4, 5) (SL.2.1B, 2, 5) (SL.3.2, 5, 6) (SL.4.1A, 5) (SL.5.1, 2, 5)

The discussion questions and activities below particularly address the following Next Generation Science Standards: (ETS1.A, B) (PS4.A, B, C) (PS2.A) (PS3.A, B) (PS4.A, B, C) (LS1.D)

In the following questions, use specific examples from the books to support your answers and reasoning.

1. Explain what the story is about. What is the main idea?
2. Have you ever done something and gotten into trouble for it? If so, describe the experience and any consequences. Why do you think Ada let Milton teach her how to pick a lock? Do you think this was a difficult decision for Ada to make? How would you have reacted if you were in her position?
3. Describe Mr. Parable. Can you name some of his personality traits and how these might have influenced his behavior?
4. Have you ever had a substitute like Mr. Parable? Explain why you liked or disliked your substitute teacher.

5. Nina wasn't fond of Milton. How did Ada try to convince Nina that Milton was not the person she thought he was?
6. What could Ada have done when Milton contacted her on the ham radio at night when she wasn't supposed to be using it?
7. What did Mr. Lace mean when he said, "I'm glad you and Milton are getting along better, but you may want to set some limits for him?" How would you describe Ada and Milton's relationship?
8. Describe the purpose for using canaries in a mine in the old days. Do you think it was a good idea for Milton to include three dead miniature canary models in their project? Explain your answer.
9. Nina said using dead models of miners or canaries was bad juju. What does the term *juju* mean?
10. Describe the replica model Ada, Nina, and Milton built together. What role did they each play in the project? Why can group projects often be challenging?
11. Milton said, "Ugh, not the hooey again." What do you think the word *hooey* means? Can you use it in your own sentence?
12. How did Ada and Nina prepare for their mission to check on their project?
13. What was Nina's new pet? Would you like a pet like that? Explain your answer.
14. Do you think Mr. Parable was being fair when he refused to let Ada and Nina check on their project? Think about the situation from both points of view when you explain your answer.
15. What is an enhancement? How is the term used in the book? Name something you might want to add enhancements to.
16. Was it logical for Ada and Nina to worry when Milton said he'd added a few enhancements? Explain your reasoning.
17. What lesson do you think Ada learned? Can you name something you understand this year that you didn't last year?

Activities

1. Look at the picture of a lock and key found here:
https://en.wikipedia.org/wiki/Pin_tumbler_lock

Using the pictures in the Design section as a guide, write and explain how a key opens a lock in your own words. You can use the colors pictured to help you describe the process.

2. Make a map of your school, similar to the one shown in the book. Label the important rooms and trace your path to your first classroom.

3. How could you use a parabolic microphone? What would you like to listen to when using it? Explain your answer and draw a picture illustrating how you'd use the microphone.

4. Make a selfie-stick mirror. If you don't have a selfie stick, find another item that would work, such as a broomstick or a meter stick. Tape a little mirror on it and try looking around the corner. Hold it at different angles to see how the visual changes. Discuss what you see with your classmates.

5. Investigate laser security systems and how they operate. Read more about them online at sites like: https://www.protectamerica.com/home-security-blog/just-for-fun/are-laser-security-systems-real-a-primer_14728. Once you've collected information, draw a simple diagram of how a laser security system works. Reread the book's back matter to help you include the basics in your diagram.

6. Use the diagram of the escape room shown in the book to help you understand them. Read more about escape rooms at <https://breakoutgames.com/escape-rooms/> or <https://www.quora.com/What-is-an-escape-room-game>. Then plan an escape room theme that you'd like to design, including an idea for at least one puzzle or hiding place. What was most challenging about this activity? What part came most easily to you?

7. Choose four consecutive pages from the book and assign parts to each member of your small group and don't forget to choose a narrator. Then read the section aloud in the characters' voices. Record the reading and present it to the rest of your class. Did each group interpret the characters' inflections and tone in the same way? Did you feel differently about the story after hearing it read aloud?

Guide written by Shirley Duke, a children's freelance writer.

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