

Mixin' It Up

Let's Model in 3 Acts

I can ... use mathematical modeling to solve problems.

Lesson 2-7



ACT 1



ACT 1

1. After watching the video, what is the first question that comes to mind?

2. Write the Main Question you will answer.

3. **Construct Arguments** Predict an answer to this Main Question.
Explain your prediction.

4. On the number line below, write a number that is too small to be the answer.
Write a number that is too large.



5. Plot your prediction on the same number line.

ACT 2

6. What information in this situation would be helpful to know? How would you use that information?

7. **Use Appropriate Tools** What tools can you use to solve the problem? Explain how you would use them strategically.

Build G.R.I.T. Time Management

To better manage your time effectively, you can choose tools that help you work efficiently.

8. **Model with Math** Represent the situation using mathematics. Use your representation to answer the Main Question.



9. What is your answer to the Main Question? Is it higher or lower than your prediction? Explain why.

ACT 3

10. Write the answer you saw in the video.

11. **Reasoning** Does your answer match the answer in the video?
If not, what are some reasons that would explain the difference?

12. **Make Sense and Persevere** Would you change your model now
that you know the answer? Explain.



Reflect

- 13. Model with Math** Explain how you used a mathematical model to represent the situation. How did the model help you answer the Main Question?
- 14. Critique Reasoning** Choose a classmate's model. How would you adjust that model?

Create a Problem

- 15.** Write your own problem related to the video in Act 1. Include any information needed to solve your problem. Explain how you would use a mathematical model to represent your situation. Then solve your problem.