



Mixin' It Up

Drinking plenty of water each day is important. Water is necessary for everything your body does. Not drinking enough water can lead to health problems. It's even easier to drink enough water if you like the taste.

There are many ways to make water more exciting. You can drink seltzer or filtered water. You can add fruit, vegetables, herbs, or flavor enhancers. You can add more or less based on what you like. Think about this during the 3-Act Mathematical Modeling lesson.



TUTORIALS Get help from *Virtual Nerd*, right when you need it.



KEY CONCEPT Review important lesson content.



GLOSSARY Read and listen to English/Spanish definitions.



ASSESSMENT Show what you've learned.

Additional Digital Resources



MATH TOOLS Explore math with digital tools.



GAMES Play Math Games to help you learn.



ETEXT Interact with your Student's Edition online.

3-ACT MATH



Mixin' It Up

3-Act Mathematical Modeling: Mixin' It Up



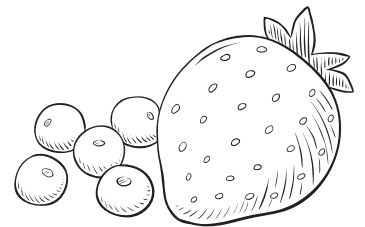
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ACT 1

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.

Too small



Too large



5. Plot your prediction on the same number line.



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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 get the information you need? Record the information as you find it.

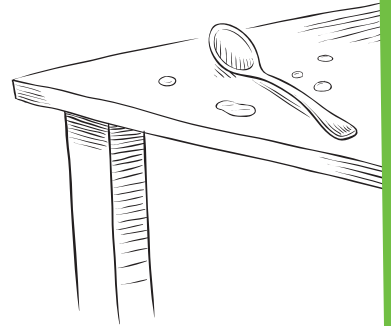
8. **Model with Math** Represent the situation using the mathematical content, concepts, and skills from this topic. Use your representation to answer the Main Question.

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

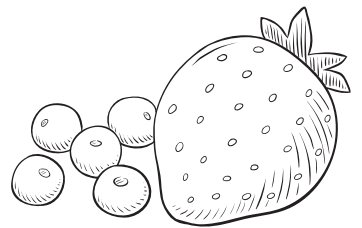


10. Write the answer you saw in the video.

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

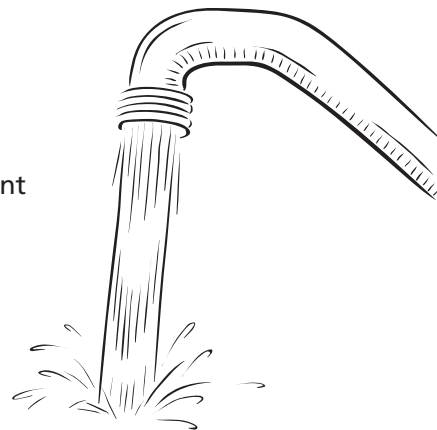


12. **Make Sense and Persevere** Would you change your model now that you know the answer? Explain.



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?

SEQUEL

15. Use Structure A classmate usually adds 6 drops to 16 ounces of water. Use your updated model to predict the number of drops she would use for the large container.

