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6. What sorts of costs might be associated with a zoo exhibit? ________________
   _______________________________________________________________________
   _______________________________________________________________________
   _______________________________________________________________________

7. How can you quantitatively determine the success of a zoo? ________________
   _______________________________________________________________________
   _______________________________________________________________________
   _______________________________________________________________________

**Gather Information:** Now that you know what information you’re looking for and how you’ll use it to help plan a zoo, you need to collect that information. Do independent research or design a survey to gather the information you’ll need in your model. Write it down.

**Do the Math:** Take the information you’ve gathered and use your mathematical tools to create a mathematical model of your zoo. Justify your numerical values, estimations, and decisions. Show all your work.
Reflection: It’s almost time to show everybody your zoo! During your presentation, you should focus on the process you used to create your model. Your finished works (map, table of costs, and suggested admission price) are important, but reflect on these questions before your presentation to help you justify your model. Remember to explain why the decisions you made were reasonable!

1. Is your solution reasonable? Why or why not? ____________________________________
________________________________________________________________________
________________________________________________________________________

2. Is your solution useful for answering your question? ________________________________
________________________________________________________________________
________________________________________________________________________

3. Why would you recommend your model to someone? ______________________________
________________________________________________________________________
________________________________________________________________________

4. What mathematical tools did you use, and how did they help solve the problem? ______
________________________________________________________________________
________________________________________________________________________

5. What did you change in your model throughout the modeling process? ______________
________________________________________________________________________
________________________________________________________________________

6. Are there situations where your solution wouldn’t work or your model wouldn’t apply? __
________________________________________________________________________
________________________________________________________________________

7. How would you need to change your model to apply to more situations? ______________
8. If you had more time, what else would you do? ______________________________________
   ______________________________________
   ______________________________________
   ______________________________________
   ______________________________________

9. Are there any mathematical tools or pieces of information that would have been helpful to
   have?  ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

Presentation: When it’s your turn, show your class your map, table of costs, and price of
admission. If your teacher has a rubric, check to see how to make your presentation better.
Don’t forget to explain why you did what you did!