

Name: \_\_\_\_\_

## Optimizing The Solution

You are a pool maintenance contractor competing for the job to fix the unstable swimming pool. Your goal is to provide the most effective, efficient, and cost-friendly solution while ensuring swimmers' safety and comfort. After you have evaluated the solution in your scenario, submit a bid to the pool manager with your recommended solution. Be sure to justify your decisions with scientific reasoning.

Using what you have learned about equilibrium and how pools are usually brought back to stability, examine the problem in your scenario. List the criteria and constraints that you and your group need to consider when solving the problem.

- Remember
  - **Criteria:** The specific goals or requirements that a solution must meet to be successful. These are the desired features, functions, or outcomes of a design.
  - **Constraints:** The limits or restrictions that must be followed when creating a solution. These could include materials, time, cost, or safety rules.

Criteria	Constraints

### Bidding Process: 1-page formal bid proposal

1. Write a **formal bid proposal** to the pool manager, including:
  - a. A clear solution and how it would bring the pool back to equilibrium
  - b. Scientific evidence and reasoning from readings and other materials used in the lesson
  - c. Calculations, justifications, and cost estimates.
  - d. Criteria and constraints you have discussed as a group above.
2. Your proposal should be **persuasive** and **scientifically sound**.
3. The pool manager (your teacher) will review all bids and rate your proposal on how it meets the criteria and constraints that you have listed in your proposal.

**Final Submission: turn in your group's typed proposal on Canvas.**