

Name:

Date:

Class:

## Student Reflection Sheet

1. What did you learn about how forces are transferred through fluids in a hydraulic system?
2. How does Newton's First Law of Inertia explain what happens when the syringes push or pull fluid through the tubing?
3. How did balanced and unbalanced forces affect the movement of your bridge?
4. How did the viscosity of the fluid in your system affect the performance of your bridge?
5. What challenges did you encounter while building your bridge, and how did you overcome them?

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6. Why is it important for engineers to design systems where forces are balanced during operation? How did you ensure balance in your bridge?
7. How does Pascal's Law apply to the movement of your bridge? Can you explain how it works in your system?
8. How does this project relate to real-world hydraulic systems in cars, drawbridges, or heavy machinery?
9. If you could redesign your bridge, what would you change, and why?
10. How did your bridge demonstrate Newton's First Law of Inertia during testing, especially when forces were applied or removed?

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