H₂O Solutions: Hydroelectric Power Project

You are working for H₂O Solutions, an engineering design firm that works mostly with waterwheels and water energy! Your city wants to use hydropower instead of coal to make energy because they are worried about air pollution. The city hired **you** to design an efficient watermill. The firm (your class) split into several engineering teams (student groups) so each team can design and test a slightly different design. You will calculate power and work by measuring force, distance and time for your waterwheel. Then, H₂O Solutions will present the most efficient design to the city.

1. **Materials:**

2. **Procedure:**

3. **Design Sketch:** (use the back of this paper if needed)

4. **Calculate the work and power of your waterwheel:**

   Work = force x distance   Power = Work ÷ time

5. **Questions:**

What is hydropower?

How does hydropower work?

Why do you think your team's design will be efficient?