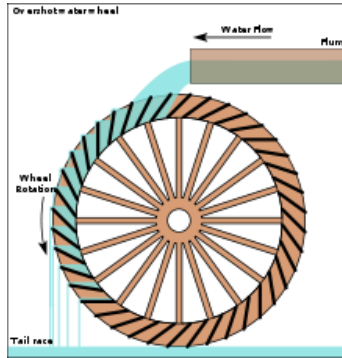Name: _____ Date: _____

## Waterwheel Data Collection



1. Describe what happened to your waterwheel as you poured rice on it?

2. In the table below record the data for your waterwheel.

| Elapsed Time | Number of Turns | Rate of Rotation (Number of Turns ÷ Elapsed Time) Rounded to nearest hundredth. |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

3. Find the average of your 4 rates of rotations by adding them up and dividing by 4 without a calculator.  Round to the nearest hundredth.

4. Go back to your engineering design process worksheet and finish the create and improve sections. After you make changes to your waterwheel use the table below to record the data for your waterwheel.

| Elapsed Time | Number of Turns | Rate of Rotation (Number of Turns ÷ Elapsed Time) Rounded to nearest hundredth. |
|---|---|---|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

4. Find the average of your 4 rates of rotations by adding them up and dividing by 4 without a calculator. Round to the nearest hundredth.

5. How effective were your improvements?  Did your waterwheel rates increase or decrease?  Explain why you think they did.

6.  What further adjustments could you make to improve your waterwheel?