





What do these structures have in common?

How are they different?

How can wind be used to do stuff?



The Windmill Challenge!



**The Windmill
Challenge!**

**What is the best
windmill you can
make?**



Paper



Straw



String





Work

Energy transferred to
or from an object when
you use force to move
it

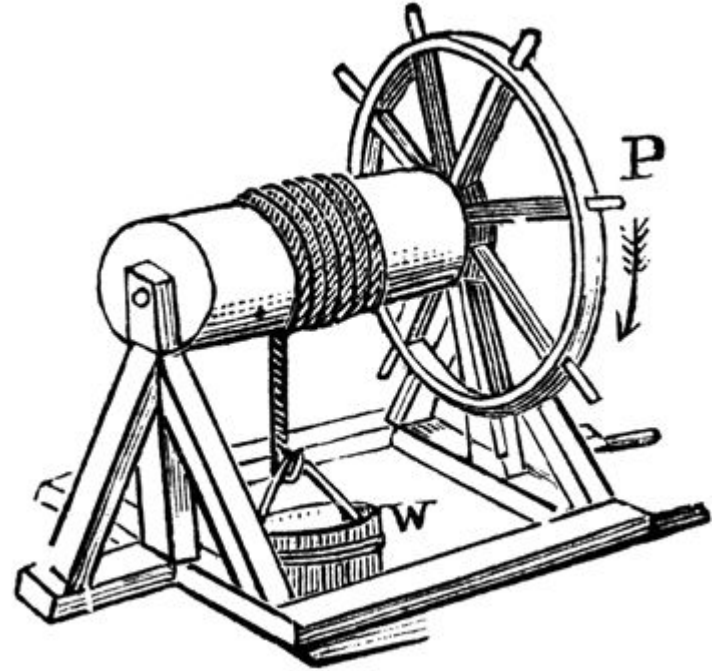
Energy

The amount of work
something or someone
can do!



Wheel and axle machine

A wheel turns, which turns the axle (rod), which can be used for energy (like lifting stuff!)



1. Build your windmill

1. Build your tower

2. Reassess your design

1. Build your tower

2. Reassess your design

3. Test your design

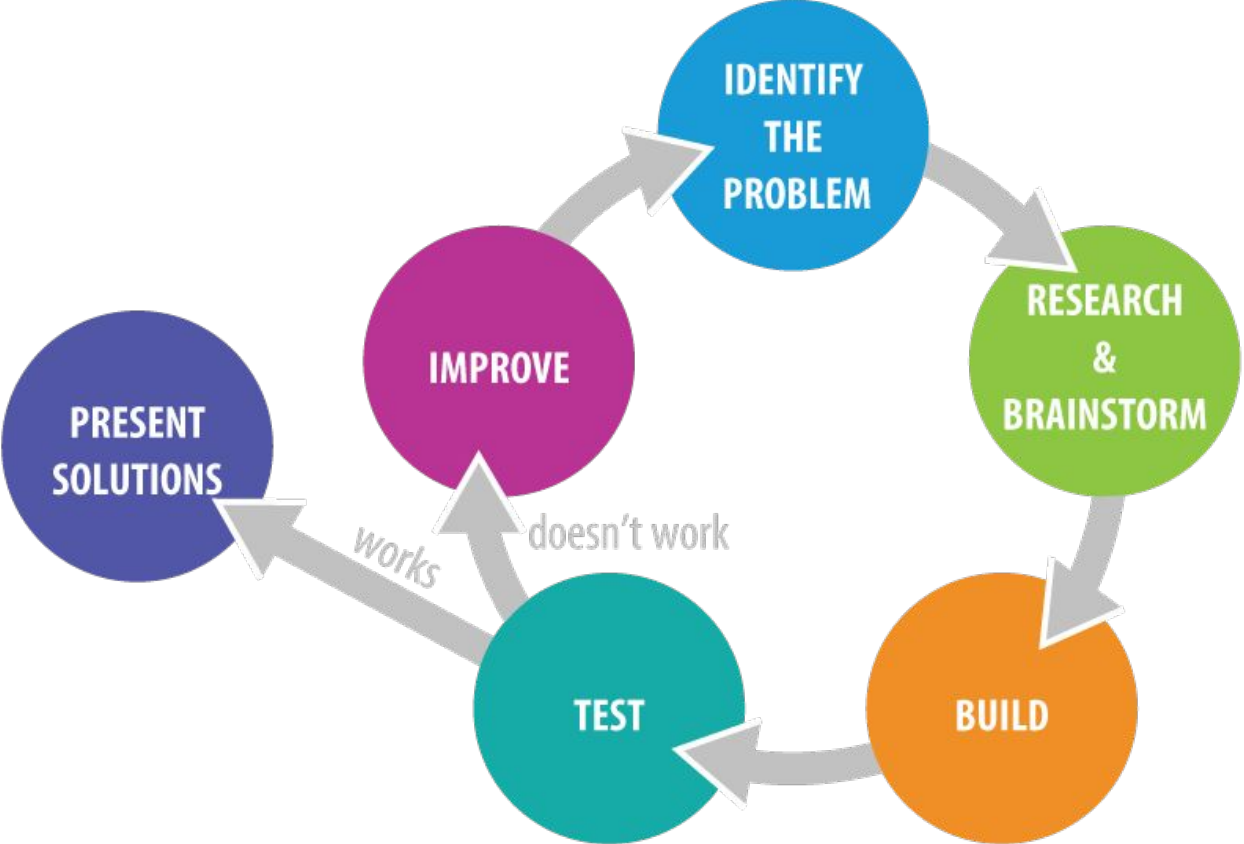
The Windmill Challenge!



1. What is the best windmill you can make?

1. How much weight can your windmill lift?

ENGINEERING DESIGN PROCESS



Your goal: Build the best windmill that can lift the most stuff!