

Components of Design

2. Water or Air: Who can Stand the Pressure? Part 2

Read and do all activities in the *Physics Pro Experiment Manual* on p. 10-11 up to “3. How Thick & Thin.”

2. Power Transmission

As you move one plunger, what happens to the other?

Workshop: Seesaw with axle

What happens when you move one end of the seesaw?

Where is the pivot point?

3. Air Shortage

In step (1), how does the force necessary to pull the plunger change the further you pull it up?

In step (1), what happens when you let go of the plunger?

What happens in step (2) when you put a pump with a vacuum inside into the water?

What force pushed the plunger back in in step (1)?

If you have time:

Design another machine using the hydraulic cylinder. Describe your machine below. What does it do? What is the function of the hydraulic piston. Have Mrs. Perry take a picture for the class website!!!