

Name:

## **Investigating Pneumatic and Hydraulic Systems**

Answer the following questions in your journal.

### **Activity #1- Pneumatic Systems**

Connect two syringes of the same size to both ends of the tubing. Make sure that the plunger of one syringe is out and the plunger of the other syringe is in before connecting the tubing.

1. Push the plunger in. Describe what happened.
2. Try pushing in the plunger of the second syringe. What happened to the first plunger?
3. Now pull the plunger back out. Describe what happened.
4. Press both plungers down at the same time. Describe what happened.

Disconnect one syringe from the tubing, press both syringes in completely. Reconnect the tubing.

5. Try pulling one plunger out and then let go. What happened?

### **Activity #2- Hydraulic Systems**

Fill the tube and one syringe with water and connect together. Connect the second syringe to the other end of the filled tube. Make sure that one plunger is pushed in all the way before connecting the

tubing.

1. Push the plunger in. Describe what happened.
2. Try pushing in the plunger of the second syringe. What happened to the first plunger?
3. Now pull the plunger back out. Describe what happened.
4. Press both plungers down at the same time. Describe what happened.