

## Fluid Power Challenge Pre-Test

*Fluid power is the technology of using the properties of fluids to generate, control and transmit power as a result of the pressurization of fluids. To better understand your current knowledge of fluid power please answer the following questions to the best of your ability.*

*Please keep in mind that this is a **pre-test** and you are not expected to know the answers to all these questions. This is not a team exercise so please complete this on your own. **Do not put your name on this test.***

1. How familiar are you with fluid power?

1	2	3	4	5
Not at all		somewhat		Very

2. How familiar are you with careers in fluid power?

1	2	3	4	5
Not at all		somewhat		Very

3. List four advantages of fluid power.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_

4. Hydraulic fluid power systems transfer energy through what medium?

\_\_\_\_\_

5. Pneumatic fluid power systems transfer energy through what medium?

\_\_\_\_\_

6. List four examples of a hydraulic fluid power system.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_

7. List four examples of a pneumatic fluid power system.

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

8. Viscosity is the measure of?

\_\_\_\_\_

9. Which of these two is more viscous at room temperature?

Water

Liquid honey

10. Volume of a cylinder is calculated by what formula.

\_\_\_\_\_

11. Pressure is calculated by multiplying what two variables?

a. \_\_\_\_\_

b. \_\_\_\_\_

12. What is mechanical advantage?

\_\_\_\_\_

\_\_\_\_\_