**Fluids In Motion** (p. 92 – 94)

**I. Pascal’s Principle**

**1. Define Pascal’s Principle.**

Pascal’s Principle –

**2. Write out the equation for determining Pascal’s Principle.**

*P1 =* ***or*** *F1 / A1 =*

**3. The science of applying Pascal’s Principle is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**4. In a hydraulic lift system, an larger force is produced because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**is transmitted equally to the larger area of the lifting piston.**

**5. List three uses of hydraulics.**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**II. Fluids In Motion**

**1. Identify if the following statements are true or false.** (Circle one.)

1. True False Fluids move faster through smaller areas than larger areas.

2. True False All fluids flow at the same rate.

3. True False Fluid pressure decreases as speed increases.

**2. Define the term viscosity.**

Viscosity –

**3. How does increasing temperature affect the viscosity of fluids?**

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**4. Define Bernoulli’s Principle.**

Bernoulli’s Principle –

**5. Use Bernoulli’s Principle to explain how each of the following operate.** (Not in the book.)

Airplane Glider : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Racecar Spoiler : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Hose-End Sprayer : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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