

# Concept Review

---

## Section: Fluids

1. **Explain** how Archimedes' principle determines the buoyant force on an object in any fluid medium.

---

---

---

---

2. **Compare** the buoyant force of water and the weight of a piece of wood that floats on the water.

---

---

3. **Calculate** the pressure of an enclosed fluid on which a force of 150 N is exerted over an area of  $10 \text{ cm}^2$ . Give the answer in pascals.

---

---

4. **Explain** Pascal's principle.

---

---

---

---

5. **Calculate** the force output by the larger piston of a hydraulic lift when a force of 700 N is exerted on the smaller piston. The areas of the two pistons are  $20 \text{ cm}^2$  and  $950 \text{ cm}^2$ .

---

---

---

---

---

6. **Define** Bernoulli's principle.