

Name: \_\_\_\_\_

### Chapter 13 Review Sheet

1. \_\_\_\_\_ is the result of a force distributed over an area.
2. What is the equation for pressure?
  
3. List the SI unit for the following: force, area, pressure
  
4. Pressure and force are \_\_\_\_\_ proportional, while pressure and area are \_\_\_\_\_ proportional.
5. Water pressure \_\_\_\_\_ as depth increases. This is a \_\_\_\_\_ relationship.
6. At any given depth, describe how pressure is exerted?
  
7. What is a fluid?
  
8. What are the two main examples of fluids?
  
9. For a fluid that is not moving, what two factors determine the pressure the fluid exerts?
  
10. Air pressure \_\_\_\_\_ as the altitude increases. This is a \_\_\_\_\_ relationship.
11. What pressure does Earth's atmosphere exert?
  
12. Why aren't we crushed by Earth's atmospheric pressure?
  
13. Explain how you can crush a can with air pressure.
  
  
14. What is stated in Pascal's principle?
  
  
15. If you had a bottle filled with water, pressure is greatest at the \_\_\_\_\_.
16. When you squeeze a bottle filled with water, what happens to the pressure?
  
  
17. What is a hydraulic system?

18. Describe the steps of how a hydraulic system works (look below the picture of the truck)

19. According to Bernoulli's principle, as the speed of a fluid increases, the pressure within the fluid \_\_\_\_\_ . This is a \_\_\_\_\_ relationship.

20. Why does a piece of paper move up when you blow air over the top of it?

21. Use Bernoulli's principle to explain how airplanes achieve flight?

22. An upward force created due to a pressure difference is known as \_\_\_\_\_ .

23. Using Bernoulli's principle, explain how a spoiler on a race car is able to exert a downward force and increase traction?

24. \_\_\_\_\_ is the ability of a fluid to exert an upward force on an object placed in it.

25. Buoyancy results in the apparent \_\_\_\_\_ of weight of an object in a fluid.

26. True or False: Every object in a fluid experiences buoyancy.

27. What is buoyant force?

28. What is stated in Archimedes' Principle?

29. What happens when you submerge an object in a fluid?

30. When will an object sink?

31. When will an object float?

32. When will an object become suspended?

33. What are the two forces that act on every object in a fluid?

34. Why do objects float easier in a dense fluid?