Chapter 3 Forces and Fluids - DCN

1. What is pressure?

2. What formula is used to calculate pressure?

3. How is the unit for pressure abbreviated in the SI system?

4. Name one way to change the amount of pressure exerted on an object.

5. Define Fluid.

6. Why do your ears pop you swim deep underwater?

7. In what direction is pressure exerted by a fluid on a surface.

8. What is atmospheric pressure?

9. How much atmospheric pressure is on us at sea level?

10. How come we are not crushed by this pressure?

11. What is a barometer?

12. How does a barometer work?

Why do objects float? (pg 74-80)

13. Define buoyant force.

14. Why does a stone sink but a twig floats when tossed in water?

15. Explain how buoyant force depends on shape.

16.What is Archimedes' principle?

17. Define density.

18. What is the formula for density?

19. Will an object float if it has a mass of 10g and a volume of 22cm3?

Doing work with Fluids (pg 82 -87)

20. What is Pascal's principle?

21. What is a hydraulic system?

22. How does a hydraulic system increase force?

23. What is Bernoulli's principle?

24. How can windows be damaged by high winds.

25. What is lift?

26. Why does a sheet of paper rise when you blow across the top of the paper?

27. Why do airplanes have different size and shaped wings?