



GAS LAWS AND SCUBA DIVING

1. Why does chewing gum, swallowing or yawning help ease discomfort when changing altitude?
2. Why are changes in depth more drastic in water than in air?
3. Why is scuba gear used when diving?
4. What happens if divers hold their breath when rising quickly to the surface?
5. Henry's Law states that gases are more soluble (dissolve better) in a liquid when the pressure above the liquid increases. Using Henry's Law, explain why gases enter the blood of the divers.
6. Why shouldn't a diver take a plane-ride soon after a dive?

7. What gas in the circulatory system causes the most problems?

8. What are "the bends," also known as decompression sickness?

9. Why must Navy divers ascend in certain depth increments and wait at each one?

10. At what depth does "rapture of the deep" occur? What are its symptoms? What causes it?

11. What percent of contamination at 40 meters is the result of 1% carbon monoxide at the surface?

12. As divers surface, why does the amount of oxygen in the blood decrease? Why doesn't the amount of carbon monoxide in the blood decrease?

13. How does temperature affect the solubility of air in water?