

### **Balloons: Gas & Go - Questions**

**Directions:** Answer the questions after reading the article "Balloons: Gas & Go".

- 1) Why does the balloon expand when the propane burner blasts?
  
- 2) Why doesn't the balloon pop?
  
- 3) Why does the balloon rise through the surrounding air?
  
- 4) What is a variometer? | What is an altimeter?  
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- 5) What determines the flight path of a hot air balloon?
  
- 6) What did Charles' suggest for an improvement on hot air balloons?
  
- 7) What is a flight ceiling? Why should you be careful not to cross the flight ceiling?
  
- 8) Which heats faster: air over a plowed field or air over a lake? Justify your answer.
  
- 9) How would you make your own hot air balloon?
  
- 10) Under "Think about it", Suppose you had "molecular snapshots" of the way air molecules were arranged inside and outside the balloon. How would they compare?