

CONCEPTUAL *Physics* PRACTICE PAGE

Chapter 14 Gases Gas Pressure

1. A principle difference between a liquid and a gas is that when a liquid is under pressure, its volume

[increases] [decreases] [doesn't change noticeably]
and its density

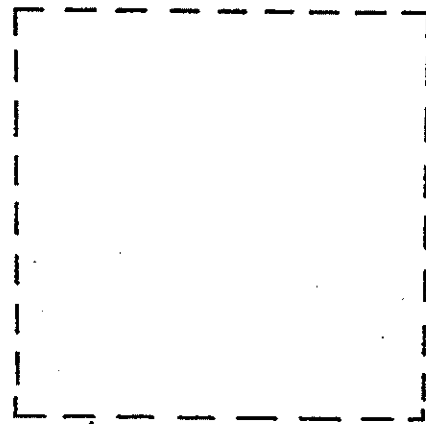
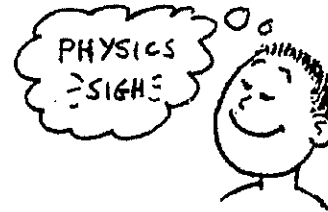
[increases] [decrease] [doesn't change noticeably].

When a gas is under pressure, its volume

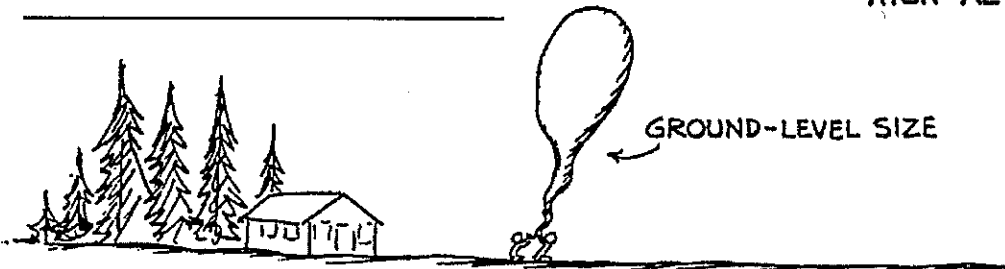
[increases] [decreases] [doesn't change noticeably]
and its density

[increases] [decreases] [doesn't change noticeably].

2. The sketch below shows the launching of a weather balloon at sea level. Make a sketch of the same weather balloon when it is high in the atmosphere. In words, what is different about its size and why?

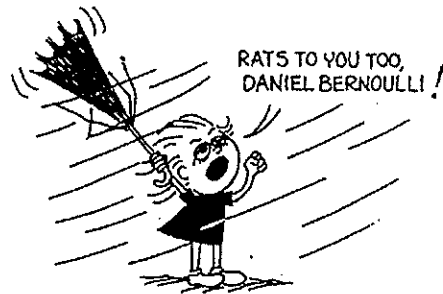


↑ HIGH-ALTITUDE SIZE



3. A hydrogen-filled balloon that weighs 10 N must displace _____ N of air in order to float in air. If it displaces less than _____ N, it will be buoyed up with less than _____ N and sink. If it displaces more than _____ N of air, it will move upward.

4. Why is the cartoon more humorous to physics types than to non-physics types? What physics concept has occurred?



The wit drew it!

Tinkering is the process of "nosing"
your way toward a solution to some-
thing you don't quite know how to do
— a combination of discovery and play.



Hewitt
Drew it!