EPS 200 (Stapleton) Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Pressure Questions

1. What is the average value of air pressure at sea level? (include units) \_\_\_\_\_\_\_\_

2. When you rise quickly in altitude, which way do your eardrums stretch -- inward or outward? Explain why.

3. A nearly flat car tire flattens out where it touches the road, so that 80in2 of tire surface touches the road. If the pressure in the tire is 15psi, what is the total force of the car tire pushing against the road?

4. The total force of air pressure that is squeezing you at this moment is very high. Give some reasons to explain why that pressure does not hurt you.

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5. Use a diagram to explain why a suction cup sticks to glass.

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