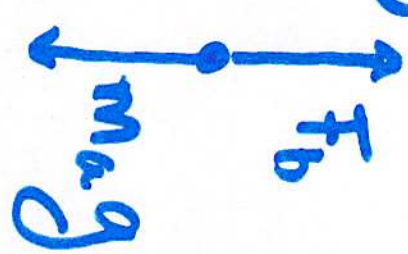
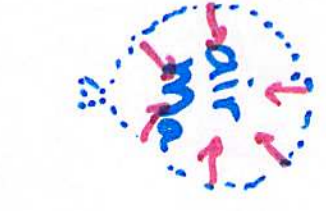


pressure is isobaric!

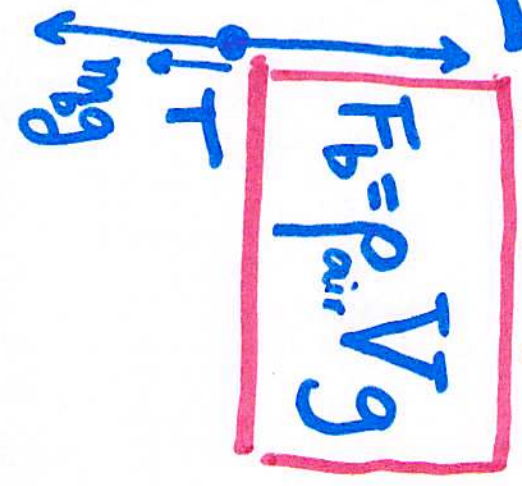
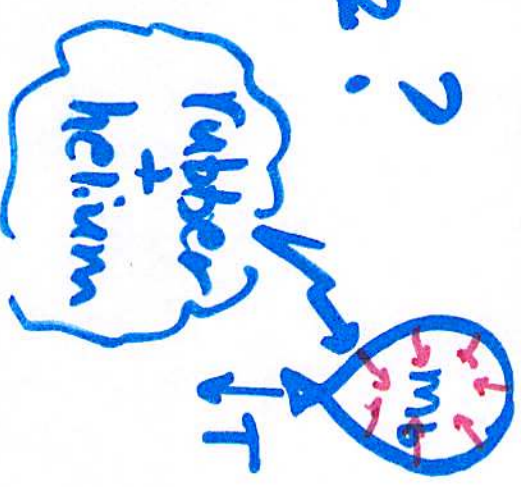
$$\frac{dP}{dz} < 0$$

buoyant force?



$$|\vec{F}_b| = |m_a \vec{g}|$$

$$M_a = \rho_{air} V$$

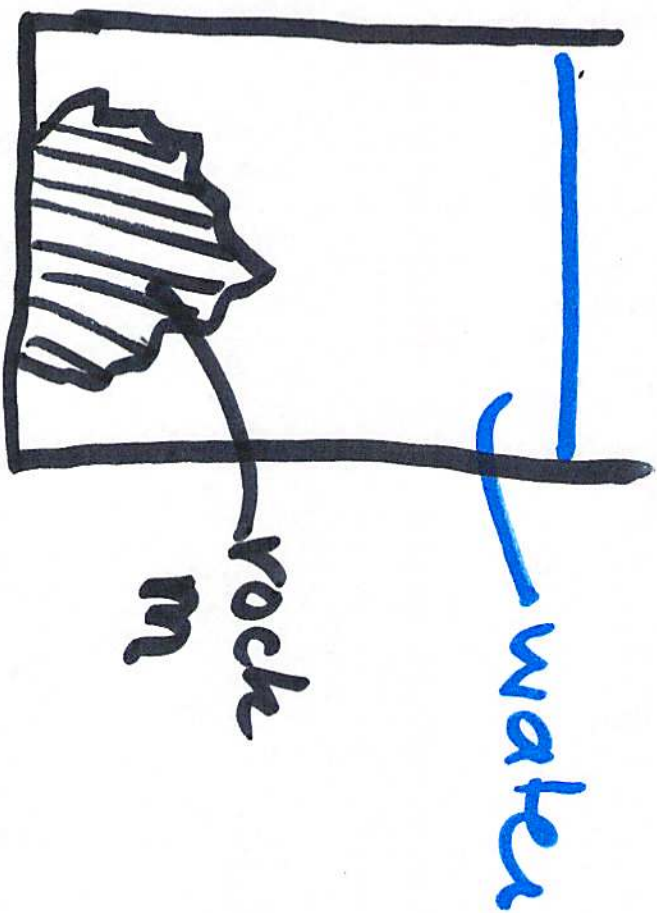


iso-pressure surfaces
iso-density surf

flat, perpendicular to gravity

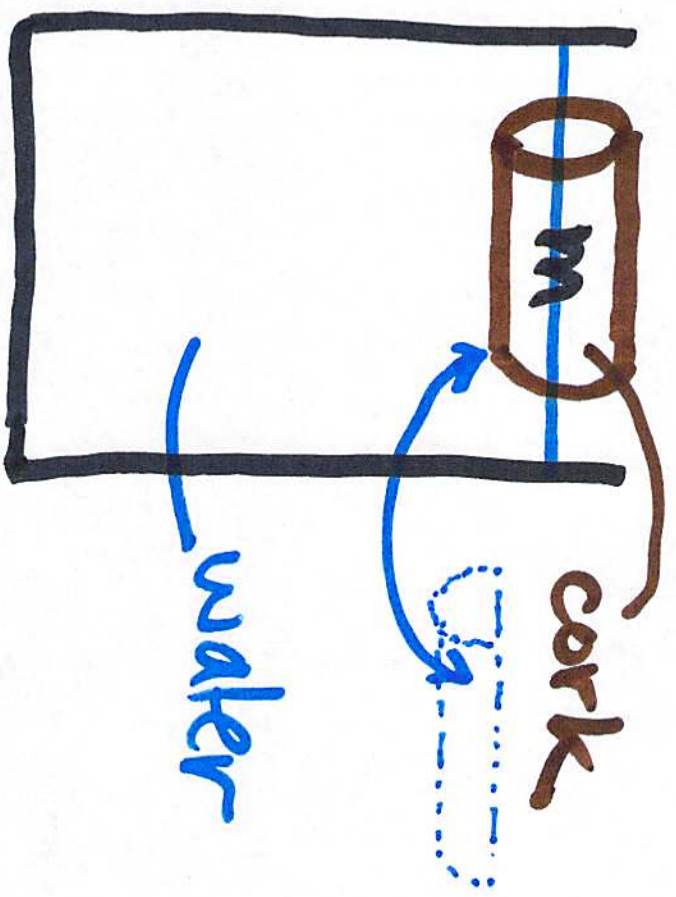
room





$$N \uparrow \uparrow F_b = \rho_{\text{water}} V_{\text{rock}} g$$

$$\downarrow mg$$

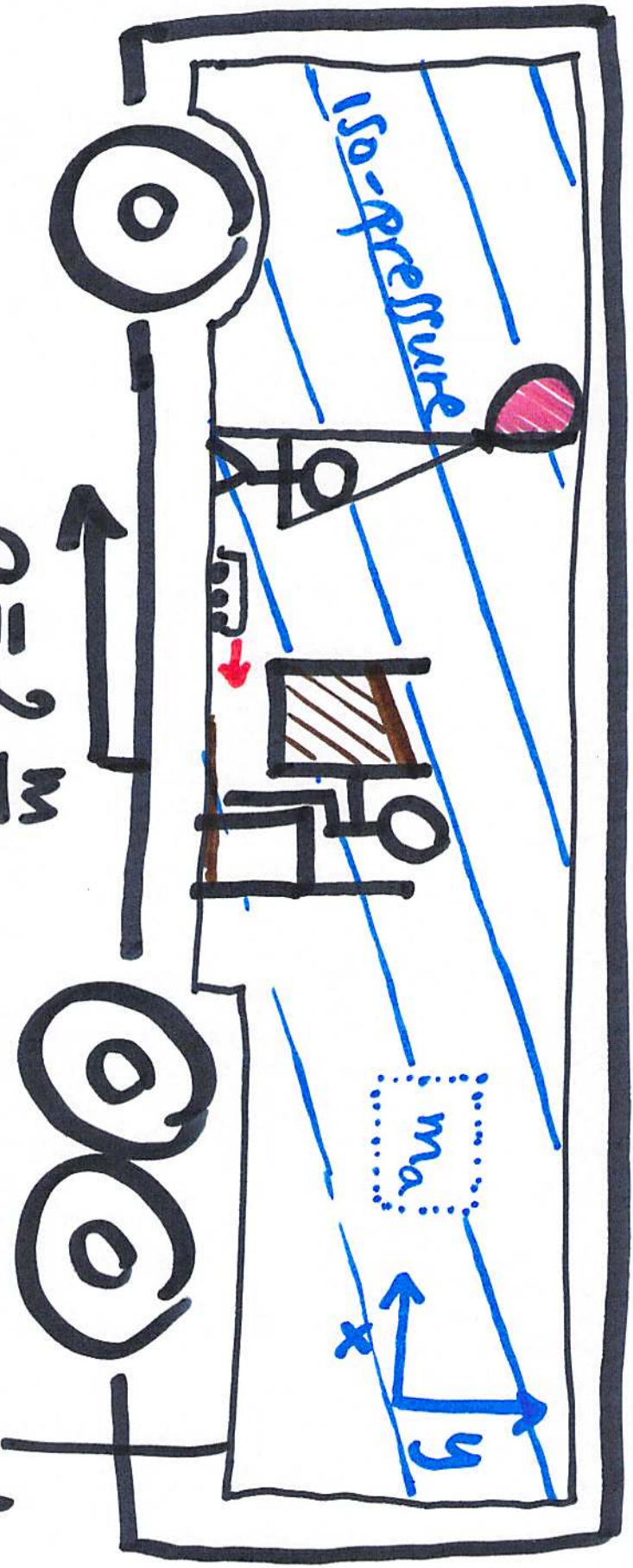


$$F_b = \rho_{\text{water}} V_{\text{displaced}} g$$

$$m$$

$$\downarrow mg$$

"displaced"



"Steady" acceleration.

