Q1. \( \text{density} = \frac{3 \text{mass}}{4\pi (\text{radius})^3} \) Use this formula to show the density of Saturn is 0.7 g/cm\(^3\) (you'll need to show your work to get credit). Could Saturn float on an enormous pool of water?

Q2. What is the main objection to Saturn's rings having formed with the planet?

Q3. How has Io managed to remain volcanically active despite it being much smaller than geologically dead objects like Mercury and the Moon?

Q4. It is possible that Saturn's moon Titan has "playas". What is a "playas" and what on Titan causes them?

Q5. Why are Uranus and Neptune blue? (One word answer is fine.)