1 Planets can partially heat their interiors through differentiation. What is differentiation and how does it heat the interiors of planets? In the case of Jupiter and Saturn, what is sinking and what is rising?

2 How do greenhouse gases heat a planet? Please draw a picture.

3 Will Saturn always have rings? Please explain.

4 Why are all modern scientific telescopes reflectors? What are the advantages of using reflectors instead of refractors?

5 Why doesn't Mercury have an atmosphere?

6 Why is the sky blue on Earth? Why are our sunsets and sunrises red?

7 Why are Neptune and Uranus blue? What compound is important to this? Please draw a picture to help explain.

8 Why does Jupiter have stripes? Why does the color of the stripe tell you the temperature of the stripe?

9 Why is Io more volcanically active than Mars, when Mars is much larger than Io?

10 Why does Mars have a volcano that is larger than Mt. Everest? Since Earth is larger than Mars why doesn't it have the tallest mountains/volcanoes?