

The Outer Planets

Planet 5 – Jupiter

1. Like the rest of the outer planets, Jupiter has no surface. How is that possible?
2. What two elements is Jupiter primarily composed of?
3. What is the cause of Jupiter's banded cloud patterns?
4. What is the form (phase) of the matter in Jupiter's interior? Is the term "gas giant" a misnomer?

Planet 6 – Saturn

5. Name a few ways Saturn differs from Jupiter.
6. Recent *Cassini* pictures show colorful auroras at Saturn's poles. These and many other lines of evidence suggest that Saturn, like Jupiter, has a strong magnetic field. Where does it come from?

Planet 7 – Uranus

7. How does the composition of Uranus and Neptune *differ* from that of Jupiter and Saturn?
8. Describe the motion of the Sun in the "sky" over the course of a day in the Uranian summer.

Planet 8 – Neptune

9. What is notable about Neptune's magnetic field? Where does this field probably originate?