IQ

• Jupiter is made of hydrogen (~75%) and helium (~24%), making it similar in composition to the Sun.

  • T
  • F
• It is true!

• Both the Sun and Jupiter are about 75% hydrogen, 24% helium and 1% everything else (by mass).

• This is also very close to the composition of the universe, in general!
IQ

- The Great Red Spot in Jupiter’s atmosphere is thought to be:
  - A. A planetary “belly button.”
  - B. The location of a subsurface black hole.
  - C. A long-lived storm similar to a cyclone on Earth.
  - Jupiter’s north magnetic pole.
The correct answer is C, a long-lived storm.

The center of the Red Spot is high altitude clouds, and the atmosphere circulates counter clockwise at about 400 miles per hour.
IQ

- Jupiter radiates more heat than it receives from the Sun.

- T
- F.
• True!

• Jupiter radiates infrared radiation (heat) at about twice the rate that the Sun heats the planet!

• The planet is still contracting, thus generating energy.
IQ

- The Galilean satellites of Jupiter exhibit BOTH rotational and orbital resonances.

- T
- F
Each of the four Galilean satellites is in synchronous rotation.
The inner three moons exhibit 1:2 and 1:4 orbital resonances, as well!
IQ

- Io, the innermost of the Galilean satellites, probably has water oceans.

- T
- F
• **F! False.**

• **Io** is a rocky world kept very hot by gravitational interactions with Jupiter, Europa and Ganymede.

• **Europa** probably has a warm water ocean!