

Astro 100 Exam II Study Guide

Topics (not exhaustive, but covers the most important material)

Accretion
Asteroid collision rates
Asteroids
Atmospheres of the Jovians
Bulk density (mass/volume)
Ceres
Clouds of Jupiter and Saturn
Comet structure (nucleus, coma, tails)
Comets
Compositions of Jovians
Conditions for liquid water
Core
Coriolis effect
Crust
Densities of common materials (water, rock, metal/iron)
Differential rotation (Jovians)
Differentiation
Dwarf planets
Earth's atmosphere
Elements of the universe (initial and produced later)
Eris
Exosphere
Flattening
Frost line
Galilean moons of Jupiter
Gravitational contraction (as an energy source)
Great Red Spot
Greenhouse effect
Greenhouse gases
Heating
Hydrogen compounds (ammonia, methane, etc.)
Immanuel Kant
Iridium
Jovian formation
Kepler's laws (notably, the 3rd law)
KT boundary layer
Kuiper Belt Objects (KBOs)
Lithosphere
Loss mechanisms of atmospheric gases (5)
Luis Alvarez

Mantle
Mars' seasons
Mars' atmosphere
Mars' surface features
Mechanisms for geological re-surfacing (4)
Mechanisms for internal heating (3)
Mechanisms for planetary cooling (3)
Mercury's atmosphere
Mercury's surface features
Meteorites (characteristics)
Moon's surface features
Oort Cloud
Ozone (UV protection)
Phases of hydrogen (Jupiter)
Physics of light scattering (effects of coloring the skies of planets)
Planetary geology
Pluto
Rings of Saturn
Roche limit
Seismic waves
Shoemaker-Levy 9
Solar nebular (and solar nebular theory)
Sources of atmospheric gases (3)
Spinning
Stratosphere
Terrestrial formation
Thermosphere
Titan
Triton
Troposphere
Tunguska Siberia
Venus' atmosphere
Venus' surface features