Mercury

- Caloris Basin & "weird terrain"
- Has almost no atmosphere
- Temperature extremes: 800°F daytime high -280°F nighttime low
- Scarps
- Longest solar day (sunrise to sunrise) of any planet.

Venus

- Runaway greenhouse effect caused by dense CO₂ atmosphere
- Hottest surface temperature: 900°F
- Reflective clouds make it very bright in the sky
- Spins Slowly Backwards
- Few craters-young active surface

Earth

- Most dense planet: 5.5 g/cm³
- Liquid water abundant on its surface
- Plate tectonics
- Life found there
- Oxygen rich atmosphere

Moon

- Rilles: straight and meandering
- Regolith
- Highlands & Maria
- · We have visited it
- Crust is thinner on one side

Mars

- Wind blown deserts fringe its polar caps
- Olympus Mons: highest mountain in the Solar System
- Rusty Red color from iron in its soil
- Valles Marineris: dwarfs the Grand Canyon
- Evidence of liquid water in the past

Jupiter

- Strongest magnetic field of any planet
- Fastest rotation in the Solar System:
 ~10 hours
- Great Red Spot
- Brightly colored cloud bands
- King of the planets: largest & most massive

Saturn

- Largest ring system
- Icy material makes rings bright
- Least dense planet: "float" in water
- Most oblate planet
- Cloud bands hidden by ammonia clouds

Uranus

- Blue-green, nearly featureless planet
- · Spins on its side
- "George's Star"
- Dark, narrow rings composed of a myriad of small particles
- First dim planet discovered

Neptune

- Blue as the deep sea
- Dark rings gathered into arcs
- Great Dark Spot
- Discovered by applying Newton's Laws
- Most distant planet just inside of the Kuiper Belt

Dwarf Planets

Ceres

- Largest object in the asteroid belt
- Smallest known dwarf planet

Pluto

- Crosses Neptune's orbit
- Recently demoted from planet status

Eris

- Largest known dwarf planet
- Orbit is highly elliptical & highly inclined

Moon Review

Which planet does each of the following moons belong to? What makes each of them unique?

| Callisto | | |
|-----------|--|--|
| Charon | | |
| Deimos | | |
| Dysnomia | | |
| Enceladus | | |
| Europa | | |
| Ganymede | | |
| Hydra | | |
| Iapetus | | |
| Io | | |
| Mimas | | |
| Miranda | | |
| Nix | | |
| Phobos | | |
| Titan | | |
| Triton | | |