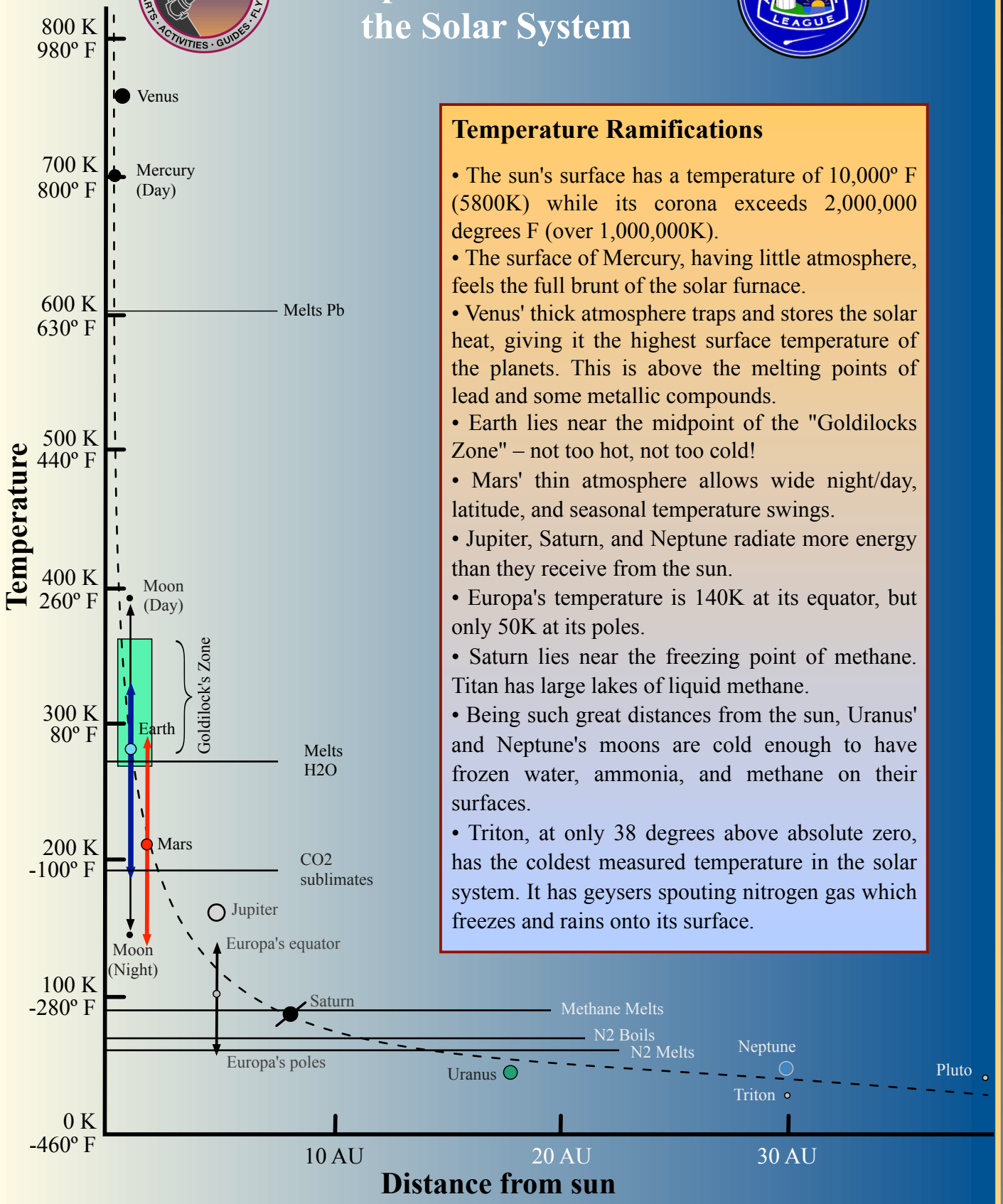
And you think it is hot/cold here!

Temperature Profile of the Solar System



Temperature Ramifications

- The sun's surface has a temperature of 10,000º F (5800K) while its corona exceeds 2,000,000 degrees F (over 1,000,000K).
- The surface of Mercury, having little atmosphere, feels the full brunt of the solar furnace.
- Venus' thick atmosphere traps and stores the solar heat, giving it the highest surface temperature of the planets. This is above the melting points of lead and some metallic compounds.
- Earth lies near the midpoint of the "Goldilocks Zone" – not too hot, not too cold!
- Mars' thin atmosphere allows wide night/day, latitude, and seasonal temperature swings.
- Jupiter, Saturn, and Neptune radiate more energy than they receive from the sun.
- Europa's temperature is 140K at its equator, but only 50K at its poles.
- Saturn lies near the freezing point of methane. Titan has large lakes of liquid methane.
- Being such great distances from the sun, Uranus' and Neptune's moons are cold enough to have frozen water, ammonia, and methane on their surfaces.
- Triton, at only 38 degrees above absolute zero, has the coldest measured temperature in the solar system. It has geysers spouting nitrogen gas which freezes and rains onto its surface.