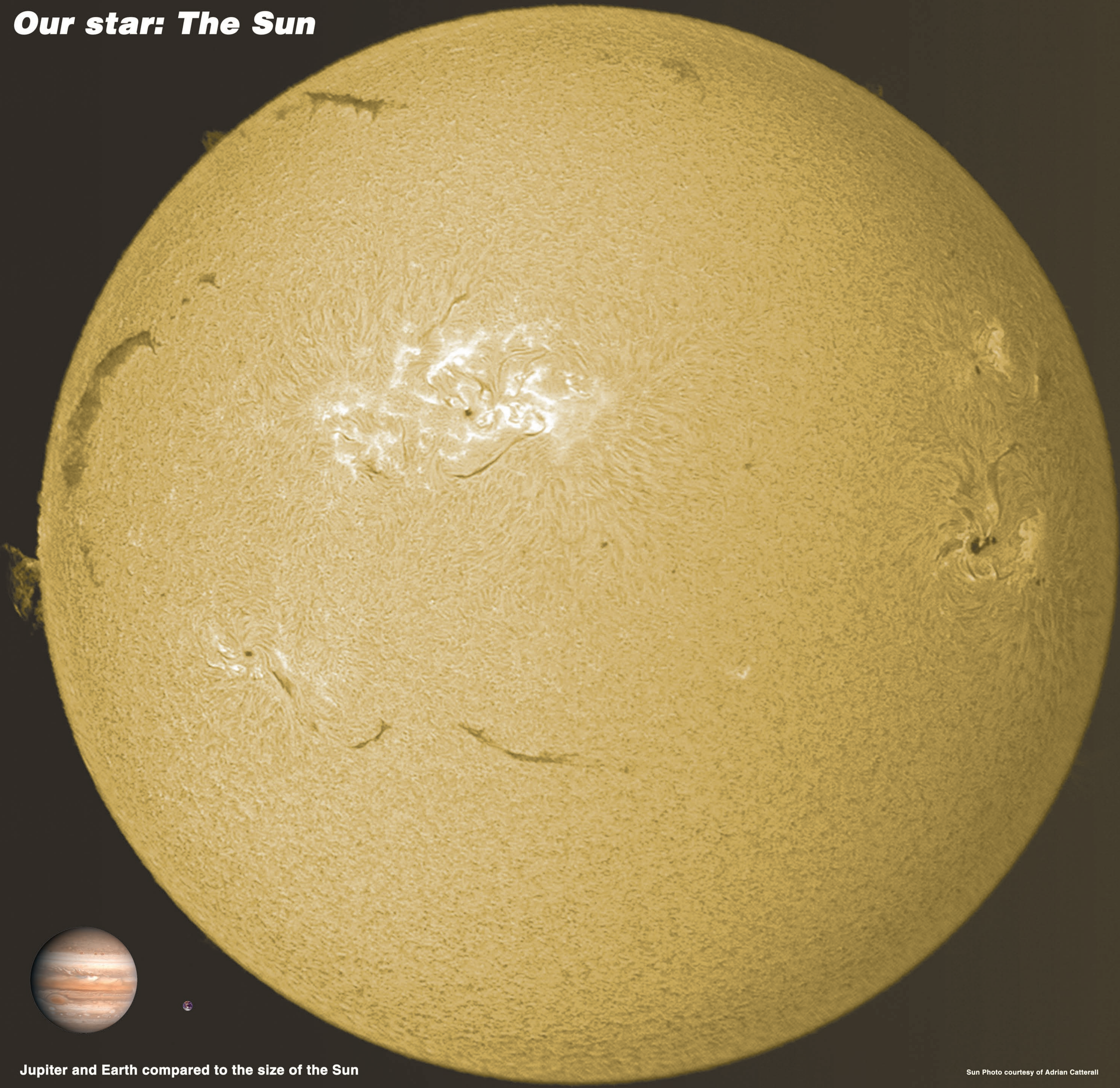
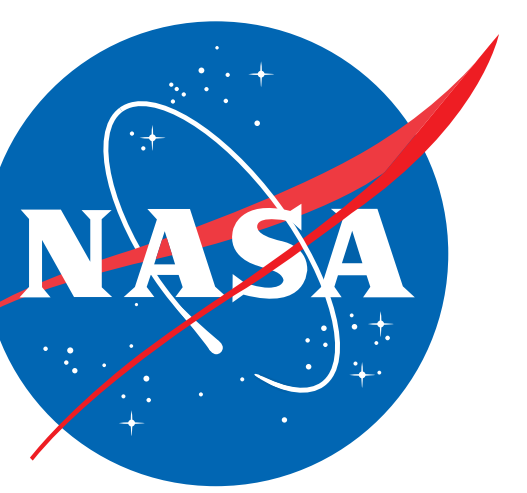


Our star: The Sun



Jupiter and Earth compared to the size of the Sun

Sun Photo courtesy of Adrian Catterall



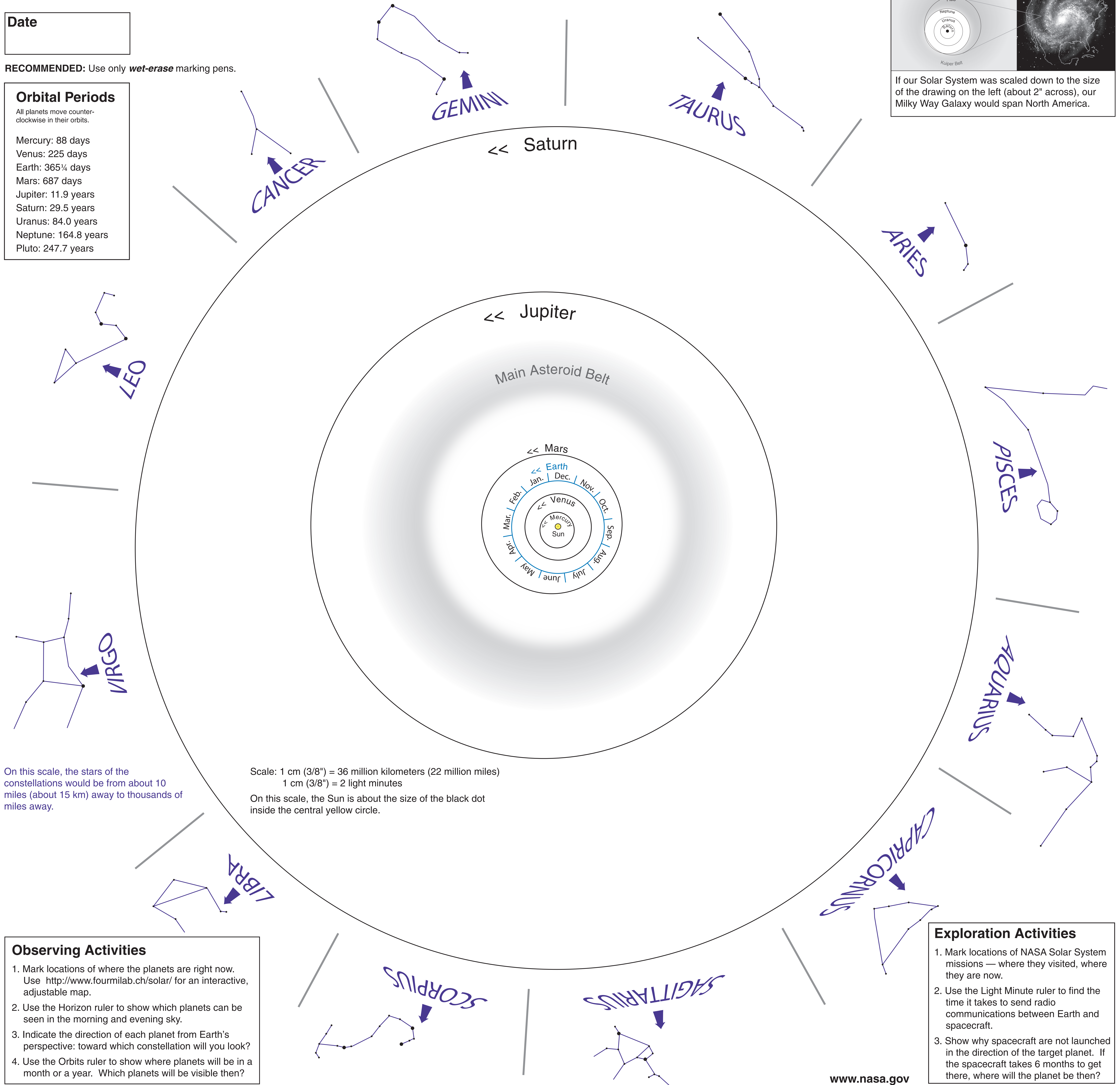
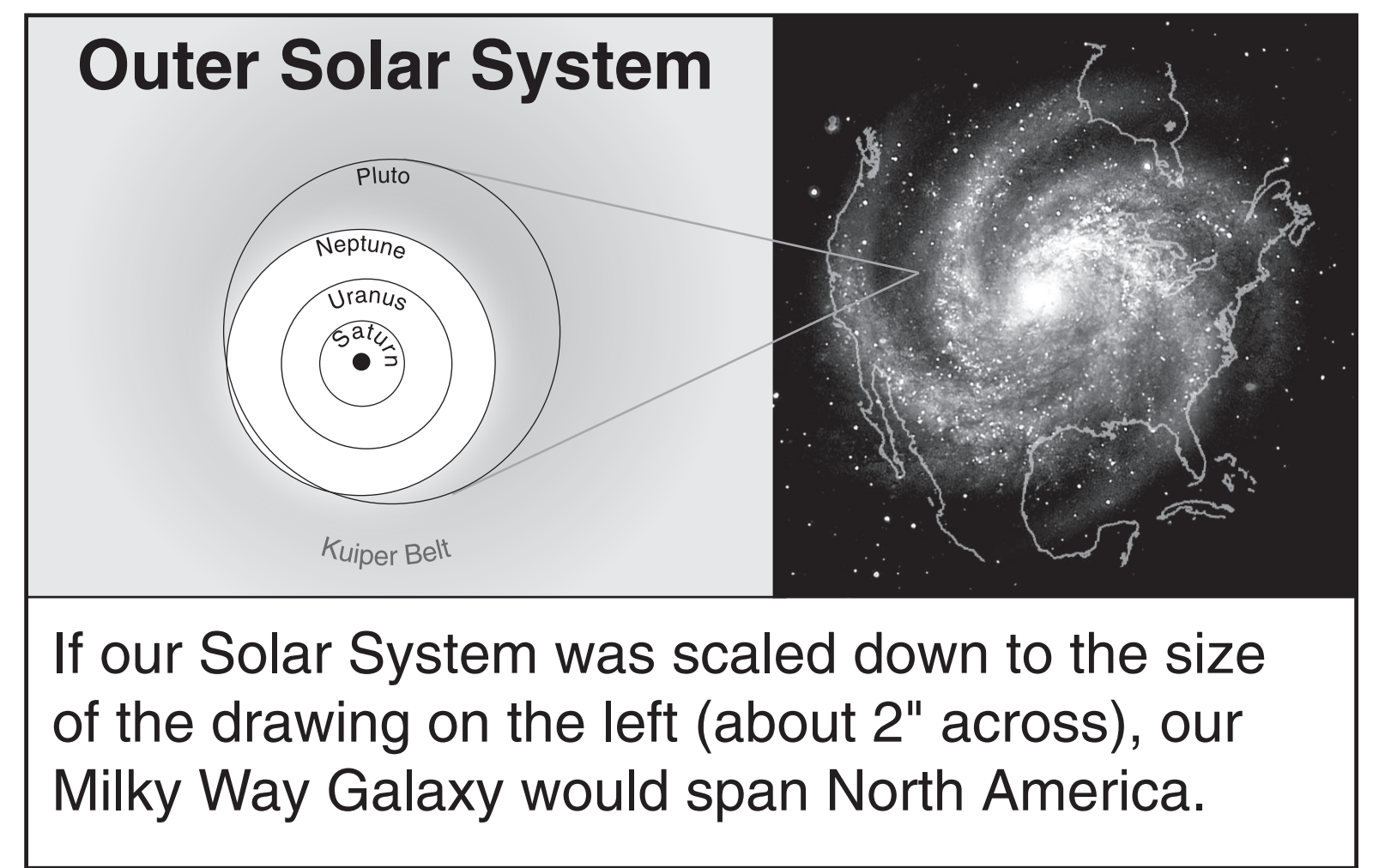
Exploring Our Solar System

Date

RECOMMENDED: Use only *wet-erase* marking pens.

Orbital Periods
 All planets move counter-clockwise in their orbits.

Mercury: 88 days
 Venus: 225 days
 Earth: 365¼ days
 Mars: 687 days
 Jupiter: 11.9 years
 Saturn: 29.5 years
 Uranus: 84.0 years
 Neptune: 164.8 years
 Pluto: 247.7 years



Observing Activities

1. Mark locations of where the planets are right now. Use <http://www.fourmilab.ch/solar/> for an interactive, adjustable map.
2. Use the Horizon ruler to show which planets can be seen in the morning and evening sky.
3. Indicate the direction of each planet from Earth's perspective: toward which constellation will you look?
4. Use the Orbits ruler to show where planets will be in a month or a year. Which planets will be visible then?

Exploration Activities

1. Mark locations of NASA Solar System missions — where they visited, where they are now.
2. Use the Light Minute ruler to find the time it takes to send radio communications between Earth and spacecraft.
3. Show why spacecraft are not launched in the direction of the target planet. If the spacecraft takes 6 months to get there, where will the planet be then?