Mercury

- The Speedy Messenger
- Close to the Sun
- Tidally locked?
  - Orbital period = rotation period?
- Use radar

  1 rotation = _____ days
  1 orbit = _____ days
  ____ = ______

Mariner 10 (1974-75)

Photographed 1/2 the surface

MESSENGER - Launch 2004, Arrived 2011
What’s it like?

No atmosphere

- Hot days (700 K)
- Cold nights (100 K)

Craters

Plains some resurfacing
Flyover

Major Features

_______ Basin

_______ km wide?
What’s it like inside?
Weak magnetic field -- _______!
______ density
Where do the _______ come from?  
Cooling large metal core - ____________

Venus

The Goddess of Love
The brightest planet in the sky
Just like the Earth?
Same mass, density, radius, overall composition
Rotation (found by radar)
1 day = _______ Earth days, ___________!
Exploration of Venus
USSR - Venera Program
US Missions

*Pioneer 1, 2 (1978)*

*Magellan (1990-1994)*

European Mission

*Venus Express (2006-14)*
Landforms on Venus

- Circular, low elevation, like impact basins
- Main feature, mountains, craters, volcanoes
  - (in the North) - Maxwell Montes
  - (along the equator)

Surface Features - Craters