**Answer Key**

Features of Our Solar System Planets

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Feature** | **Mercury** | **Venus** | **Earth** | **Mars** | **Jupiter** | **Saturn** | **Uranus** | **Neptune** |
| **Distance From the Sun (x 106 km)** | 58 | 108 | 150 | 228 | 779 | 1434 | 2873 | 4495 |
| **Revolution (Year)****(Earth Days)**  | 88 | 225 | 365 | 687 | 4331 | 10,747 | 30,589 | 59,800 |
| **Rotation (Day)****(Earth Hours)** | 4223 | 2802 | 24 | 25 | 10 | 11 | 17 | 16 |
| **Diameter****(km)** | 4879 | 12,104 | 12,756 | 6,792 | 142,984 | 120,536 | 51,118 | 49,528 |
| **Gravity (weight in lbs)** | 38 | 91 | 100 | 38 | 236 | 106 | 89 | 113 |
| **Composition** | Rock | Rock | Rock | Rock | Gas | Gas | Gas | Gas |
| **Atmosphere** | Very little | 96% CO2  | 78% N21% O | Very Little95% CO2 | 96% H | 96% H | 83% H 15% He | 80% H19% He |
| **Mean Temperature (°F)** | 333 | 867 | 59 | -85 | -166 | -220 | -319 | -328 |
| **Ring System** | No | No | No | No | Yes | Yes | Yes | Yes |
| **Number of Moons** | 0 | 0 | 1 | 2 | 67 | 62 | 27 | 13 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Mercury** | **Venus** | **Earth** | **Mars** | **Jupiter** | **Saturn** | **Uranus** | **Neptune** |
| **Unique Feature** | Smallest PlanetVery elliptical Orbit, so sometimes day is longer than a year.No tilt so no seasons70% Iron Maybe rock was blasted off | Deep sulfuric acid cloudsRunaway Green-house atmosphereCauses surface temperature to be hot enough to melt leadUpside down | Water WorldOnly planet with liquid water on the surface.Only known lifeThe most dense planetLargest moon compared to size of planet | Used to have water so may have had lifeLargest Volcano in the solar system: Olympus MonsMost explored planet, 50 probes, The Mars Rovers Spirit and Opportunity and now Curiosity | Largest planetThe Great Red Spot observed for over 50 years is a storm 100,000 x the size of Hurricane Katrina. The moon Io is as close to Jupiter as the Moon. It is squeezed by tides and melts. Lots of volcanoesEuropa is an ice world that may have liquid water: life?Ganymede is largest moon in solar system, larger than Mercury | Huge ring system made of chunks of 90% water ice so they sparkle. That is why they are so bright.Only planet less dense than waterHuge storms in the spinning atmosphereSpace probe landed on it’s largest moon Titan which as also larger than Mercury | Tilted on its side maybe from an impact from a body the size of Earth, or a wobble from a moon that is no longer there. | Furthermost planet in the solar systemWas discovered by math before it was seen in a telescopeIt has a hyperactive atmosphere. It is the windiest planet with winds at 1,200 mph.The Great Dark Spot is a storm, but it is not as permanent as Jupiter’s storm. |