**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% N  21% O | Very Little  95% CO2 | 96% H | 96% H | 83% H 15% He | 80% H  19% 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 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Mercury** | **Venus** | **Earth** | **Mars** | **Jupiter** | **Saturn** | **Uranus** | **Neptune** |
| **Unique Feature** | Smallest Planet  Very elliptical Orbit, so sometimes day is longer than a year.  No tilt so no seasons  70% Iron Maybe rock was blasted off | Deep sulfuric acid clouds  Runaway Green-house atmosphere  Causes surface temperature to be hot enough to melt lead  Upside down | Water World  Only planet with liquid water on the surface.  Only known life  The most dense planet  Largest moon compared to size of planet | Used to have water so may have had life  Largest Volcano in the solar system: Olympus Mons  Most explored planet, 50 probes, The Mars Rovers Spirit and Opportunity and now Curiosity | Largest planet  The 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 volcanoes  Europa 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 water  Huge storms in the spinning atmosphere  Space 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 system  Was discovered by math before it was seen in a telescope  It 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. |