Student’s name (Last, First): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Planet** | **Mass**  **(×1024 kg)** | **Perihelion** | | **Aphelion** | | **Semimajor axis**  **(×106 km)** | **Sidereal orbit period (days)** | **Orbit eccentricity** | **Mean orbital velocity (km/s)** |
| **Distance (×106 km)** | **Speed (km/s)** | **Distance (×106 km)** | **Speed (km/s)** |
| **Mercury** | 0.3301 | 46.00 | 58.98 | 69.82 | 38.86 | 57.91 | 87.97 | 0.2056 | 47.87 |
|  |  |  | 69.84 | 38.85 | 57.92 | 87.99 | 0.2058 | 47.36 |
| **Venus** | 4.8676 | 107.48 | 35.26 | 108.94 | 34.79 | 108.21 | 224.701 | 0.0067 | 35.02 |
|  |  |  | 108.98 | 34.78 | 108.23 | 224.77 | 0.0069 | 35.02 |
| **Earth** | 5.9726 | 147.09 | 30.29 | 152.10 | 29.29 | 149.60 | 365.256 | 0.0167 | 29.78 |
|  |  |  | 152.15 | 29.28 | 149.62 | 365.343 | 0.0169 | 29.78 |
| **Mars** | 0.64174 | 206.62 | 26.50 | 249.23 | 21.97 | 227.92 | 686.980 | 0.0935 | 24.13 |
|  |  |  | 249.17 | 21.98 | 227.90 | 686.787 | 0.0934 | 24.08 |
| **Jupiter** | 1,898.3 | 740.52 | 13.72 | 816.62 | 12.44 | 778.57 | 4,332.59 | 0.0489 | 13.07 |
|  |  |  | 819.07 | 12.40 | 779.80 | 4347.04 | 0.0504 | 13.04 |
| **Saturn** | 568.36 | 1,352.55 | 10.18 | 1,514.50 | 9.09 | 1,433.5 | 10,759.22 | 0.0565 | 9.69 |
|  |  |  | 1,513.62 | 9.10 | 1,433.1 | 10,830.?? | 0.0562 | 9.62 |
| **Uranus** | 86.816 | 2,741.30 | 7.11 | 3,003.62 | 6.49 | 2,872.46 | 30,685.4 | 0.0457 | 6.81 |
|  |  |  | 2.994.99 | 6.51 | 2,868.15 | 30.633.9 | 0.0442 | 6.80 |
| **Neptune** | 102.42 | 4,444.45 | 5.50 | 4,545.67 | 5.37 | 4,495.06 | 60,189. | 0.0113 | 5.43 |
|  |  |  | 4,562.17 | 5.36 | 4,503.31 | 60,328. | 0.0131 | 5.43 |