

Name _____ Date _____

STUDENT SHEET 1

PLANET INFORMATION

| Planet | Distance from Sun (AU) | Mass (10 ²⁴ kg) | Orbital period (time it takes to orbit the Sun in years) | Diameter (km) | Average temperature (°C) | Number of moons | Has rings | Composition |
|---------|------------------------|----------------------------|--|---------------|--------------------------|-----------------|-----------|-------------|
| Mercury | 0.39 | 0.33 | .24 | 4,879 | 167 | 0 | No | Rocky |
| Venus | 0.72 | 4.87 | .62 | 12,104 | 462 | 0 | No | Rocky |
| Earth | 1 | 5.97 | 1.00 | 12,756 | 15 | 1 | No | Rocky |
| Mars | 1.52 | 0.64 | 1.88 | 6,792 | -55 | 2 | No | Rocky |
| Jupiter | 5.20 | 1898 | 11.86 | 142,984 | -148 | 69* | Yes | Gaseous |
| Saturn | 9.58 | 568 | 29.46 | 120,536 | -178 | 62* | Yes | Gaseous |
| Uranus | 19.23 | 86.8 | 83.75 | 51,118 | -216 | 27* | Yes | Gaseous |
| Neptune | 30.10 | 102 | 163.73 | 49,528 | -214 | 14* | Yes | Gaseous |

*as of 2017

Name _____ Date _____

STUDENT SHEET 2

MODELING GALACTIC GRAVITY

Draw the orbits of Star A, Star B, and Star C around the galactic center. For Star A, draw a small solar system that includes three planets and one moon. Your solar system does not need to be drawn to scale.

