

Name: _____

February 24, 2014

Terrestrial and Jovian Planets

After reading the Terrestrial and Jovian Planets outline, fill in the T-chart with at least 5 differences between the two types of planets.

Terrestrial	Jovian
Mercury Venus Earth Mars	Jupiter Saturn Uranus Neptune

Planet X

Imagine this: after you graduate from Mott Hall V, you go on to become a famous astronomer. You are world renown and scientists from all over the world beg you to come to their labs to share your work and observations of the night sky. Because you are in such high demand, you have a private plane that flies you from city to city; you try to spend as much time in the air during the day as possible to maximize nighttime sky observation time. You could say you have become slightly nocturnal with all this astronomy in your life. You prefer to work at night not only because the sun is out of your way, but also because co-observers usually doze off with their eyes still pressed against the telescope. When they doze off, you are given the opportunity to work on your secret project. Because these scientists have paid for you to travel the world, you have been able to observe outer space from all sides of the Earth. You have seen some celestial objects from multiple angles and some you can only observe in certain locations, but one item in particular is keeping your interest and this is your secret project: you have discovered another planet in our solar system! It's not located out where Pluto is though, it's closer to us than that and you're amazed that scientists have overlooked this for so long.

What type of planet is it — would it be considered terrestrial or Jovian? Why, what qualities make it that type of planet? What should you name it? How big is it? How far from the sun is it? What is its density? Sketch a planet trading card to introduce your new planet and then write a descriptive paragraph discussing its characteristics, climate, composition and potential value to humans. In this paragraph be sure to explain why your planet is considered terrestrial or Jovian.

Planet X Rubric

Item	Your Score	Possible Score
Terrestrial or Jovian?		2
Rational for why it is that type		8
Picture of Planet X		2
Sketch/ outline of trading card to match your collection		2
Planet X stats — density, diameter, distance, etc.		6
Planet X details — composition, climate, etc.		6
Value to humans		8
Submitted by end of class Feb. 25		6
Total Score		40