

## Planet Classification Activity

Before beginning this activity read the information located at:

International Astronomical Union Questions & Answers

[http://www.iau.org/public\\_press/news/release/iau0603/questions\\_answers/](http://www.iau.org/public_press/news/release/iau0603/questions_answers/)

Solar System Exploration

<http://solarsystem.nasa.gov/planets/index.cfm>

Wikipedia Dwarf Planet

[http://en.wikipedia.org/wiki/Dwarf\\_planet](http://en.wikipedia.org/wiki/Dwarf_planet)

Wikipedia Gas Giant

[http://en.wikipedia.org/wiki/Gas\\_giant](http://en.wikipedia.org/wiki/Gas_giant)

Wikipedia Terrestrial Planet

[http://en.wikipedia.org/wiki/Terrestrial\\_planet](http://en.wikipedia.org/wiki/Terrestrial_planet)

1. What characteristics, structures, or properties of our own Earth do we study to help us learn about other objects in the solar system? Provide at least 3 specific answers.
  - a)
  - b)
  - c)
  
2. What are the 3 “new” terms used in the official IAU definition?
  - a)
  - b)
  - c)
  
3. What is the IAU definition of a planet?
  - a)
  - b)
  - c)
  
4. What is the IAU definition of a dwarf planet?
  - a)
  - b)
  - c)

5. What is the difference in the definitions of a planet and a dwarf planet?
  
6. What is the definition of a plutoid?
  
7. What is an object called if it is too small to be a planet or a dwarf planet?
  
8. Why is Ceres considered a dwarf planet, but not a plutoid?
  
9. Complete the following table. In column B write the classification for the solar system object. Possible classifications are: terrestrial, jovian, dwarf, plutoid. Four of these objects will have two classifications.

In column C list a characteristic of that solar system object, other than its size, volume, mass, gravity, color, distance from the Sun, location, discovery, or number of moons, that is **unique** to that solar system object and **only** that object.

| A                   | B                 | C                     |
|---------------------|-------------------|-----------------------|
| Solar system object | Classification(s) | Unique characteristic |
| Mercury             |                   |                       |
| Venus               |                   |                       |
| Earth               |                   |                       |
| Mars                |                   |                       |
| Ceres               |                   |                       |
| Jupiter             |                   |                       |
| Saturn              |                   |                       |
| Uranus              |                   |                       |
| Neptune             |                   |                       |
| Pluto               |                   |                       |
| Haumea              |                   |                       |
| Makemake            |                   |                       |
| Eris                |                   |                       |