


Pluto

Class: No.: Name:

 Adopted from: <http://www.nasa.gov/vision/universe/solarsystem/planetsf-20060824.html> ★★★

Honey, I Shrunk the Solar System

2006/08/24

If you woke up Thursday morning and sensed something was different about the world around you, you're absolutely right. Pluto is no longer a planet.

The International Astronomical Union has resolved a hotly-**debated** topic that gives our **solar** system eight **planets**, instead of the nine most of us grew up memorizing.

NASA has already visited all eight planets that retain their official title: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. In addition, the agency has its New Horizons spacecraft en route to Pluto, which the astronomical union has re-assigned to a new category of celestial objects, to be called "**dwarf** planets."

The International Astronomical Union has decided that, to be called a planet, an object must have three traits. It must orbit the sun, be massive enough that its own gravity pulls it into a nearly round shape, and be dominant enough to clear away objects in its neighborhood.

To be admitted to the dwarf planet category, an object must have only two of those traits -- it must orbit the sun and have a nearly round shape. And no, moons don't count as dwarf planets. In addition to Pluto, Ceres and 2003 UB313, the astronomical union has a dozen potential dwarf planets on its watch list.

Despite the establishment of these three distinct categories, there are bound to be **gray** areas. As technologies improve and more objects are found, the International Astronomical Union will set up a process to decide which categories are most appropriate for specific objects.

I. Comprehension Check:

- How many planets in our solar system now?
(A) Ten. (B) Nine. (C) Eight. (D) Uncountable.
- According to the reading, who defined (界定) the traits of a planet?
(A) NASA. (B) The International Astronomical Union. (C) Pluto. (D) New Horizons.
- Which of the followings is not "dwarf planets."?
(A) Pluto. (B) Ceres. (C) 2003 UB313. (D) Earth.
- Which is true about the traits of a planet?
(A) It must move around the sun. (B) It should be larger than Earth.
(C) It has to be clear and bright. (D) It has its own dwarf planets.
- Which of the followings is **NOT** true?
(A) Both NASA and the International Astronomical Union work on the space science.

- (B) Pluto used to be one of the planets in our solar system.
- (C) To define planets and dwarf planets is still debatable.
- (D) Pluto, Ceres and 2003 UB313 used to be the planets in our solar system defined by the International Astronomical Union.

Answers: C B D A D

II Words for Learning:

Example:

publish (vt) -- published	發表	p. 178 (on the page of the dictionary)
Her first novel was published		

1. debate		p.
2. solar		p.
3. planet		p.
4. dwarf		p.
5. gray		p.
6.		p.
7.		p.

III. Summary or Reflection

附註：

本文取自美國太空總署(NASA)網站教育專區，提供給美國國小四到六年級小朋友看的時事，原文很長，經過刪減而成這篇。對本國學生而言，內容很難。恰巧現在學生的地球科學老師也介紹到矮行星(dwarf planet)。學生只要知道大意即可，不必詳讀。如果學生有興趣，可以上網看完全文。

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