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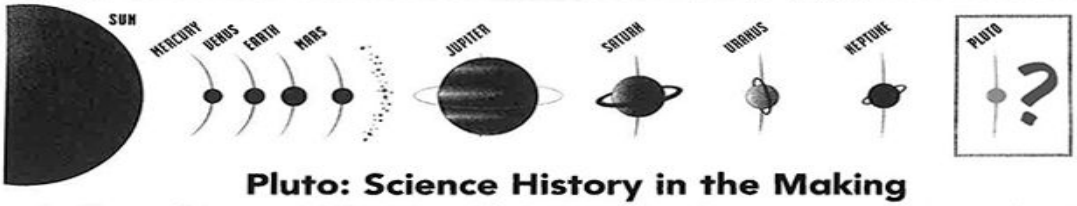

Pluto: Science History in the Making

For 76 years, Pluto was called the ninth—and final—planet in our solar system. In 2006, that changed. Now we have eight **planets**. They are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. Pluto is considered a **dwarf planet**. So is the large asteroid Ceres and Eris, a newly discovered icy space object. Thousands of smaller objects in space, like most asteroids and comets, are called **small solar system bodies**.

Why did Pluto's status change? The truth is, astronomers had disagreed about Pluto's status for a long time. When Clyde Tombaugh discovered Pluto in 1930, little was known about this space object. It is very far away and difficult to see from Earth. For a long time, scientists thought Pluto was bigger than it really was. Pluto, it turns out, is quite small. It is even smaller than Earth's moon! While Pluto was discovered first, astronomers have since found many objects of similar size orbiting the sun 'in the same neighborhood' as Pluto. This neighborhood, called the *Kuiper Belt*, is home to Eris, which is even bigger than Pluto. It wasn't considered a planet, so why was Pluto? Astronomers had to decide. Should they also count other objects as planets or change Pluto's status?

They decided to change Pluto's status to dwarf planet because of it's large moon. They called Eris a dwarf planet, too. The astronomers made some 'rules' for classifying objects in the solar system. These are the rules:

A planet must:
- be in orbit around a star (but is not a star itself).
- be massive (big) enough so that its own gravity makes it into a spherical (round) shape.
- have 'cleared the neighborhood' of all other objects of significant mass around its orbit (that is, it's big enough that either it has pushed away other objects around it—or the objects around it have become its moons or satellites).

A dwarf planet must:
- be in orbit around a star (but is not a star itself).
- be massive (big) enough so that its own gravity makes it into a spherical (round) shape.

A small solar system body must:
- be in orbit around a star (but is not a star itself).

Write yes or no in the boxes below for each rule that applies to that object. Then list an example of each.

	Planet	Dwarf Planet	Small Solar System Body
In orbit around a star (yes or no)			
Has a spherical shape (yes or no)			
Cleared the neighborhood of objects around it (yes or no)			
Example			

Do you think Pluto should have remained a planet or been reclassified as a dwarf planet? If you were an astronomer, what decision would you have made?

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