

Scavenger Hunt (Teacher Version)

Corresponding Material

Web Design: HTML Tables

Discussion

So far, we've been building web pages by putting together tags and seeing what the result is. Now it's time to think from the opposite direction! Can you identify what tags look like in the output without looking at the html?

Further Discussion

You will need to prepare additional material in advance for this activity. You will need to print out a website for your students, such as <https://en.wikipedia.org/wiki/Planet>

You may only want to print the first page or first couple of pages.

You can do this activity with any web page, but a simple web page works the best. Wikipedia articles work well because of their simplicity.

Your students will need highlighters or colored pencils.

The students may choose things that are actually created using other html tags. The point is that they pick things that legitimately *look* like the tags they pick.

This activity can also be done earlier in the unit. You'll just need to adjust what tags the students should search for to match the set of tags you've covered.

If you want to extend this activity, have the students look at the page source to see if they picked correctly. See this website for information on viewing the page source in your web browser: <http://www.computerhope.com/issues/ch000746.htm>. In most web browsers, you can also "inspect" a particular element on the page, and it will direct you to the precise location in the HTML where that element is created.

Class Exercise

You will be analyzing finished web pages to see if you can label what the parts of the web page are! Use the printed web page your teacher provides.

Look through the web page. Color code what tags you see by highlighting or circling them with colored pencils. Find a maximum of five examples of each of the following tags, and color code them. Highlight each of the tags below with the same color to act as a legend. Keep in mind the web page may not have all of these tags.

- `<title>`
- `<p></p>`
- `<a>`
- ``
- ``
- ``
- ``
- any size of `<h_></h_>` tag, e.g. `<h1>` or `<h2>` or ...
- `<i></i>`
- ``
- `<hr>`
- `<table></table>`
- `<th></th>`
- `<tr></tr>`
- `<td></td>`

Sample Answers:

*Note -- the image + caption parts could be tables



Planet



From Wikipedia, the free encyclopedia

This article is about the astronomical object. For other uses, see [Planet \(disambiguation\)](#).

A **planet** is an astronomical object orbiting a star or stellar remnant that

- is massive enough to be rounded by its own gravity;
- is not massive enough to cause thermonuclear fusion, and
- has cleared its neighbouring region of planetesimals.^[a]^[1]^[2]

The term *planet* is ancient, with ties to history, astrology, science, mythology, and religion. Several planets in the Solar System can be seen with the naked eye. These were regarded by many early cultures as divine, or as emissaries of deities. As scientific knowledge advanced, human perception of the planets changed, incorporating a number of disparate objects. In 2006, the International Astronomical Union (IAU) officially adopted a resolution defining planets within the Solar System. This definition is controversial because it excludes many objects of planetary mass based on where or what they orbit. Although eight of the planetary bodies discovered before 1950 remain "planets" under the modern definition, some celestial bodies, such as Ceres, Pallas, Juno and Vesta (each an object in the solar asteroid belt), and Pluto (the first trans-Neptunian object discovered), that were once considered planets by the scientific community, are no longer viewed as such.

The planets were thought by Ptolemy to orbit Earth in deferent and epicycle motions. Although the idea that the planets orbited the Sun had been suggested many times, it was not until the 17th century that this view was supported by evidence from the first telescopic astronomical observations, performed by Galileo Galilei. By careful analysis of the observation data, Johannes Kepler found the planets' orbits were not circular but elliptical. As observational tools improved, astronomers saw that, like Earth, the planets rotated around tilted axes, and some shared such features as ice caps and seasons. Since the dawn of the Space Age, close observation by space probes has found that Earth and the other planets share characteristics such as volcanism, hurricanes, tectonics, and even hydrology.

Planets are generally divided into two main types: large low-density **giant planets** and smaller rocky **terrestrials**. Under IAU definitions, there are eight planets in the Solar System. In order of increasing distance from the Sun, they are the four terrestrials, Mercury, Venus, Earth, and Mars, then the four giant planets, Jupiter, Saturn, Uranus, and Neptune. Six of the planets are orbited by one or more natural satellites.

More than two thousand planets around other stars ("extrasolar planets" or "exoplanets") have been discovered in the Milky Way. As of 7 August 2016, 3,493 known extrasolar planets in 2,617 planetary systems (including 590 multiple planetary systems), ranging in size from just above the size of the Moon to gas giants about twice as large as Jupiter have been discovered, out of which more than 100 planets are the same size as Earth, nine of which are at the same relative distance from their star as Earth from the Sun, i.e. in the habitable zone.^[3]^[4] On December 20, 2011, the Kepler Space Telescope team reported the discovery of the first Earth-sized extrasolar planets, Kepler-20e^[5] and Kepler-20f^[6] orbiting a Sun-like star, Kepler-20.^[7]^[8]^[9] A 2012 study, analyzing gravitational microlensing data, estimates an average of at least 1.6 bound planets for every star in the Milky Way.^[10] Around one in five Sun-like^[b] stars is thought to have an Earth-sized^[c] planet in its habitable^[d] zone.

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The eight planets of the Solar System

- The terrestrial planets
 - Mercury, Venus, Earth, and Mars
- The giant planets
 - Jupiter and Saturn (gas giants)
 - Uranus and Neptune (ice giants)

Orbit

Uranus and Neptune (ice giants)

Shown in order from the Sun and in true color. Sizes are not to scale.



11 External links

History

[edit]

Further information: history of astronomy, Definition of planet, and timeline of Solar System astronomy

The word "planet" derives from the Ancient Greek *ἀσὴρ πλανήτης* *astēr planētēs*, or *πλάνης ἀσὴρ* *plánēs astēr*, which means "wandering star,"^[11] and originally referred to those objects in the night sky that moved relative to one another, as opposed to the "fixed stars", which maintained a constant relative position in the sky.^[12]

The idea of planets has evolved over its history, from the divine lights of antiquity to the earthly objects of the scientific age. The concept has expanded to include worlds not only in the Solar System, but in hundreds of other extrasolar systems. The ambiguities inherent in defining planets have led to much scientific controversy.

The five *classical planets*, being visible to the naked eye, have been known since ancient times and have had a significant impact on *mythology*, *religious cosmology*, and ancient astronomy. In ancient times, astronomers noted how certain lights moved across the sky in relation to the other stars. Ancient Greeks called these lights *πλάνητες ἀστέρες* (*planētes asteres*, "wandering stars") or simply *πλανήται* (*planētai*, "wanderers"),^[13] from which today's word "planet" was derived.^{[14][15]} In ancient Greece, China, Babylon, and indeed all pre-modern civilizations,^{[16][17]} it was almost universally believed that Earth was the *center of the Universe* and that all the "planets" circled Earth. The reasons for this perception were that stars and planets appeared to revolve around Earth each day^[18] and the apparently *common-sense* perceptions that Earth was solid and stable and that it was not moving but at rest.



Printed rendition of a geocentric cosmological model from *Cosmographia*, Antwerp, 1539

Babylon

[edit]

Further information: Babylonian astronomy

The first civilization known to have a functional theory of the planets were the Babylonians, who lived in Mesopotamia in the first and second millennia BC. The oldest surviving planetary astronomical text is the Babylonian Venus tablet of Ammisaduqa, a 7th-century BC copy of a list of observations of the motions of the planet Venus, that probably dates as early as the second millennium BC.^[19] The MUL.APIN is a pair of cuneiform tablets dating from the 7th century BC that lays out the motions of the Sun, Moon and planets over the course of the year.^[20] The Babylonian astrologers also laid the foundations of what would eventually become Western astrology.^[21] The *Enuma anu enlil*, written during the Neo-Assyrian period in the 7th century BC,^[22] comprises a list of omens and their relationships with various celestial phenomena including the motions of the planets.^{[23][24]} Venus, Mercury and the outer planets Mars, Jupiter and Saturn were all identified by Babylonian astronomers. These would remain the only known planets until the invention of the telescope in early modern times.^[25]

Greco-Roman astronomy

[edit]

See also: Greek astronomy

The ancient Greeks initially did not attach as much significance to the planets as the Babylonians. The Pythagoreans, in the 6th and 5th centuries BC appear to have developed their own independent planetary theory, which consisted of the Earth, Sun, Moon, and planets revolving around a "Central Fire" at the center of the Universe. Pythagoras or Parmenides is said to have been the first to identify the evening star (Hesperos) and morning star (Phosphoros) as one and the same (Aphrodite, Greek corresponding to Latin Venus).^[26] In the 3rd century BC, Aristarchus of Samos proposed a heliocentric system, according to which Earth and the planets revolved around the Sun. The geocentric system remained dominant until the Scientific Revolution.

Ptolemy's 7 planetary spheres

1	2	3	4	5	6	7
Moon	Mercury	Venus	Sun	Mars	Jupiter	Saturn
☾	☿	♀	☼	♂	♃	♄