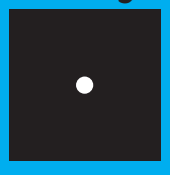
Pluto

1st dwarf planet discovered in 1930 by young amateur Clyde Tombaugh

average distance to the Sun:	5,906,400,000 km
diameter:	2306 km
orbital period ('year'):	248 years, 8 d
rotation period ('day'):	6 days, 9 h, 17 m, 38 s
mass (Earth = 1):	0.0022
number of moons:	3
temperature:	-230° C
atmosphere:	methane

100 x larger:



average distance (scale)
59.1 m

size (scale)
0.023 mm

Pluto

At the end of the 19th century it appeared that Uranus and Neptune were not keeping to their expected course. In 1905 the American Lowell started a search operation to find his 'Planet X' that was the cause of the distortions, even building an observatory to that purpose. In 1930 Clyde Tombaugh discovered Pluto. Soon after the discovery it was found that Pluto is too small to influence the orbits of the gas giants and we know now that there is no distortion of their orbits at all! In 1978 Pluto's moon Charon was found, allowing Pluto's correct diameter to be determined. Pluto is so small, that the question arose whether we should call it a planet. Its orbit is an elongated ellipse, crossing Neptune's orbit and it looks like the ice dwarfs. However, as long as we didn't find an object larger than Pluto, its planetary status was unchallenged. That changed in 2005, with the discovery of the slightly larger Eris. In 2006 a new class of heavenly bodies was introduced: **dwarf planets**, with Eris, Pluto and the asteroid Ceres. The distance of Pluto to the Sun varies from 4.4 to 7.4 billion km (model: 44-74 m!).

Scale 1:100 billion: 1 cm in scale model = 1 million km in reality.
Abbrev.: d = days; m = min; h = hours; s = sec; dist. = distance

scale model
solar system
1:100 billion

Pluto

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