Little Eyes

September 2009

> ***Infinities and indivisibles transcend our finite understanding, the former on account of their magnitude, the latter because of their smallness; imagine what they are when combined.***
>
> *Galileo Galilei*

August 2009

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October 2009

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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Robert Ballard Discovers Titanic Remains, 1985	2	3	4	5
6	7 Labor Day	8	9	10	11	12 ACT Test Date
13	14	15	16	17 Constitution Day	18 Rosh Hashanah (Begins at Sundown)	19 International Coastal Cleanup Day
20 Eid al Fitr (Depends on the Sighting of the Moon in North America)	21	22	23	24	25	26
27 Yom Kippur (Begins at Sundown)	28	29 Enrico Fermi's Birthday	30	***Biology Question*** — What is the general name for the type of eye found in crustaceans and insects?		

A: Compound eye

In 1610, Galileo used a telescope at short range to get an up-close view of insect body parts. Observing compound insect eyes, he is said to have reported that they were "perforated with holes to afford passage to the images of visible things." He also observed common insects " … among which the flea is quite horrible, the gnat and the moth very beautiful …". His fascination with what he saw led him to perfect the compound microscope in 1624, which used both a concave and convex lens. Galileo called this tool occhiolino, which translates to "little eye." He presented this early microscope to the Duke of Bavaria and Prince Cesi.

The compound microscope works by using light to illuminate the object you want to see up close. The objective lens is the one closest to the sample and also the one with which you can change your magnification. The eyepiece lens is mounted in the microscope cylinder and is closest to your eye. The two lenses work together to magnify the image you're viewing.

Modern compound microscopes can magnify objects up to 2,000 times. Today, they are used to research bacteria, cells, and other organisms, and are commonly used to teach students about science. Recently, the arrival of the digital microscope has helped revolutionize microphotography and allows for live transmission to a TV or computer screen.

Credit: "Dragonfly As Seen Through a Fly's Eye" compiled from images courtesy of www.indexopen.com and www.istock.com