

# The lion, the comet and the light show

On November 17 the annual meteor shower known as the *Leonids* should peak with an intensity not seen for more than three decades, providing a dramatic spectacle with the promise of an even brighter show next year. The meteors – debris released from the tail of comet *Tempel-Tuttle* – become a deluge every 33 years, when the comet's orbit passes particularly close to the sun

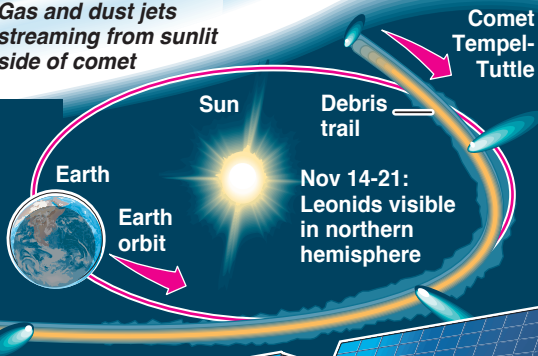
**Meteors:** *Dust and debris released from melting nucleus*

**Comet:**  
*Ice and rock nucleus*

**Glowing coma:** *Up to 1 million km across*

**Comet 'tail':**  
*Gas and dust jets streaming from sunlit side of comet*

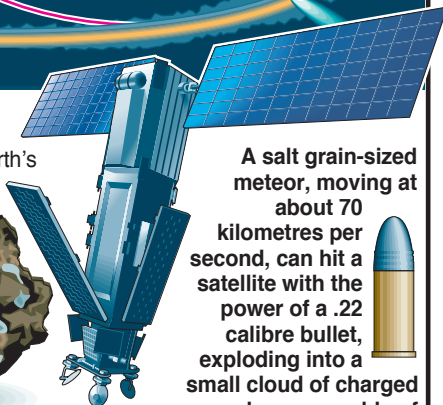
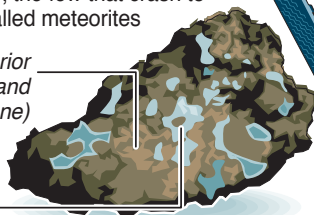
**'Shooting stars':** *As Earth crosses vast trail of dust left by speeding comet, debris flares in atmosphere*



**Meteorites:** Meteors range in size from dust-sized particles to objects metres across. Most meteors burn up in the Earth's atmosphere; the few that crash to earth are called meteorites

**Mineral interior**  
*(olivine and pyroxene)*

**Iron**



A salt grain-sized meteor, moving at about 70 kilometres per second, can hit a satellite with the power of a .22 calibre bullet, exploding into a small cloud of charged plasma capable of

