## Lesson 5:7 Speeding Up and Slowing Down

An "ellipse" is a stretched-out circle:


Kepler discovered by careful observation that the orbits of planets are only approximately circular. In reality they are elliptical. A generation later, Newton figured out why.

A planet or comet in an elliptical orbit moves rapidly when it is close to the sun and more slowly when it is far from the sun because its angular momentum must be conserved.


