CubeSat Club Meeting
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Last Week

- Introduction to CubeSats
- Vectors!

Vector Review

- If our x position is 10, our y position is 3 and our z position is -4, write the vector.
- What is the vector for the north pole? The earth radius is about 6378 km.
- If on March 20 the earth is 1 astronomical unit from the sun along the x-axis, what is the earth's vector?
- Can you think of any examples of vectors?
- Give an example of a velocity vector.

This week

- Go to www.psatellite.com/CubeSat/index.php for the latest dowloads including the CubeSat book and all presentations
- Review vectors
- Study gravity and orbits

Vector Review

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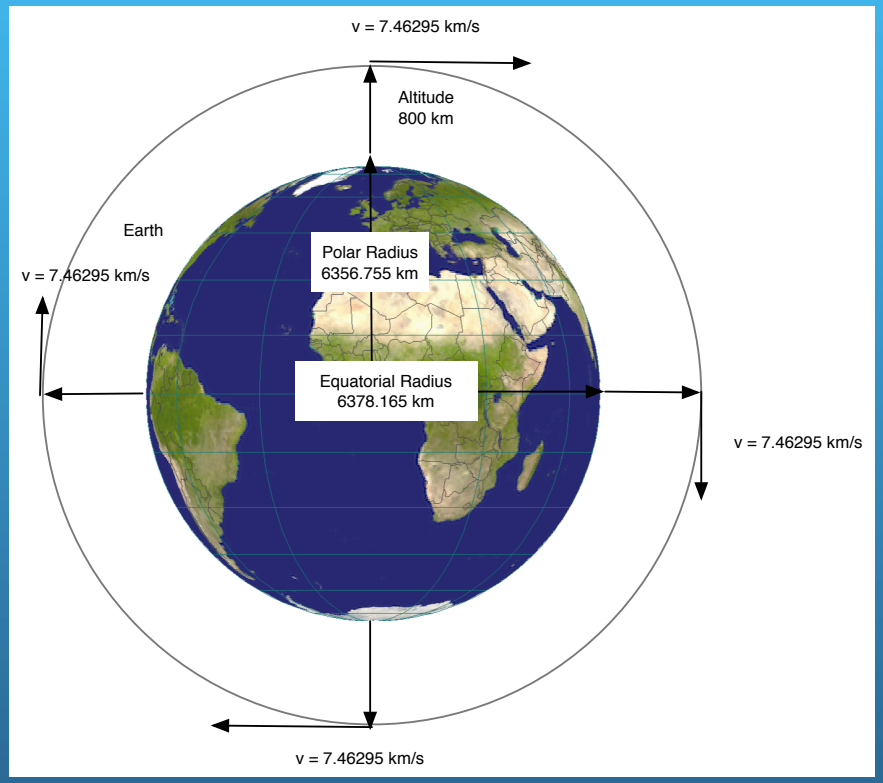
Gravity



How do we calculate the orbital velocity?

Gravity equation

- μ is the earth's gravitational constant equal to 398600.436 km^3/s^2
- In a circular orbit the centripetal acceleration balances the radial (towards the center of the earth) acceleration
- Notice that mass doesn't matter