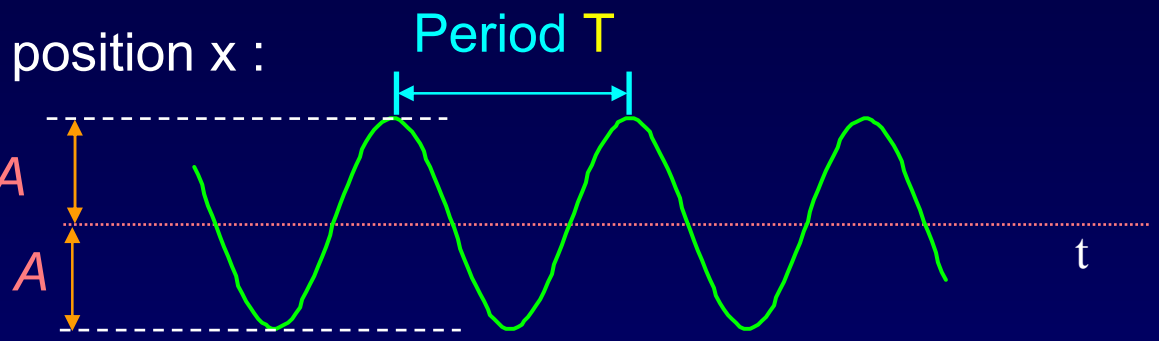
Wave Properties

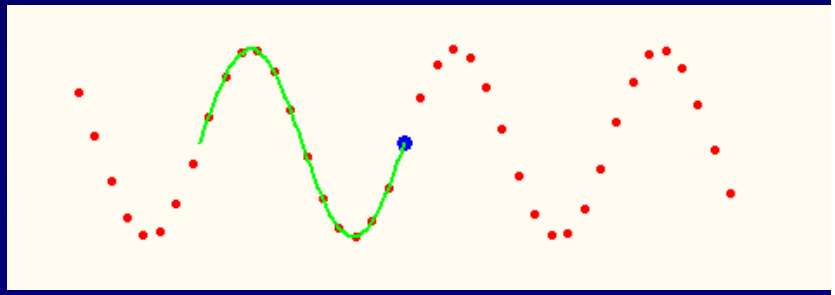
Period: The time *T* for a point on the wave to undergo one complete oscillation.

For a fixed position x :



Speed: The wave moves one wavelength, λ, in one period, *T*. So, its speed is:

$$v = \frac{\lambda}{T} = \lambda f$$



Movie (tspeed)

Frequency: $f = 1/T =$ cycles/second.

Angular frequency: $\omega = 2\pi f =$ radians/second

Be careful: Remember the factor of 2π