Intro

Measuring

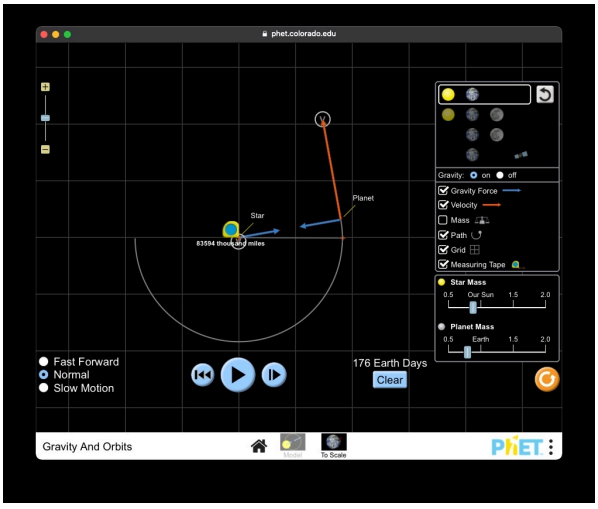
- Star to planet ≈ 92000 miles (Right)
- Star to planet (L) ≈ 95000 miles
- Ideal : 94000 miles

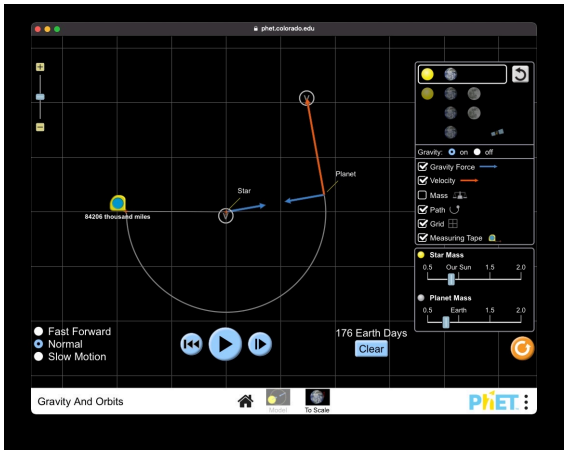
Gravity.

- Without gravity the planet shoots into space tangentially with it's path.
- The planet takes a longer path on the other side and comes back on the return.
- When the velocity suddenly drops the planet quickly drops towards the star.

Kepler' Laws

1.

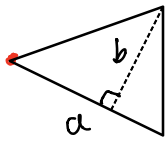




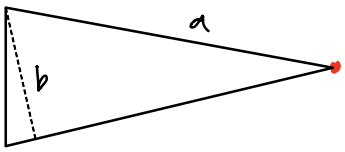
2. When I change the mass of the planet there is no observable difference. There will be a difference with the rate of falling but with only a scale from 0.5x to 2.0x for the planet the difference is insignificant to the stars mass.

3. Triangle near:

20 days



$a = 50000$ miles
$b = 45000$ miles
$A = 1.13 \times 10^9 \text{ mi}^2$



$a = 138000$ miles
$b \approx 17000$ miles
$A = 1.17 \times 10^9 \text{ mi}^2$