

Oct 30

Egg Drop

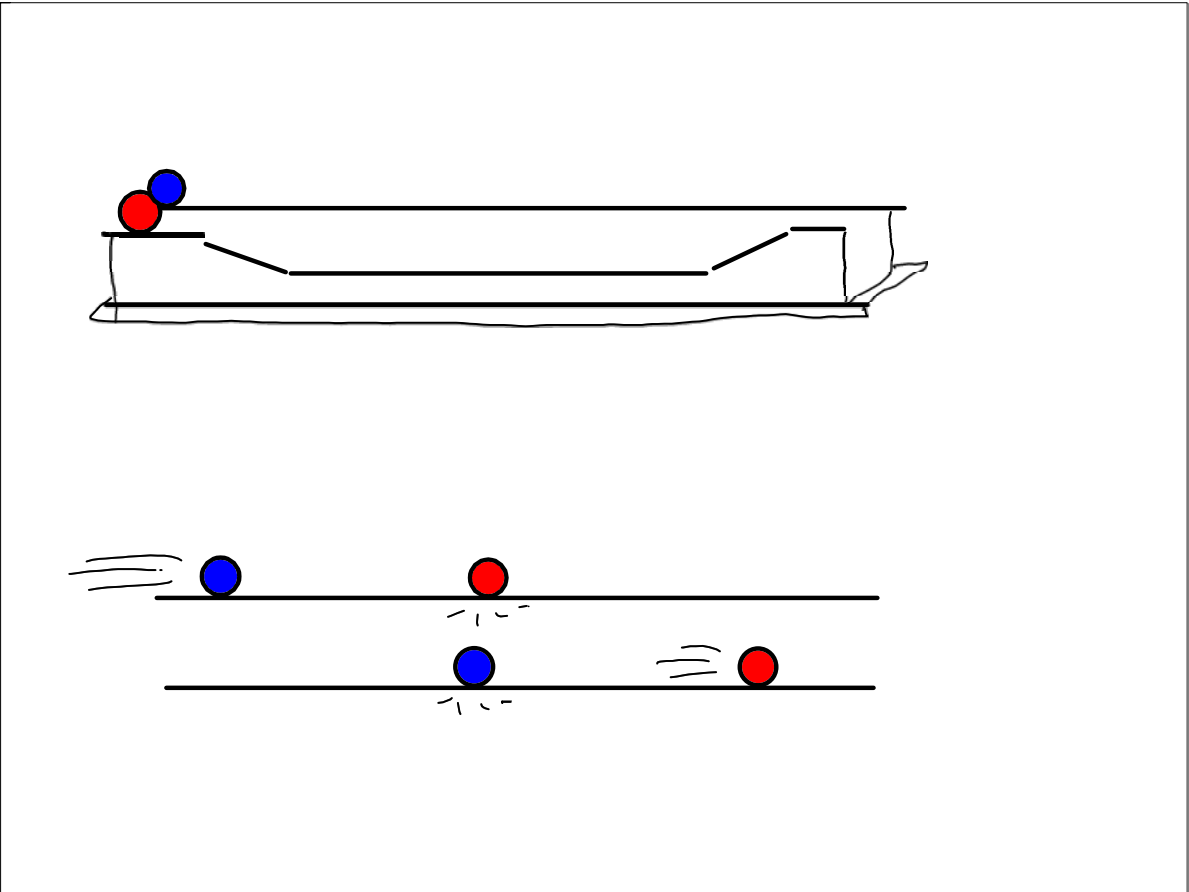
$$a = \frac{V_f - V_o}{\Delta t}^2$$

1. Decrease the initial velocity
(the speed at which it hits the ground)

most used things with lots of air friction:

- Like a parachute
- More area on package
- Tie balloons to it
- Lower it gently with a drone (lots of air friction, no lift) v.s.

2. Increase (Δt) the time it takes to stop.
add padding or cushioning



Collisions

When two or more things hit together.

elastic collision

When objects collide and "all" of the energy is transferred to the other object.

Newton's Cradle is a fairly good example

Fast Billiard/Pool ball hits a second one, the first stops, the second goes away with "all" of the energy of the 1st Ball

inelastic collision

"all" of the energy is "lost" during the collision.

Drop pla-doh it does not bounce, it deforms