Name:_____ Group:_____

What is a drone? It flies, it makes noise, but what is it?

You've seen the drone takeoff and land.

The instantaneous moment that the drone lifts off the table, what is the position, velocity, acceleration? Draw the scenario if it helps. Note that its initial state is position = 0, velocity = 0, acceleration = 0

What is the state of the drone when it is hovering in the air? Again, draw the situation if it helps.

Describe the acceleration and velocity for the period of time that it moves from its initial position to its hover position. Use a graph of acceleration vs time, and velocity vs time to present your argument.

If an object is set into motion with (i.e. velocity is non-zero) and then goes to zero velocity. Describe the movement of the drone in terms of what happens to the acceleration

If a drone moves up at Velocity (t), with Acceleration (t), from position x_1 to position x_2. Is there any mathematical difference with a ball having the same motion?