**GODOT 3.0**

* *Node*:
  + Literally everything is a node
  + Includes:
    - Name
    - Properties
    - Callback: functions to make node react to things
    - Extendable: write code to made node to more things than it already does
  + Arranged in a tree
    - Only 1 parent
    - Can have any # of children
* *Scene:*
  + A tree of nodes grouped together
* *Delta:*
  + Script
  + Changes time to pixels/second
  + \* delta for movement
  + Allows the sprite to move at that speed, regardless of frame rate
    - Think, lag in COD; person is still moving, you just might be lagging
* Project Settings
  + Physics 2D
    - Layers
      * Different layers allow things not to hit each other
      * To do this, go to the scene, and under PhysicsBody2D, set the layer to what you want, and the mask to things that can collide / hit it

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* **KinematicBody2D:** 
  + Not affected by physics at all
  + More simple
  + Auto generated physics in world
  + Good for doors and bridges opening

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**Troubleshooting:**

* **“*Nil”***
  + Most likely means that there is a script variable that needs to have something in it. Think of the bullet that wouldn’t shoot because I didn’t put the EnemyBullet scene into the first Script Variable, in the Inspector of the scene.
* “**Bullet immediately despawning”**
  + When working with several collision / spawn points close together, make sure that the spawn point is outside the collision layer. For example, the muzzle was too close to the turret collision layer, so it would despawn immediately.