**2D Physics Game Research**

***Ideas from other games:***

*Crayon Deluxe:* I liked the idea of this game where the user would move the player indirectly by using external objects to move the player using external forces.

*Cut-the-Rope:* The idea of moving the player by removing what they are attached to interested me greatly, this also coupled with the *world of goo* game where the player would build themselves to reach the end of the level.

*Tractor Racer:* A game I found on YouTube was a game where you played as the tractor and would have to try and keep and object, in this case a haybale or another tractor in the trailer while going over bumpy hills, trying to anticipate gravity.

***Physics Mechanics:***

*Friction:* I liked the idea of a game based on friction where the players would have to repeatedly press a key/control to move their game piece along the level, as race of sorts.

*Added Force*: Another idea I had while researching was to have a game where the player would add force to a game object to achieve something, this was inspired by an angry birds sort of game where the player chucks items to destroy/beat the game level. This also relates to how the new football games such as FIFA use for the player to take free-kicks and penalties.

*Gravity:* A game with the ability to use gravity would be a stacking kind of game where the player would have to balance gameObjects in the level to achieve a certain goal, like connect two points with predefined pieces and put them in the correct place or balance will throw out and cause the tower to fall down and fail the level.

*Jumping:* With this idea the game could be constantly pulling down the screen and the player would have to jump up at the right time to get onto the next platform with a gravity or buoyancy effect on the platforms so when the player jumps on them they move in an up and down motion to make getting to the next platform harder.

*Acceleration:* With acceleration and velocity the player could be pushed along an endless runner building up speed increasing difficulty until the player fails. Could be split screen or hot seat kind of multiplayer, players time is the score.