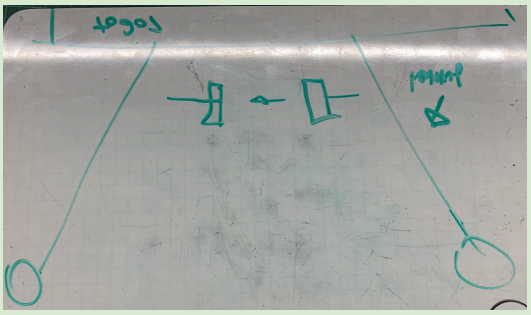
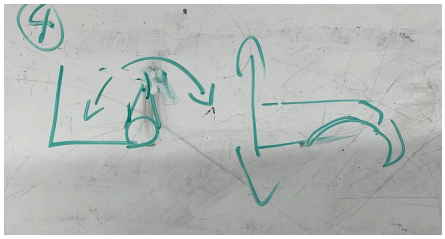
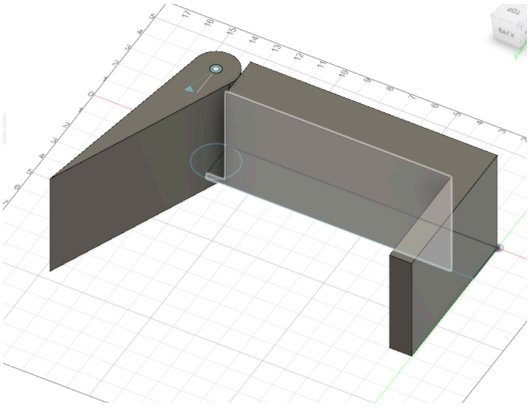
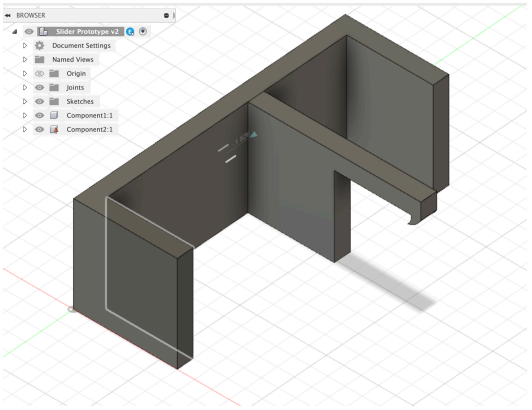
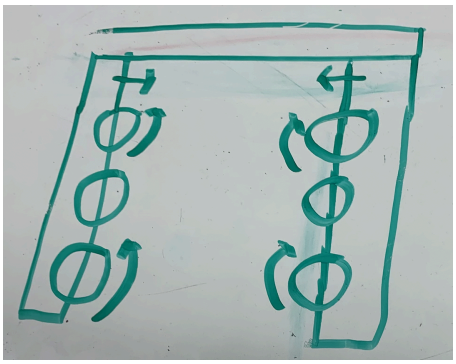
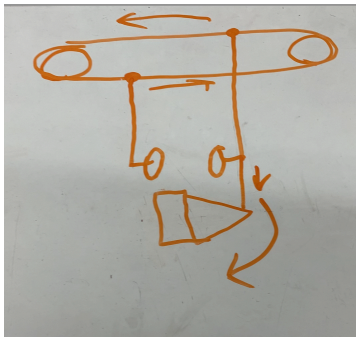
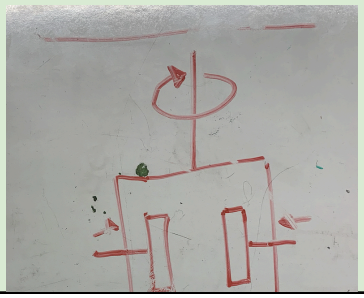
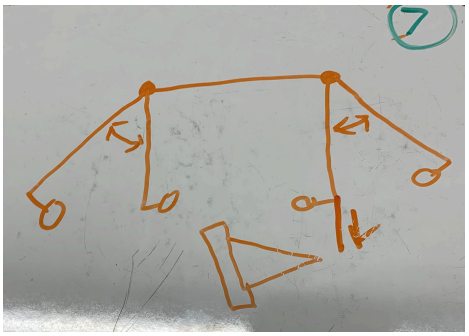
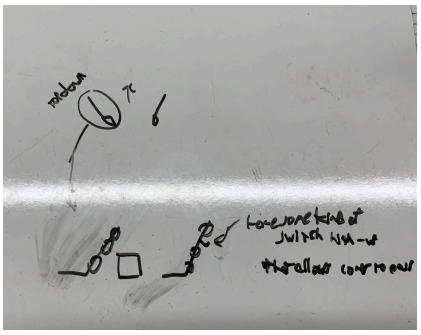
Video	Pro	Con	Extra Notes:
Active intake: https://www.youtube.com/watch?v=_Vo1t3xlda0	- Can acquire cone at any orientation - Can intake both cones and cubes	- Does not reorient cone on it's own	
Passive intake: https://www.youtube.com/watch?v=v1esWoCvdasPassive intake: https://www.youtube.com/watch?v=v1esWoCvdas	- Easy to reorientate cones - Keeps cones perpendicular to the ground	- Doesn't work if cone parallel to intake - Minimal room for error picking up cone	- Add funnel to adjust
https://www.youtube.com/watch?v=40qXnnMz85Q	- Moves and reorients the cone simultaneously	- Only possible to reorient in specific locations - Moves the cone only a short distance	
POWERPLAY …	Easy to extend to any width and easy to raise to any height	Does not reorient the cone passively (fix: add rotating padded ends to the end of the gripper like the first video that we watched)	
https://www.youtube.com/watch?v=67io5qIqRqk	-Works from any orientation -Works for both cones and cubes	-Not easily movable -Brings game piece into robot -Does not reorient the cone into a vertical position -Not possible to output game pieces	

How Do I Pick …	-Works primarily for cones but can be adjusted to fit the dimensions of a cube -Possible to pick up stacked cones	-cones can not be picked up if laying on their side	

Ideas	Pros	Cons	Photos
Funnel Design (1)	- doen't require driver to stop driving - reorients quickly - rights cones - works from any orientation -easy to add plow to funnel if we do that	- if wheels on funnel are unmotorized might not always pick up cones correctly	
Pinclaw (4)	- always points up (rights cones) - works from most? orientations - works with cones and cubes	- takes time to re-align - more precision from driver	 

Ideas	Pros	Cons	Photos
Slider (3)	- works with cones and cubes - rights cones - works from most? Orientations (some more difficult)	- takes time to orient before picking up - might not always work for some orientations without going around	
Adjustable Width (6)	-can intake cones from most position and orientation -adjustable width based on game piece (cone/cube) -quick because they are motorized	-difficult to reorient cones in specific positions	
Chain (2)	-Can intake from any position -Can intake cones and cubes -passivley realignes cones	-Slow	
Rotating arcade claw (5)	-can intake from any orientation -rights cone	-precise driver inputs -low margin for error	

Ideas	Pros	Cons	Photos
Motor grab (7)	-Can intake from any position -Can intake cones and cubes -Passivley realignes cones	-Slow -Requires motors (heavy and large)	
Upright-wheel intake (10)	- Passively sets up cones in upright position - Should easily allow both object types to get in	- Cannot really confirm functionality until testing - Requires semi-accurate driving into cones	
Street Cone	- Passively reorients - Doesn't require driver to stop - Works with cones and cubes - Leaves cones upright - initial bar doesn't need to move	- can't pick up cones against a wall - cut out in drive train makes electronics harder	