

documentation

- complete design analysis
- list of selection criteria & selection matrix
- at least 3 designs

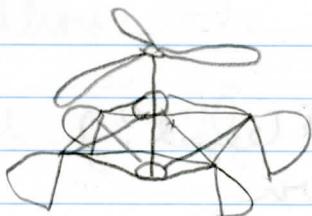
final report

- itemized list of materials cost
- description of product & how it works
- autocad drawings details representing all parts of final product

progress report : November 8

brief description of at least 3 designs considering
 & a timeline showing schedule of activities,
 specific dates for construction & testing of the
 final design & writing of final report

design 1 - fan lander



propulsion - rubber band

wind up, lever release

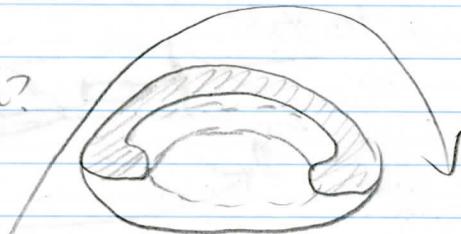
lightweight construction

3D printed parts

unpredictable

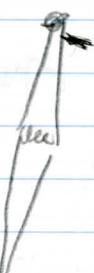
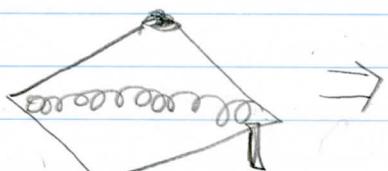
helicopter principle

cup-popper inspiration?



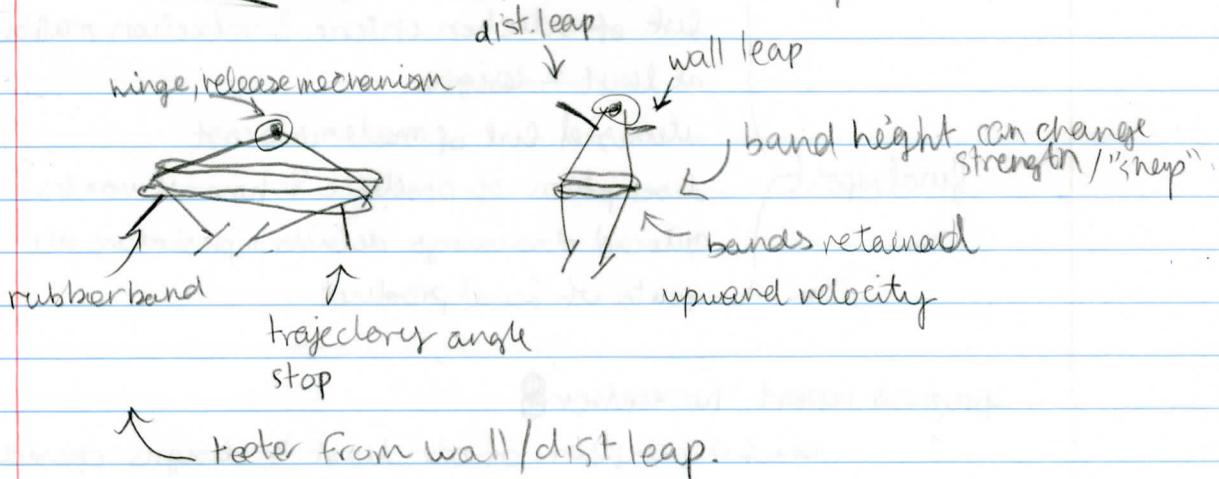
bistable mechanism?

spring energy



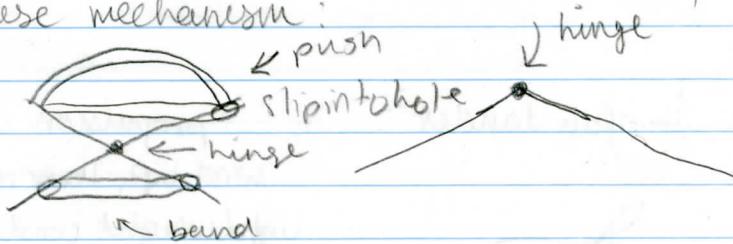
2

design 2: stick leaper rubber band powered

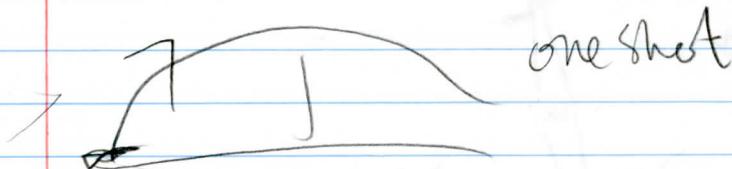
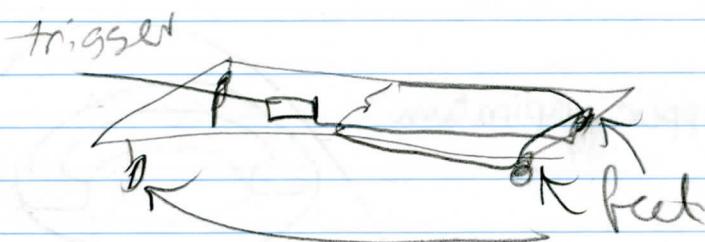


3d printed legs, low infill, thin design - 18
rubberband - 19

release mechanism:



Design 3: hat / mousetrap? (legal?)
upside down

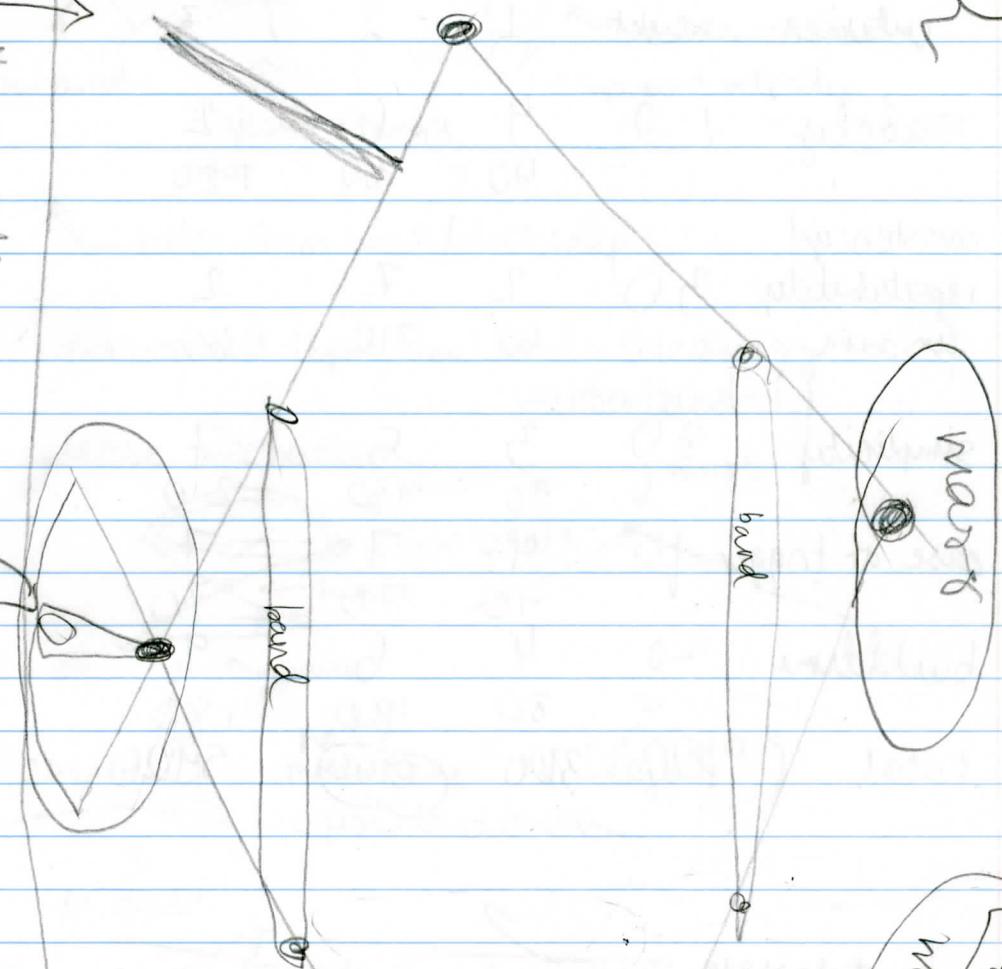


Design 2

shallow angle
more weight

button/lever

steeper angle
more distance



Design 2 schedule

- Auto CAD design Nov 8-10
- Fusion 360 legs, hinges, release, massdesign Nov 10-15
- printing parts Nov 16
- assembly Nov 17