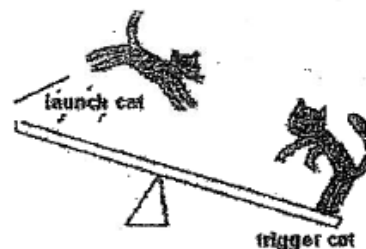


Cat-A-Pult Student Sheet

Materials: cat-a-pult, 2 soft foam cats (launch cat and trigger cat), target

Safety: Make sure you are behind the launch arm and no one is in cat's flight path.



To launch your cat:

1. Place cat-a-pult on designated launch site
2. Set the release force (green) and the tension force (orange) to setting shown in the Data Table below for trial 1
3. Load one foam cat onto the end of the launch-arm so that the cat fits snugly. Press the launch-arm down until it locks in the “ready” position. The cat-a-pult is now loaded and ready for launch.

Launch Data:

Trials	release force (green)	tension force (orange)	distance (cm)
1	1	1	
2	2	1	
3	1	2	
4			
5			
6			
7			
8			

4. Carefully drop the trigger cat straight down onto the large flat trigger plate from a height of 6 to 12 inches.
5. Record the launch distance of your cat (where it first hits the ground) and circle any trial numbers in the table that hit the target.
6. Repeat steps 2 through 5 using the given launch forces in the table.
7. After your third launch, it is now your turn to determine tension settings for launches. Record the release force setting and launch information in the table.
8. Answer the questions on the back.

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Questions:

1. What was your longest distance? _____

Your shortest distance? _____

2. Which knob controlled the distance?

Green-release force or Orange-trajectory force

3. Which knob controlled the height?

Green-release force or Orange-trajectory force

4. Which knob did you find most helpful in hitting the target?

Green-release force or Orange-trajectory force

5. At what settings did the launch cat come closest

to the target? _____