

Catapult Force Diagram

Name: _____

Date: _____

INSTRUCTIONS

- STEP 1 — Label the following parts of the diagram: Frame, Arm, Twisted String, Trigger
- STEP 2 — Add force arrows for: (a) the pull-back force on the arm, (b) the tension stored in the twisted string, (c) the release direction when the arm snaps forward, (d) the projectile's trajectory.
- STEP 3 — Add energy captions. Next to each arrow, write one short sentence about what is happening
- STEP 4 — Mark Newton's 3rd Law. Put a STAR ★ on the diagram where there is an action and reaction.

WORD BANK

Twisted String

Trajectory

Pull back

Forward motion

Arm

Scoop

Frame

Trigger

