Name: $\qquad$ Class: $\qquad$

## Kinetic Energy in Lacrosse

GRADES 6-8

|  | Pass 1 = 10 mevers |  |  | Pass 2 = 10 mevers |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mass of ball: 0.15 kg | Time (s) | Velocity ( $\mathrm{m} / \mathrm{s}$ ) | Kinetic Energy (Joules) | Time (s) | Velocity ( $\mathrm{m} / \mathrm{s}$ ) | Kinetic Energy (Joules) |
| Student 1 | answer here | answer here | answer here | answer here | answer here | answer here |
| Student 2 | answer here | answer here | answer here | answer here | answer here | answer here |
| Student 3 | answer here | answer here | answer here | answer here | answer here | answer here |
| Student 4 | answer here | answer here | answer here | answer here | answer here | answer here |


|  | Pass 3 = 10 meters |  |  | Pass 4 = 10 meters |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mass of ball: 0.15 kg | Time <br> (s) | Velocity <br> ( $\mathbf{m} / \mathrm{s}$ ) | Kinetic Energy <br> (Joules) | Time <br> (s) | Velocity <br> (m/s) | Kinetic Energy <br> (Joules) |
| Student 1 | answer <br> here | answer <br> here | answer <br> here | answer <br> here | answer <br> here | answer <br> here |
| Student 2 | answer <br> here | answer <br> here | answer <br> here | answer <br> here | answer <br> here | answer <br> here |
| Student 3 | answer <br> here | answer <br> here | answer <br> here | answer <br> here | answer <br> here | answer <br> here |
| Student 4 | answer <br> here | answer <br> here | answer <br> here | answer <br> here | answer <br> here | answer <br> here |

1. What percent of the Kyle Hartzell shot ( 111 MPH ) was your fastest pass/shot?

Example: If you threw at $14 \mathrm{M} / \mathrm{S} / 50 \mathrm{M} / \mathrm{S}=.28$ or $28 \%$. Your fastest pass was only 28\% as fast as Kyle Hartzell's shot.
answer here

Name: $\qquad$

Class: $\qquad$

## Kinetic Energy in Lacrosse

## GRADES 6-8

Graph the kinetic energy vs. your velocity for each throw from slowest to fastest.

2. Based on your data/graph, explain the relationship between velocity and kinetic energy by making a claim about the relationship. Support your claim with evidence and reasoning.

Claim: What is the relationship between velocity and kinetic energy? answer here

Evidence: Record and reference in words any data that supports your claim. answer here

Reasoning: Explain why your claim is supported by evidence and scientiÿc ideas. Use the kinetic energy formula to support you.
answer here

