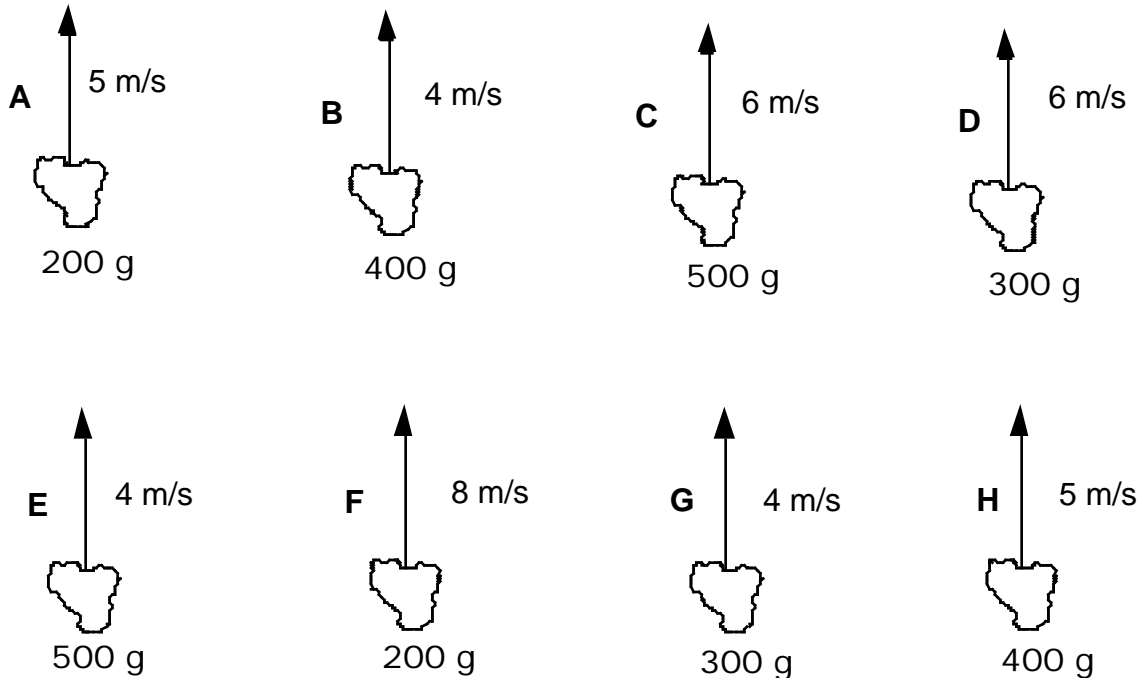


Rocks Thrown Upward—Net Force²⁰

Shown below are eight rocks that have been thrown straight up into the air. The rocks all have the same shape, but they have different masses. The rocks are all thrown straight up, but at different speeds. The masses of the rocks and their speeds when released are given in the figures. (We assume for this situation that the effect of air resistance can be ignored.) All start from the same height.

Rank these rocks from greatest to least on the basis of the net force on the rocks after being thrown.



Greatest 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____ Least

Or, all rocks have the same net force on them but not zero. _____

Or, the net force on all these is zero. _____

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

Basically Guessed			Sure		Very Sure				
1	2	3	4	5	6	7	8	9	10

²⁰ T. O’Kuma, D. Maloney