Names: _____

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Group Activity 15 **Due:** In class, November 2nd

1. Suppose we have a resonance where the entrance and exit widths are equal and their sum is equal to the total width. Take the entrance and exit widths to be 10keV and the resonance energy to be 200keV. At what center-of-mass energy will the resonant cross section be 10% of the maximum for the resonance? What about 50%?

2. What are the natural parity states in ^{18}Ne that can be populated in ^{14}O(α,p) for $l = 0,1,2,\cdots$?