Names: _____

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**Group Activity 8** **Due:** In class, September 21st

1. Write a schematic form of the decay rate as described by the Fermi theory of $\beta$ decay. Which part is primarily responsible for the energy spectrum of $\beta$s?

2. Why do you suppose $\beta$ decay half-lives reach a plateau as the driplines are approached?

3. For which region of the nuclear chart do we expect electron-capture to be appreciable as compared to $\beta^+$ decay?