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In-Class Activity #6: Pop Quiz on Absolute Age Dating

1. Two zircon grains are analyzed using ^{238}U - ^{206}Pb radiometric dating, yielding the following ratios of parent isotope (^{238}U) to daughter isotope (^{206}Pb):

	^{238}U	^{206}Pb
Zircon A	17%	83%
Zircon B	31%	69%

Which zircon grain is older? **Zircon A** or **Zircon B** (circle one)

2. An analysis of feldspar using ^{40}K-^{40}Ar radiometric dating reveals that 75% of the parent isotope (^{40}K) has decayed into the daughter isotope (^{40}Ar). How many half-lives have passed since the feldspar formed?

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