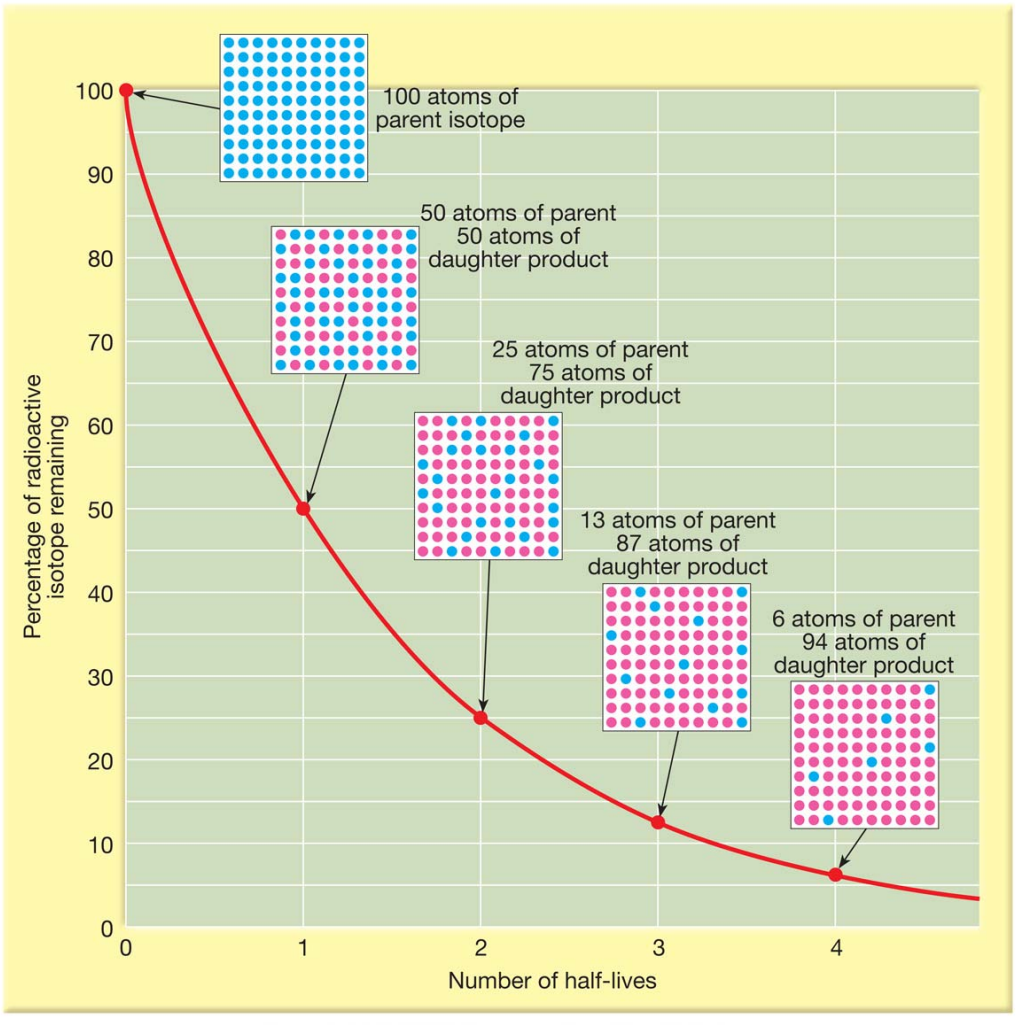


Table 18.1 Radioactive isotopes frequently used in radiometric dating.

Radioactive Parent	Stable Daughter Product	Currently Accepted Half-life Values
Uranium-238	Lead-206	4.5 billion years
Uranium-235	Lead-207	713 million years
Thorium-232	Lead-208	14.1 billion years
Rubidium-87	Strontium-87	47.0 billion years
Potassium-40	Argon-40	1.3 billion years



Rock B contains: Potassium-40 P/D = 25/75

What is the minimum age of rock A?

How do you know? (show your work!)

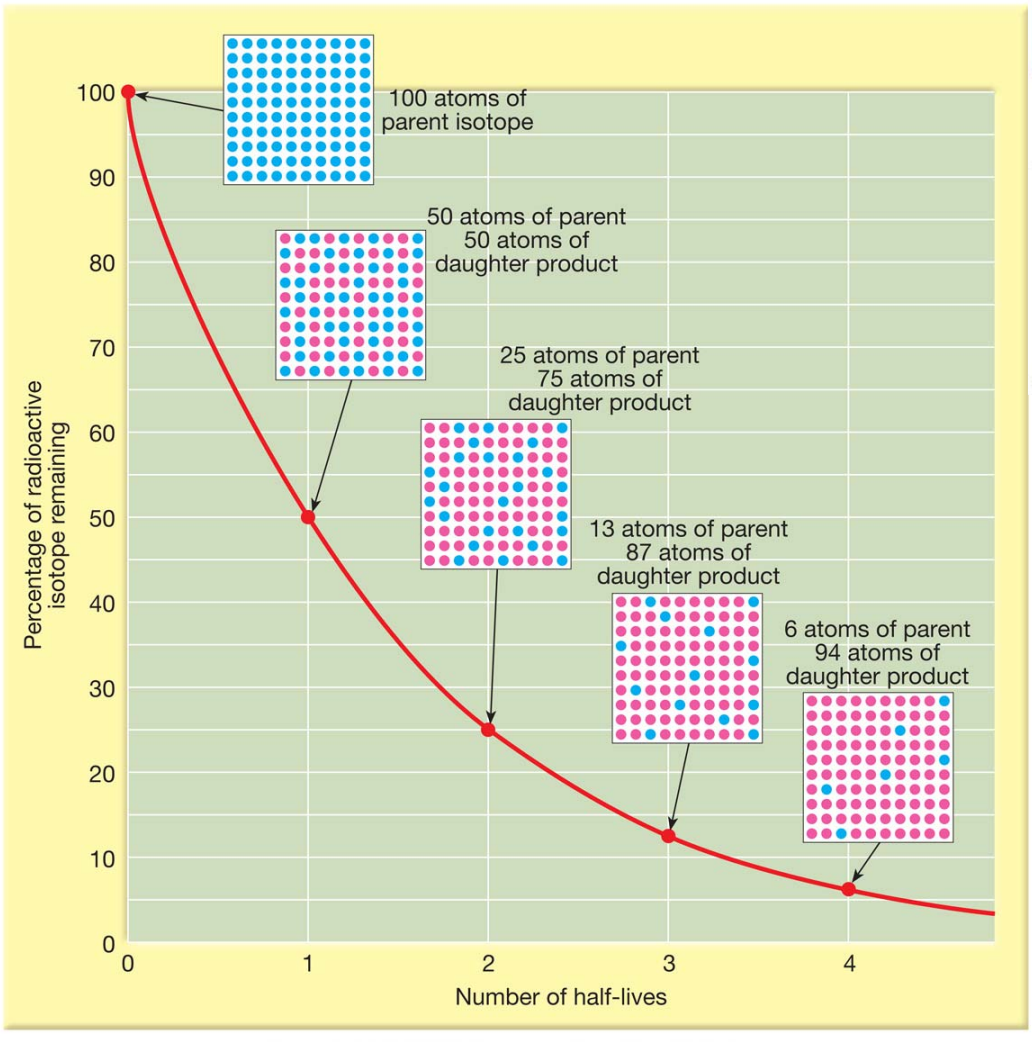
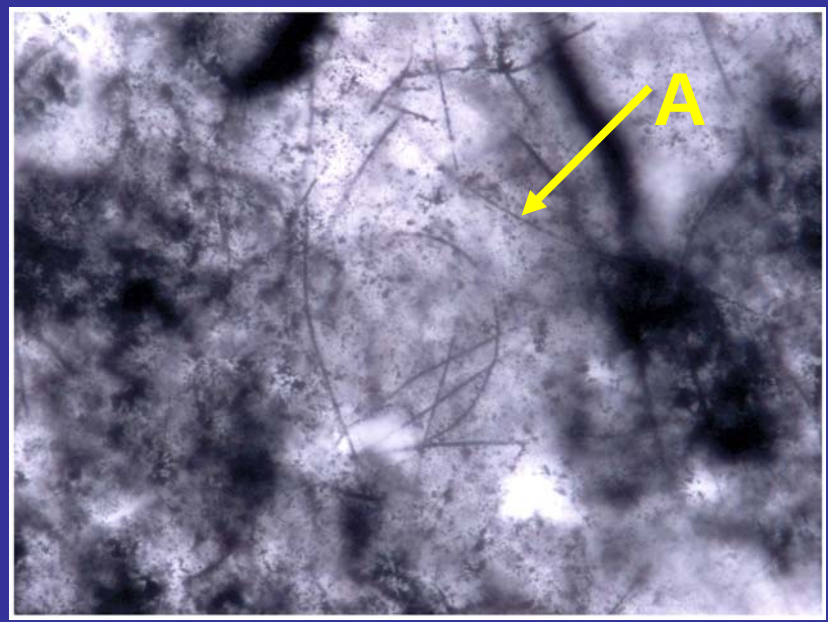


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Fossil A contains: Uranium-235 P/D = 4.5/95.5

Fossil A is in a metamorphic rock

What are the minimum & maximum ages of this fossil?

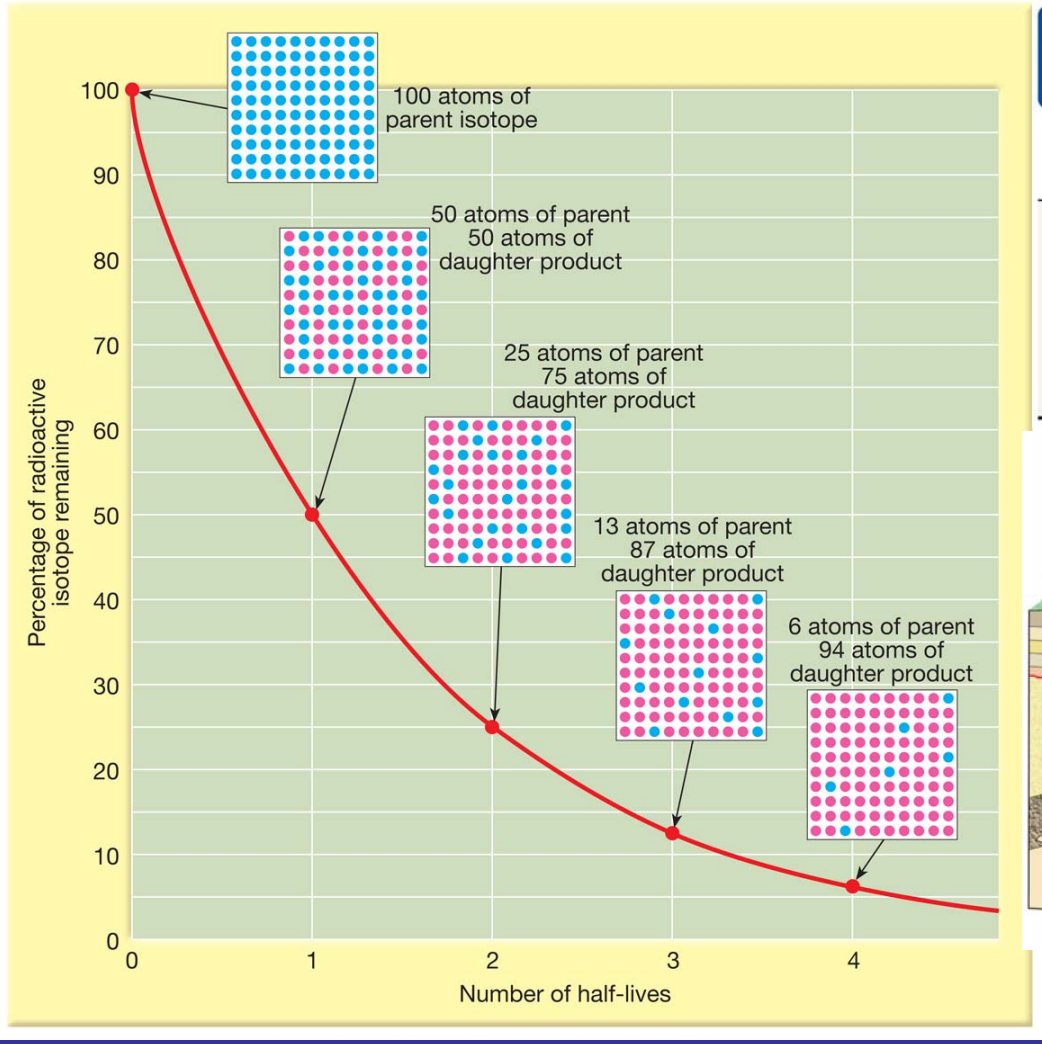
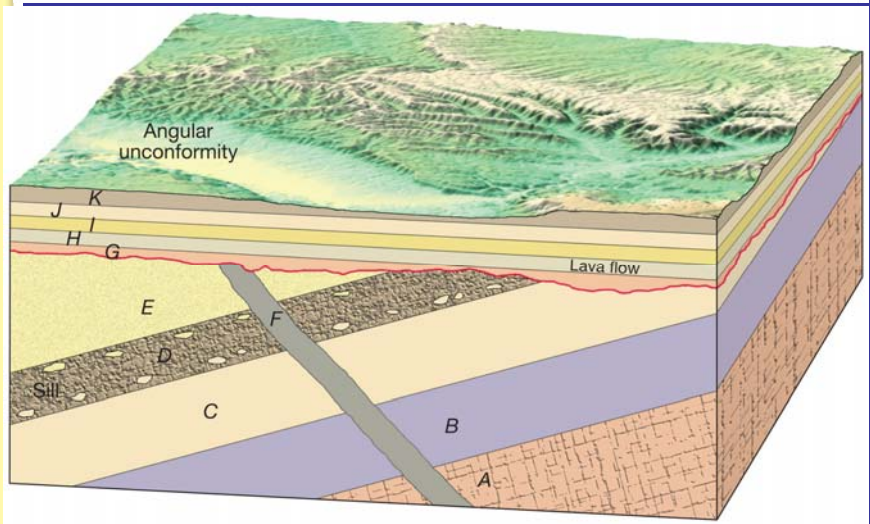


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Potassium-40	Argon-40	1.3 billion years



C contains:
Potassium-40
P/D = 13/87

A contains:
Uranium-238
P/D = 50/50

What is the range of possible ages for B?