

- 40** The grid shows a number of nuclides arranged according to the number of protons and the number of neutrons in each.

A nucleus of the nuclide ${}^8_3\text{Li}$ decays by emitting a β -particle.

What is the resulting nuclide?

number of protons	4					A	B	
	3				${}^6_3\text{Li}$	${}^7_3\text{Li}$	${}^8_3\text{Li}$	
	2		${}^3_2\text{He}$	${}^4_2\text{He}$			C	D
	1	${}^1_1\text{H}$	${}^2_1\text{H}$					
		0	1	2	3	4	5	6
		number of neutrons						

Space for working