

## SECTION A

**Answer ALL questions.**

**For questions 1–10, in Section A, select one answer from A to D and put a cross in the box ☐.**  
**If you change your mind, put a line through the box ☐ and then**  
**mark your new answer with a cross ☐.**

- 1** The table shows the charges on up quarks and down quarks.

Quark	Charge / $e$
u	$+\frac{2}{3}$
d	$-\frac{1}{3}$

Which row of the table shows the quark structure of protons and neutrons?

	Proton	Neutron
<input type="checkbox"/> <b>A</b>	ddd	uuu
<input type="checkbox"/> <b>B</b>	ddu	uud
<input type="checkbox"/> <b>C</b>	duu	ddu
<input type="checkbox"/> <b>D</b>	uuu	ddd

(Total for Question 1 = 1 mark)