

DO NOT WRITE IN THIS AREA

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Answer ALL questions.**1** (a) Which of these is a vector quantity?

(1)

- ☐ **A** density
- ☐ **B** force
- ☐ **C** mass
- ☐ **D** speed

(b) Which of these is a scalar quantity?

(1)

- ☐ **A** acceleration
- ☐ **B** energy
- ☐ **C** momentum
- ☐ **D** velocity

(c) When a book from a low shelf is placed on a higher shelf, the book gains

(1)

- ☐ **A** gravitational potential energy
- ☐ **B** mass
- ☐ **C** weight
- ☐ **D** work

(d) When an object falls at terminal velocity

(1)

- ☐ **A** it accelerates at 10 m/s^2
- ☐ **B** it has no weight
- ☐ **C** the resultant vertical force is downwards
- ☐ **D** the vertical forces on it are balanced

(Total for Question 1 = 4 marks)