

- 1 A 0.10 kg mass is taken to Mars and then weighed on a spring balance and on a lever balance. The acceleration due to gravity on Mars is 38% of its value on Earth.

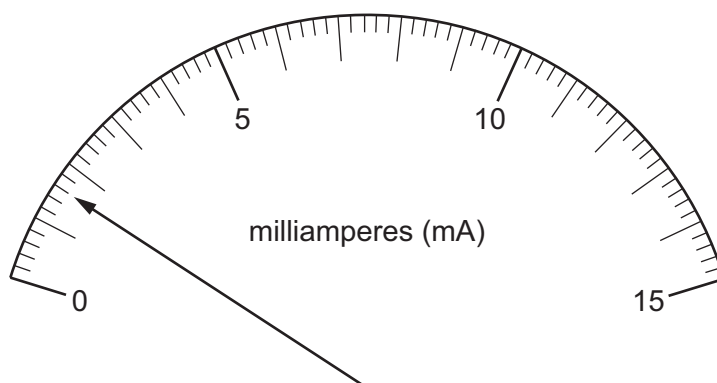
What are the readings on the two balances on Mars? (Assume that on Earth  $g = 10 \text{ m s}^{-2}$ .)

	spring balance / N	lever balance / kg
<b>A</b>	0.38	0.038
<b>B</b>	0.38	0.10
<b>C</b>	1.0	0.038
<b>D</b>	1.0	0.10

- 2 What is equivalent to the unit of electric field strength?

**A**  $\text{J C m}^{-1}$       **B**  $\text{N s A}^{-1}$       **C**  $\text{kg m s}^{-3} \text{ A}^{-1}$       **D**  $\text{kg m}^3 \text{ s}^{-3} \text{ A}^{-1}$

- 3 The diagram shows the reading on an analogue ammeter.



Which digital ammeter reading is the same as the reading on the analogue ammeter?

	display units	display reading
<b>A</b>	$\mu\text{A}$	1600
<b>B</b>	$\mu\text{A}$	160
<b>C</b>	mA	16.0
<b>D</b>	A	1.60

**Space for working**