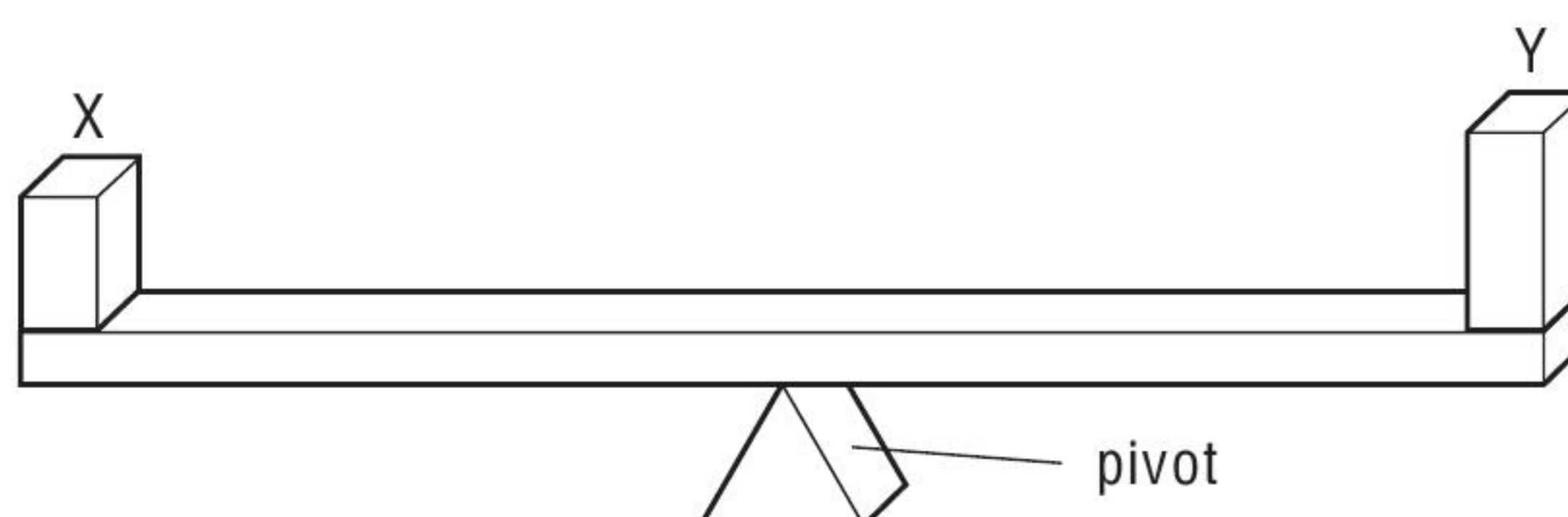


10. Which statement is correct?

- A The mass of a bottle of water at the North Pole is different from its mass at the Equator.
- B The mass of a bottle of water is measured in newtons.
- C The weight of a bottle of water and its mass are the same thing.
- D The weight of a bottle of water is one of the forces acting on it.

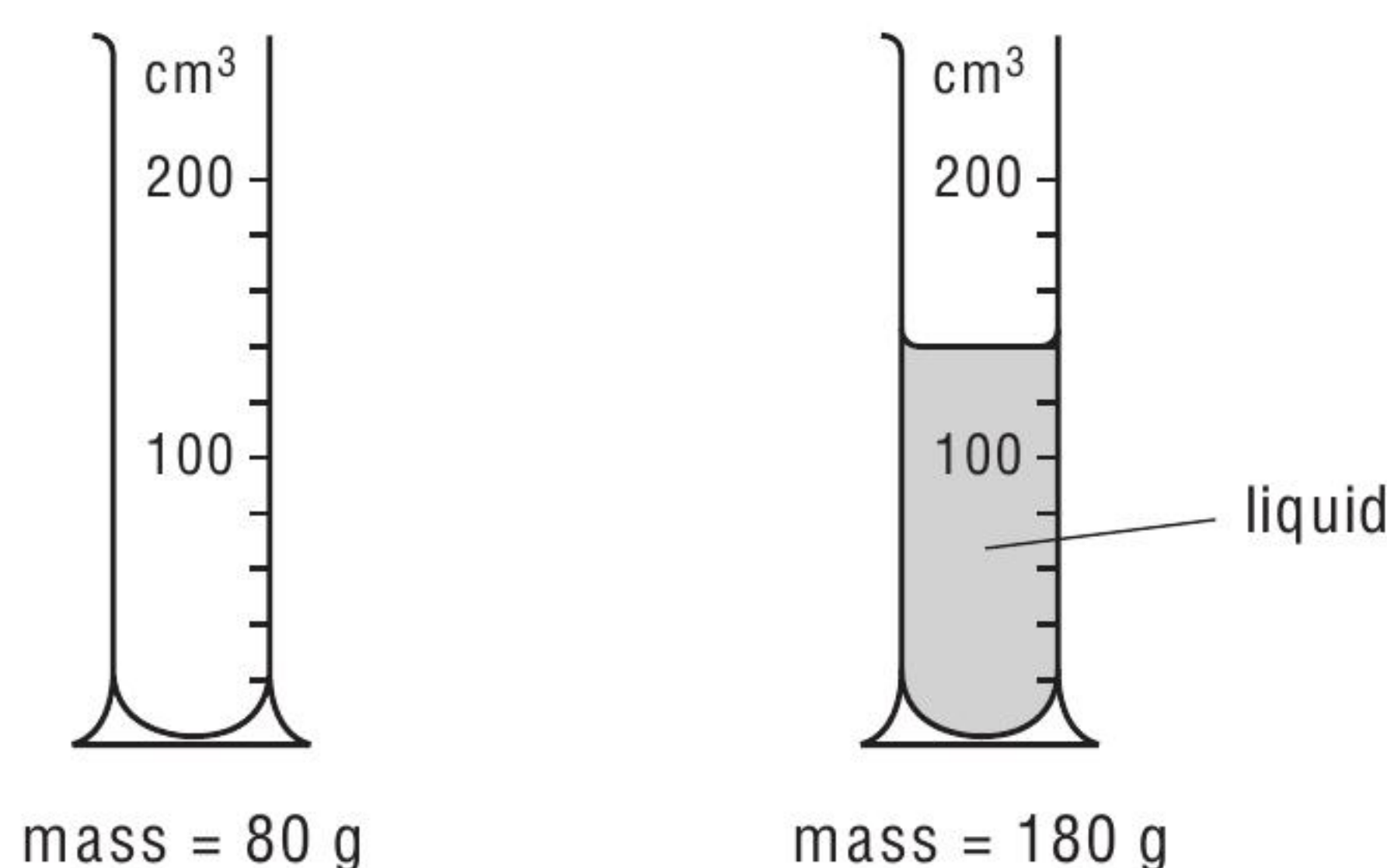
11. Two blocks X and Y are placed on a beam as shown. The beam balances on a pivot at its centre.



What does this show about X and Y?

- A They have the same mass and the same density.
- B They have the same mass and the same weight.
- C They have the same volume and the same density.
- D They have the same volume and the same weight.

12. The masses of a measuring cylinder before and after pouring some liquid into it are shown in the diagram.



What is the density of the liquid?

- A $\frac{100}{120} \text{ g/cm}^3$
- B $\frac{100}{140} \text{ g/cm}^3$
- C $\frac{180}{120} \text{ g/cm}^3$
- D $\frac{180}{140} \text{ g/cm}^3$