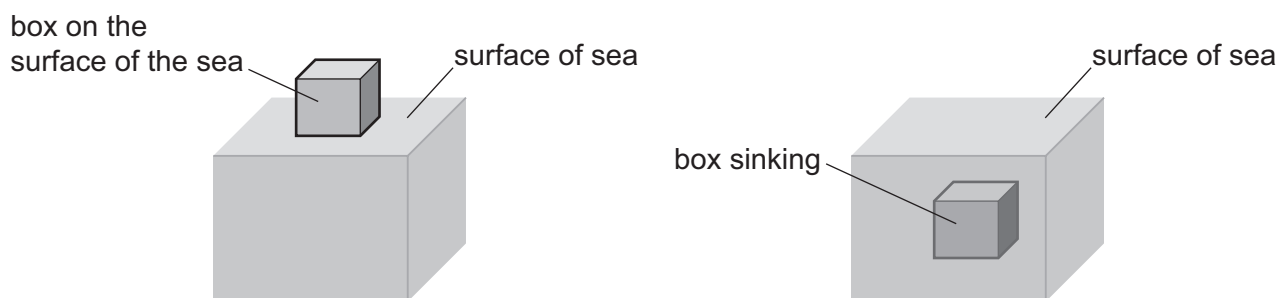


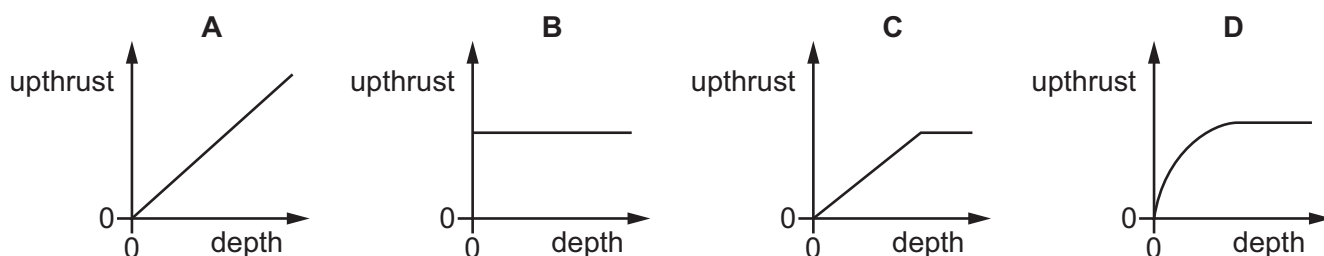
- 15** A box, in the shape of a cube, falls from a ship into the sea. The box lands with its lower face level with the surface of the sea.



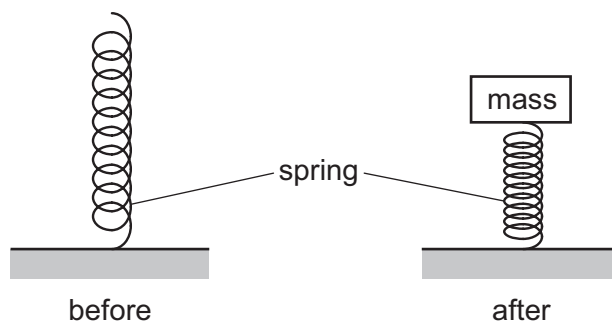
The box begins to sink, becomes totally submerged and then sinks deeper into the sea.

As the box sinks, its lower face is always parallel to the surface of the sea.

Which graph best represents the variation of the upthrust acting on the box with the depth of its lower face below the surface of the sea?



- 16** A spring is compressed by a mass, as shown.



Which statement describes the changes to the energy of the spring when it is compressed by the mass?

- A** The spring gains both gravitational potential energy and elastic potential energy.
- B** The spring gains gravitational potential energy and loses elastic potential energy.
- C** The spring loses both gravitational potential energy and elastic potential energy.
- D** The spring loses gravitational potential energy and gains elastic potential energy.