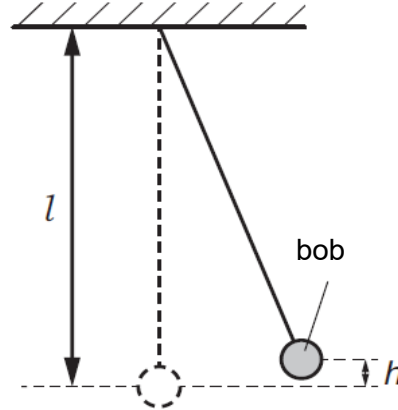**8** A simple pendulum of length l is attached to a bob of mass m. It is displaced sideways so that the bob rises through a vertical distance h and then released.

What is the tension in the string as the bob passes through its lowest position?

A mg

B $mg - \dfrac{2mgh}{l}$

C $mg + \dfrac{2mgh}{l}$

D $\dfrac{2mgh}{l}$

9   An object of mass 5.0 kg has a weight of 8.2 N on the surface of the moon. The radius of