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change = N s [4]

- (c) the average force acting on the ball during contact with the surface.

force = N [2]

- 4 (a) Explain what is meant by the concept of *work*.

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- (b) Using your answer to (a), derive an expression for the increase in gravitational potential energy ΔE_p when an object of mass m is raised vertically through a distance Δh near the Earth's surface.

The acceleration of free fall near the Earth's surface is g . [2]

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