Pre lab-2

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1. Consider a ball of mass 0.050 kg release from 0.85 m height, what velocity does the ball will attain when it hits the floor?

Ans: we know,

$v^2 = u^2 + 2gh$

$\Rightarrow v = \sqrt{0^2 + 2 \times 9.8 \times 0.85}$

$= \sqrt{16.66}$

$= 4.082$ (Ans)

here,

$h = 0.85\ m$

$g = 9.8\ ms^{-2}$

$u = 0$

2. In a bouncing ball lab experiment what do you expect about the bounce height of the ball?

Ans: In a bouncing ball experiment, we expect that the ball will have the same potential energy as potential energy and also the same bounce ~~high~~ height as the starting hight. But the actual case the kinetic energy is changed to other form. so, bounce heigh become less than ~~accu~~ starting ~~hight~~ height.

3. Without air resistance, the ball is still not be able to bounce to its original drop height, why?

Ans: Because of energy transfers like, elastic potential energy, thermal energy, sond energy. And also the ball will never ~~as~~ have as much as kinetic energy as it~~s~~ originally had.

4. Name some factors that would affect the bounce height.

Ans: ① Air, ② surface, ③ Gravity, ④ Hardness