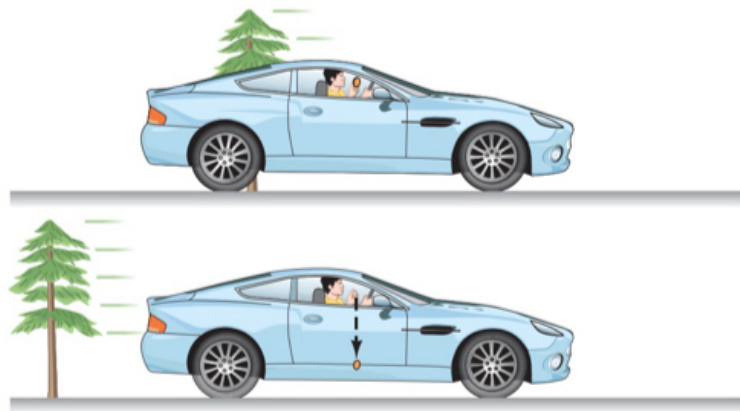
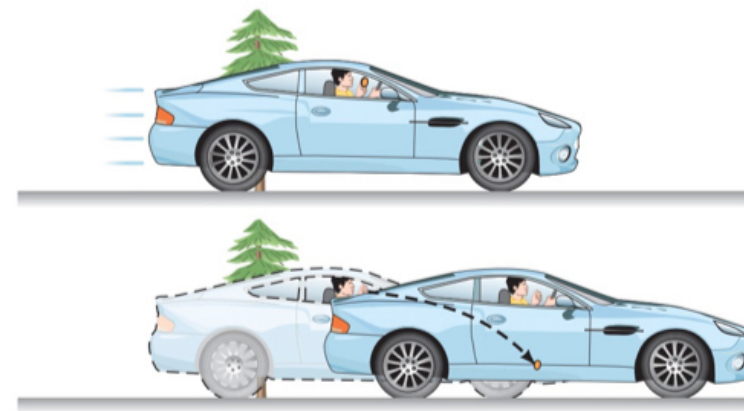


REFERENCE FRAMES



(a)
Reference frame = car



(b)
Reference frame = Earth

A coin is dropped by a person in a moving car. The upper views show the moment of the coin's release, the lower views are a short time later. (a) In the reference frame of the car, the coin falls straight down (and the tree moves to the left).

(b) In a reference frame fixed on the Earth, the coin has an initial velocity (= to car's) and follows a curved (parabolic) path.

from: Giancoli, Physics