

Part I

1. Two teams are having a tug-of-war match. Which of the following can be considered an isolated system?
  - (a) one team
  - (b) both teams
  - (c) both teams and the rope
  - (d) none of the above systems

Answer: (d) Since they are pushing on the earth the earth is part of the system

2. A railcar (mass of 1000 kg) moves horizontally at speed 10 m/s. Friction between the railcar and the track can be neglected. A 40-kg bale of hay falls vertically onto the railcar; the car

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