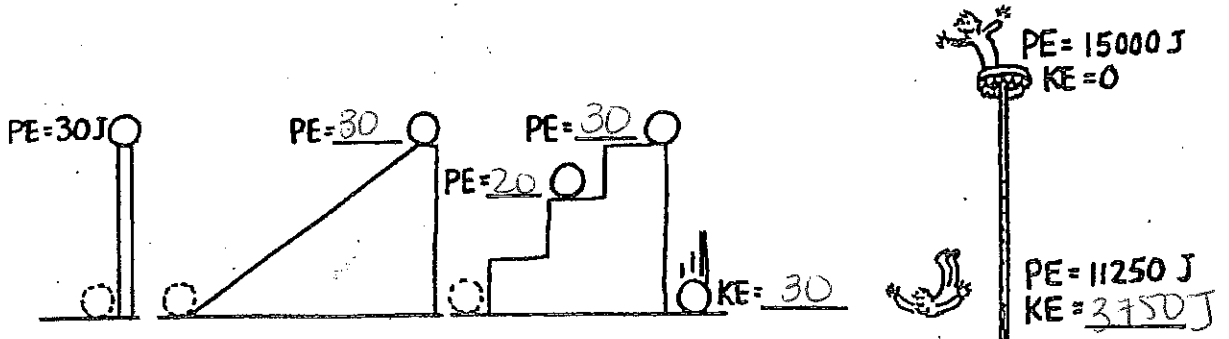


Concept-Development Practice Page

8-2

Conservation of Energy

1. Fill in the blanks for the six systems shown.



$1 \times 10^6 \text{ J} = \frac{1}{2} m (30 \text{ km/h})^2$

↑ convert first

$m = 29031.79 \text{ kg}$
 $v = 30 \text{ km/h}$
 $KE = 10^6 \text{ J}$

$v = 60 \text{ km/h}$
 $KE = 4 \times 10^6 \text{ J}$

$v = 90 \text{ km/h}$
 $KE = 9 \times 10^6 \text{ J}$

