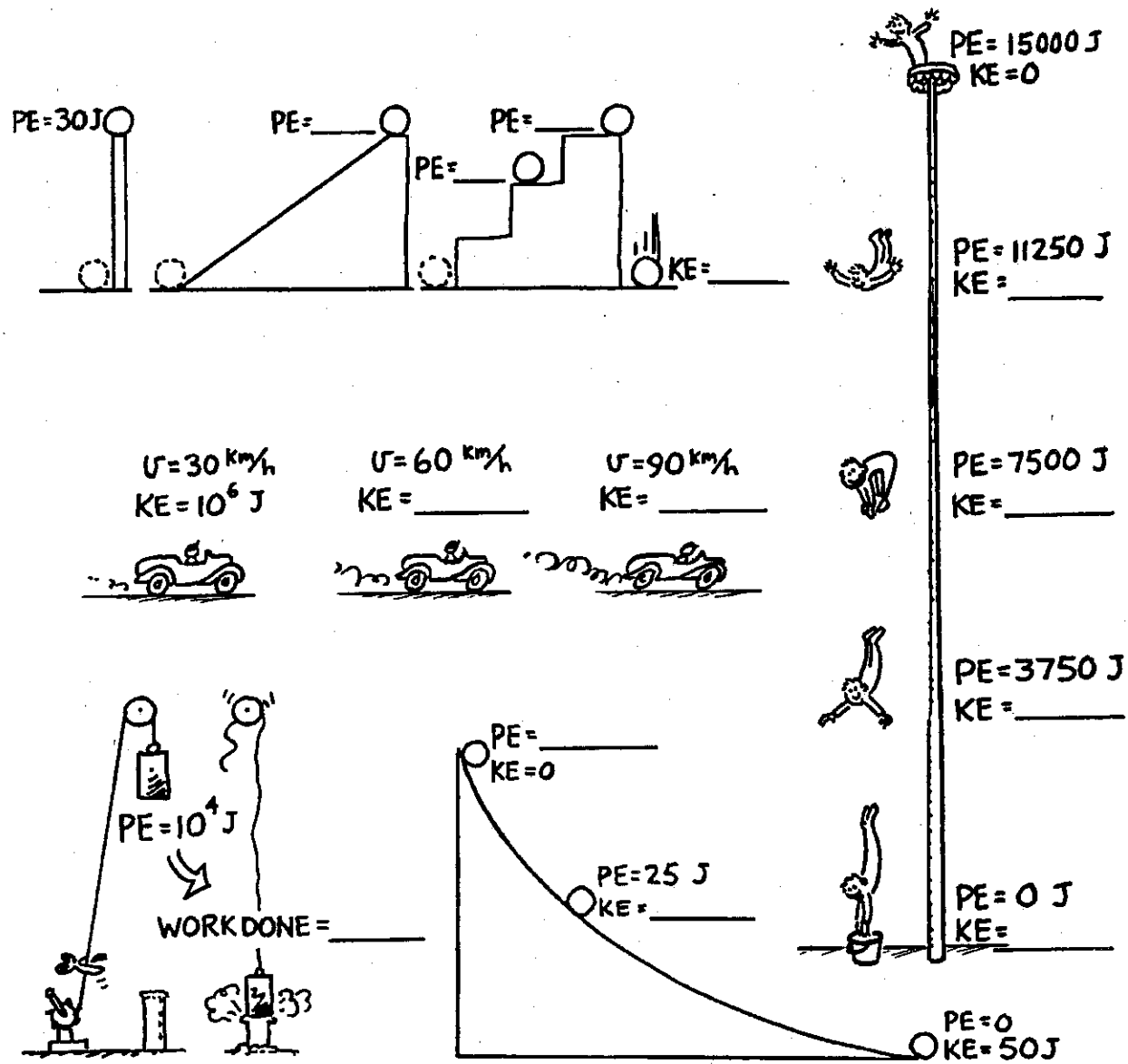
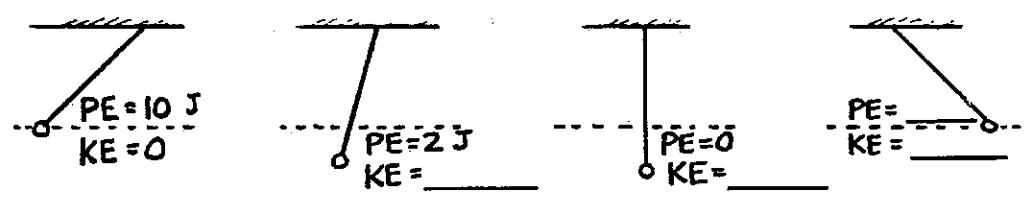
Name Period Date

Concept-Development Practice Page 8-2

Conservation of Energy

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





Conceptual PHYSICS

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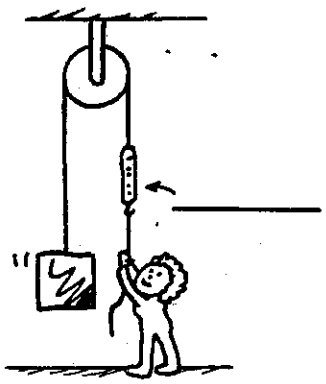
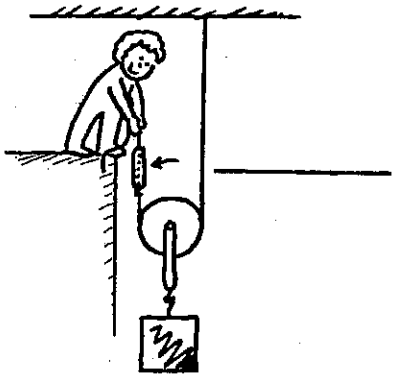
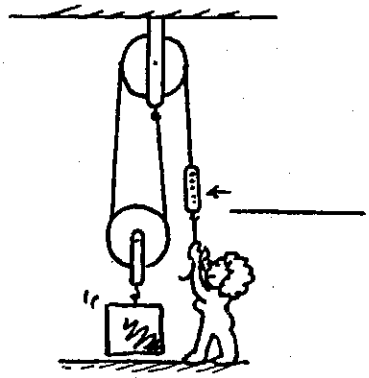
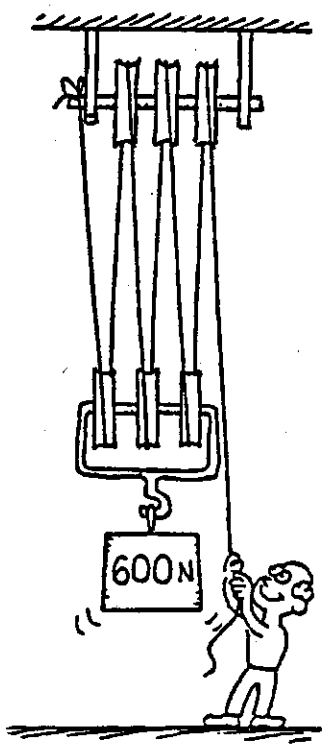
2. The woman supports a 100-N load with the friction-free pulley systems shown below. Fill in the spring-scale readings that show how much force she must exert.







3. A 600-N block is lifted by the friction-free pulley system shown.



a. How many strands of rope support the 600-N weight?

_____

b. What is the tension in each strand?

_____

c. What is the tension in the end held by the man?

_____

d. If the man pulls his end down 60 cm, how many cm will the weight rise?

_____

e. What is the ideal mechanical advantage of the pulley system?

_____

f. If the man does 60 joules of work, what will be the increase of PE of the 600-N weight?

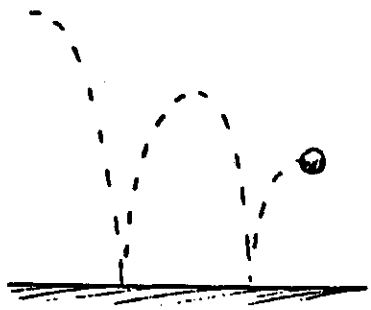
_____

4. Why don't balls bounce as high during the second bounce as they do in the first?

_____

_____

_____



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