



# Questions to Ask About Systems

- a. When this system is working, what does it do?
- b. For this system to work, must it receive any input?
- c. What, if any, output does this system produce?
- d. Identify at least four parts of this system. Describe what each part does, and tell how each part contributes to the system as a whole.
- e. Choose an interesting part of the system and list at least four words or phrases describing that part. Which, if any, of those words or phrases also describe the whole system?
- f. Could any of the parts of this system be made of different material without affecting how the system works? Explain your answer.
- g. Can any one part of the system do what the whole system does? Justify your response.
- h. Can you take a part from another system of the same kind and use it to replace a part in this system? If you do so, will this system work the way it does now?
- i. Identify at least two parts of this system that must interact if the system is to function. Describe how these parts interact. Could the parts of this system be arranged differently and the system still function?
- j. What is the boundary of this system?
- k. Can you identify any subsystems within the whole system? If so, describe one subsystem.
- l. Does this system require symmetry among any of its parts? If so, describe the symmetry.
- m. Describe how the functioning of this system would change if one of the parts wears out.
- n. If this system stops working, how would you go about fixing it?
- o. Give an example of how this system might respond to a stimulus from inside itself.
- p. Give an example of how this system might respond to a stimulus from the environment outside the system.
- q. In what way is it useful to think of this item as a system?
- r. Could someone develop a computer simulation of this system? Justify your answer.
- s. Which of these questions did you find most difficult to answer? Explain how you thought in answering this question.