

Size up the System

Directions: After reading the following 4 scenarios, please identify the individual parts of each system (Inputs, Processes, Outputs, & Feedback) and write them in the appropriate blanks provided.

Scenario #1:

A company in Castledale, Utah buys cocoa beans from Columbia and sugar from Hawaii to make chocolate candy bars. They make the bars in a manufacturing plant and ship them to stores all across the United States. People love them so much and have bought enough candy bars that soon the company will start selling in Canada and Mexico, too.

Identify the:

Input(s) _____

Process(es) _____

Output(s) _____

Feedback _____

Scenario #2: ABC Video Games has just created a new simulation where a player can turn into a prehistoric dinosaur of their choice. ABC produces the game with the cheapest electronic circuits and plastic case they could find. They program the electronic circuits and place the circuits inside the plastic case. Then the games are packaged in a small paper box. The packaged video games are shipped to only a few stores, and customers find that after they buy the video games, many of them do not work and the plastic case splits apart from not being glued together very well.

Identify the:

Input(s) _____

Process(es) _____

Output(s) _____

Feedback _____

Scenario #3:

Mommy Tilfiger makes the world's classiest clothes. They buy their materials from the finest textile manufacturers and then cut and sew the fabrics to precise sizes. They have a quality control program to avoid having defective clothes from ever leaving their manufacturing plant. The clothes that do get to the stores sell remarkably well, even though they cost much more than clothes made much like the Tilfiger brand.

Identify the:

Input(s) _____

Process(es) _____

Output(s) _____

Feedback _____

Scenario #4:

Chevroford Motor Company has developed an electric car that converts the sun's radiant energy into electricity through photovoltaic (foto-vol-TAY-ic) cells. The electricity then turns an electric motor that is connected to the car's gearbox. The gearbox is connected to the wheels that get the whole car moving. There is an on-board computer that tells the driver how much energy is being used and how fast the car is going.

Identify the:

Input(s) _____

Process(es) _____

Output(s) _____

Feedback _____