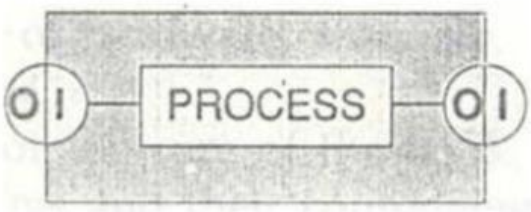
Câu 1: Hãy đọc kỹ đoạn văn sau và trả lời câu hỏi

Throughout the ages people have sought to understand the world around them and to explain it in a systematic way. A *system* is simply a group of elements which work together to achieve a purpose. Systems can be very large, such as the system of courts and laws we call our 'legal system', or very small, such as the system involved in cleaning your teeth. Systems can occur in nature or be designed by people. The water cycle (described below) is an example of a natural system. Banking systems and computer systems are examples of systems designed by people.

Input-process-output

Processing systems accomplish a task: they take one or more *inputs* and carry out a *process* to produce one or more *outputs*. An input is something put into the system, a process is a series of actions or changes carried out by the system, while an output is something taken from the system. All systems can be represented by the following input-process-output (*IPO*) diagram.



The shaded area in the diagram represents the system. The letter 'I' stands for input and the letter 'O' stands for output. The input into this system is an output from another system and the output from this system is an input into another system.

To develop these ideas further we will consider three systems: coffee making the water cycle and the shop.

THE WATER CYCLE

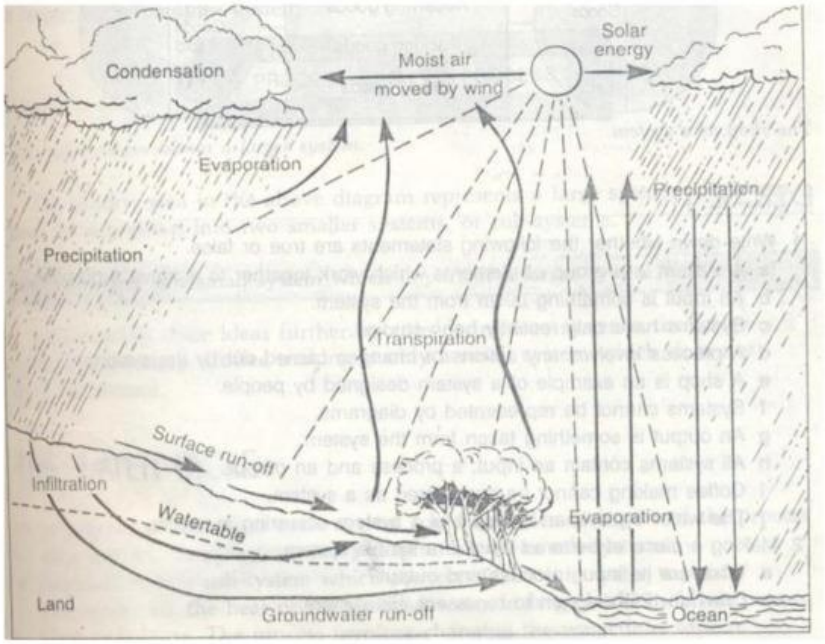
Water circulates between the earth and the atmosphere; this is an example of a system occurring in nature. It is driven by the heat of the sun which causes evaporation from bodies of water and transpiration from plants. The water vapour in the atmosphere forms clouds under certain conditions. When these clouds have more water vapour than they can hold, precipitation occurs and the water is returned back to the earth as rain, hail, dew or snow. This process of moving water from the earth into the atmosphere and back to the earth is called the water cycle.

The inputs are the heat from the sun, and water from oceans, lakes, rivers and plants. The process consists of actions such as evaporation, transpiration and precipitation. The output is the circulation of the water between the earth and its atmosphere.

LIVEWORKSHEETS

THE SHOP

A shop is a retail system designed by people; its purpose is to allow customers to purchase goods or items. The inputs are the goods to be sold. The process consists of actions such as receiving goods from the warehouse, packing the goods into the shop and selling the goods at the counter. The output is the goods sold to the customers.



1. Write down whether the following statements are true or false.

a. A system is a group of elements which work together to achieve a purpose.

b. An input is something taken from the system.

c. Systems have only recently been studied.

d. A process involves any actions or changes carried out by the system.

e. A shop is an example of a system designed by people.

f. Systems cannot be represented by diagrams.

g. An output is something taken from the system.

h. All systems contain an input, a process and an output.

i. Coffee making cannot be considered as a system.

j. The water cycle is an example of a system occurring in nature.

LIVEWORKSHEETS