

## Lecture 1: processes

The goal of this lecture is to define a process; its types and how to describe it based on a given diagram. It's very significant for a future engineer to master such simple task in English language. It will help you in future conferences, work meetings and international English language examinations.

- 1- **Definition:** process is a set of steps, phases or actions in order to achieve a certain end or a result.
  
- 2- **Types of processes:** we can classify processes according to different criteria, one of them is as following:
  - a. **Natural processes:** are processes that occur without the contribution of human.  
For examples: photosynthesis, hydrologic cycle, life cycle, rock cycle... ect
  - b. **Man-made processes:** are processes that occur with the contribution of human.  
For example: steel making, juice making ... ect

### 3- Language to be used in describing a certain process in a diagram:

The composition must contain 2 parts: and introduction and a body. There is no need for a conclusion for you will merely describe and not draw any sort of assumption.

- **The introduction:** in the introduction, the writer must define the diagram he's describing as follow:

The diagram/ picture/ flow chart depicts/ illustrates/ describes the proces of/ how....

### Words to Describe the Type of Diagram:

Verbs

- Creates
- Produces
- Makes
- Distributes
- Moves

Adjectives

- Natural
- Human-produced

- Man-made
- Cyclical
- Linear
- step(s)

**- the body:** in the second part, the writer must explain the diagram in a paragraph respecting the following instructions.

**a. Use of an objective, precise, concise and academic language:**

- Avoid including your opinion or the first person pronoun I.
- Use words that convey the meaning in exact terms.
- Avoid the use of long sentences and literary style or slang language.

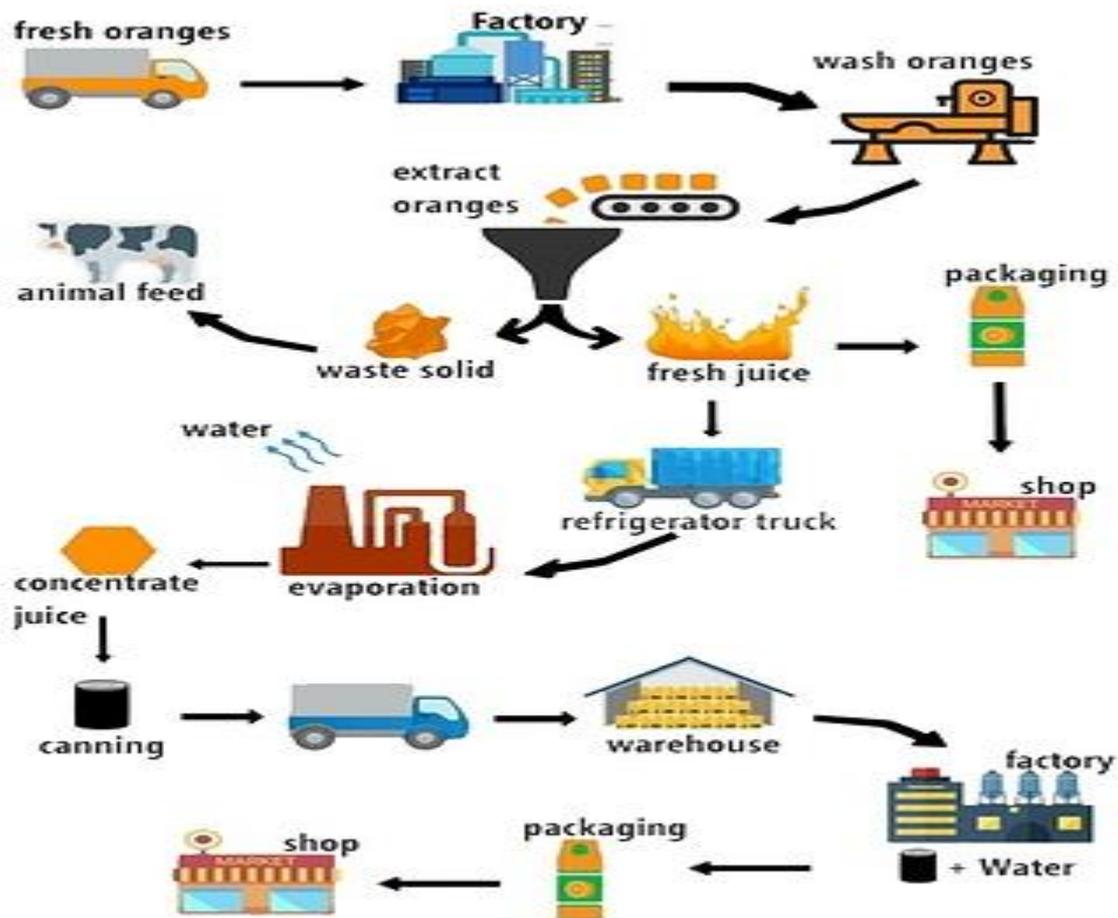
**b. Use of the passive voice:**

- *The purpose of passive voice can be one of the following: unknowing the doer of the action, or emphasizing the action rather than the doer.* For example: when describing the step of transporting the oranges from the farm to the factory ( in the juice making process), the doer of the action is not as important as the action itself. Therefore, we say as following:

**The oranges are transported to the factory rather than **the workers transported the oranges to the factory.****

**c. Use of chronology sequencers:**

- In order to connect the steps in a coherent paragraph, the use of chronology sequencers is mandatory.
- A) First/ Firstly, Second/ Secondly, Third/Thirdly ..... Next/ After that/ Then, Following that/ Followed by, Subsequently/ Subsequent to that, Finally/ Lastly...
- B) Where/ From where/ After which/ After that/ Afterward...
- C) When/ As soon as/ Immediately, Just after that...
- D) At the beginning, In the end, Just after the beginning, Just before the end...
- To denote the end of a step:
  - A) After this step/ stage/ process...
  - B) Once this stage/ step is completed...

**Example of diagram description :**

The process describes the manufacture of orange juice. There are 14 main stages in the whole orange juice producing process, beginning with collecting fresh oranges and ending with distributing product to supermarkets.

Firstly, fresh oranges are delivered to factory and they are washed before extraction. Then, solid waste and juice are separated by squeezer, one becomes animal food, the other is mixed with water to make orange juice. In the next stage, orange juice can either be packed to move to supermarket or transferred to another step performed by evaporator machine.

In the evaporation process, the water from fresh orange juice will be removed. Following this, the concentrated juice is canned and then transfer to warehouse. Before packaging, water is added to each can. The entire orange juice producing process concludes after orange juice boxes are delivered to supermarket

