

Activity 4.4

<u>Title:</u> Multiple Choice Questions <u>Learning outcome:</u> Recap of main notions learned in Lecture 3 <u>Applicable:</u> it can be used in the third lecture of the Systems Thinking module <u>Green skills:</u> discussion, collaborative planning, co-creation, systems thinking <u>Instructions:</u> Answer the following questions:

1) What is the systemic archetype that is formed by the model that was described in the presentation:



- a) Success to the successful
- b) Limits to growth
- c) Escalation
- d) None of the above

2) Assume that a city gets its water from a water tank/reservoir. The higher the population of the city the higher the demand for water. As the demand increases, so does the water usage by the citizens which reduces the water level in the tank/reservoir. Assuming that the city suffers from lack of rain and that the citizens do not have any other means of drinking water, the mayor decides that as the water level in the reservoir falls the price of the water must increase which decreases the overall demand. What type of feedback loop is the one described?

- a) Negative or Balancing Feedback Loop
- b) Positive or Reinforcing Feedback Loop
- c) Feedback Loop that generates s-shaped behavior
- d) None of the above



Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the National Agency (NA). Neither the European Union nor NA can be held responsible for them.



3) In Systems Thinking it is assumed that exogenous variables and data determine the behavior of the system under study.

- a) True
- b) False

4) If a feedback loop contains 1 (one) negative link between two of its variables then the feedback loop is considered positive/reinforcing.

- a) True
- b) False



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the National Agency (NA). Neither the European Union nor NA can be held responsible for them.