

Ex. 2 p. 90

1. E
2. D
3. B
4. A
5. C

Ex. 4 p. 91

1. It was set up to pilot a low-energy food production system in a coastal desert region using only seawater, sunshine and nutrients from the sea.
2. The only criteria they didn't fulfill was using only the nutrients extracted from the seawater.

Ex. 5 p. 91

Criteria:

1. The system had to be simple.
2. The system needed to use minimal power.
3. The system had to rely on seawater and sunshine as input or raw materials for the soil.
4. The system needed to be low-cost.

Evaluation:

1. They were able to design a process that perfectly imitates the water cycle.
2. They demonstrated that the system was capable of operating with very little power from outside sources.
3. They didn't need to use any fresh water from outside the system on the crops, but it turned out to be impossible to use only nutrients extracted from the seawater.
4. They showed they were able to build a glasshouse within per square meter target of 35 Euros.

Overall:

The only criteria they didn't fulfill was using only the nutrients extracted from the seawater.

Ex. 6 p. 91

2. Minimal power had to be used by the system.
3. We didn't need to rely on electricity from the grid.
4. We shouldn't have used nutrients bought from outside.
5. We were obligated to use a generator for the pumps and the fans.
6. There was no need to use any fresh water from outside the system.

Ex. 7 p. 91

A:

1. located
2. removes
3. using

B:

4. commencing
5. is pumped
6. are removed

C:

7. been cleaned
8. is pumped
9. containing

D:

10. containing
11. acts
12. allowing

E:

- 13. been blocked
- 14. containing
- 15. is forced
- 16. flowing

F:

- 17. passed
- 18. called
- 19. undergoes
- 20. flowing