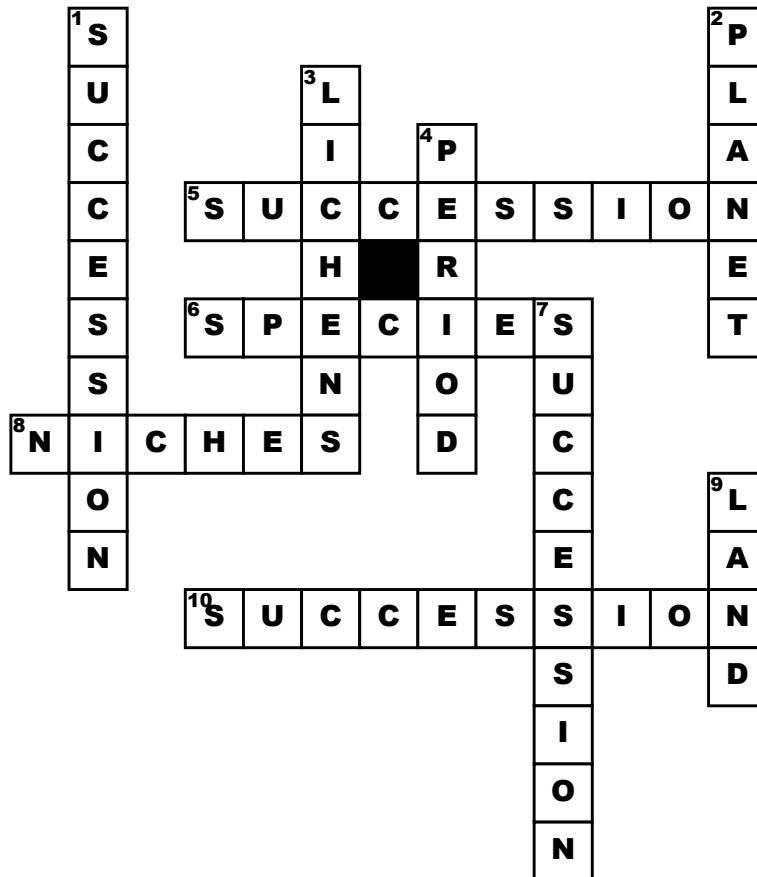


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Ecological succession



## Across

5. What is the difference between primary ecological succession and secondary ecological

6. What are pioneer species? What is the role of pioneer

8. A pioneer community is formed of species able to survive in hostile environments. The presence of these species modifies the microenvironment, generating changes in the abiotic and biotic factors of the ecosystem in formation. Therefore, they pave the way for other species to establish themselves at the location through the creation of new potential ecological

10. What is ecological

## Down

1. What is the climax stage of an ecological

2. The climax stage is the stage of the ecological succession in which the community of an ecosystem becomes stable and does not undergo significant changes. In the climax community, practically all ecological niches are explored and greater biodiversity is possible. In this stage the biomass, the photosynthesis rate and cellular respiration reach their maximum levels and therefore net primary production (NPP = organic material made by the producers - organic material consumed in the cellular respiration of the producers) approaches zero. During the climax, the amount of oxygen released by photosynthesis is practically equal to the oxygen consumed by respiration. (This is one more reason why it is wrong to say that the Amazon Rainforest, an ecosystem at the climax stage, is "the lung" of the earth. Other reasons are: because lungs are not producers of oxygen; and because the algae and cyanobacteria of phytoplankton are the main producers of the molecular oxygen on the

3. Pioneer species are the first species that colonize places where there were previously no other living organisms, such as algae that colonize bare rocks. In general, pioneer species are autotrophs or maintain harmonious ecological interaction with autotrophic organisms (such as autotrophic bacteria, herbaceous plants,

4. Ecological succession is the changing sequence of communities that live in an ecosystem during a given time

7. Primary ecological succession is the changing sequence of communities starting with the first biological occupation of a place where there were no living organisms previously. For example, the colonization and the following succession of communities on a bare rock is a case of primary ecological

9. Secondary ecological succession is the changing sequence of communities starting with the substitution of a community by a new one in a given place. An example of this is the ecological succession of the invasion of plants and animals on an abandoned crop or