Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_Date\_\_\_\_\_\_\_\_

1. Identify and describe plant adaptations, especially adaptations which allow plants to survive fire.

2. Identify and describe the advantages and disadvantages of each type of plant adaptation.

3. Identify and describe the difference between structural and physiological adaptations.

Instructions: In your groups, complete the observations identified from the field guide on the student data sheet.

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| --- | --- | --- | --- | --- |
| **Student Data Sheet**  **Circle the answer that coincides with your observations and provide evidence for each one in the space below.** | | | | |
|  | **Adapted to survive**  **fire**  (examples:  underground stem;  well-protected stem;  produces seeds or  new leaves after fire) | **Adapted to live**  **without soil**  (examples: plants  growing in trees) | **Adapted to dry**  **conditions**  (examples: thick  waxy leaves; fleshy  leaves; needle-like  leaves; dormant in dry  periods and revives  after rain) | **Adapted to protect**  **itself from**  **predators**  (examples: spines;  thorns, sap; saw or  toothlike features) |
| Prickly pear cactus | Yes/No | Yes/No | Yes/No | Yes/No |
| Wire grass | Yes/No | Yes/No | Yes/No | Yes/No |
| Sand live oak | Yes/No | Yes/No | Yes/No | Yes/No |
| Ball moss | Yes/No | Yes/No | Yes/No | Yes/No |
| Saw palmetto | Yes/No | Yes/No | Yes/No | Yes/No |
| Long leaf pine | Yes/No | Yes/No | Yes/No | Yes/No |

1. Which of the plants observed would be able to survive a flood? Provide evidence based on your data.
2. Of the vegetation listed, which plant(s) are adapted for dry seasons? Which structures allow for survival?
3. Imagine that instead of a dry and sandy area, the plants you observed existed in a very wet and windy area. How might they have been different?
4. Tulips are known to store food in a bulb to help it survive the winter. Compare this adaptation to a bear hibernating and a goose migrating.