## Rainfall on the Plain

Materials Needed:
Copies of "Rainfall on the Plain" student pages - one per student
Copies of "Rainfall Amounts" - one per student
Copies of "Nebraska Map" - one per student
Large state map of Nebraska - one or two per class
Time:
approximately 50 minutes

## Skills:

Social Studies (geography, Nebraska studies)
Science (prairie ecosystems, prairie plants, adaptations)

## Procedure:

Provide each student with the three handouts: "Rainfall on the Plain," "Rainfall Amounts," and "Nebraska Map."

Instruct students to plot all the cities on the "Rainfall Amount" handout on the "Nebraska Map." If they do not know where a city is, they should refer to the large state map.

Once they have all the cities marked on the map, students should use the color key at the bottom of the "Rainfall Amounts" handout to shade each city's dot the correct color.

Then, after all cities are marked and color coded, ask students to look for groups of the same colored dots. Instruct students to shade areas of the same colored dots with the same color. For example, if you see a group of blue dots, shade that portion of the state blue.

Once all students are done shading their map, have students analyze their map and answer the questions on the "Rainfall on the Plains" handout.

Finish the activity by having a class discussion about what they learned and where Nebraska's different types of prairies are located and why.


NAME: $\qquad$

## Rainfall on the Plains

Instructions

1. Plot cities and colors. Plot each city on the "Rainfall Amounts" handout on the Nebraska Map in its correct location. If you are not sure where a city is located, refer to the large state map. Then, using the color key, mark each city's dot with the correct color.
2. Shade Similar Areas. After all cities are marked, look for groups of same colored dots. Share areas of same colored dots with the appropriate color. For example, if you see a groups of blue dots, shade that portion of the state blue.
3. Study the Map. Examine your map and note any rainfall patterns. Use the map's information to answer the questions below.

## Analysis

1. Describe the rainfall patters you notice.
2. Pretend you are a farmer raising corn. Which two colored regions of the state would provide the best farming opportunities? Why?
3. In the yellow and red areas of the state, what land use do you think would be the most common? Why?
4. Rainfall or precipitation amounts play a large role in determining the types of plants that group in an area. This, in turn, influences the types of $\qquad$ found in the area.
5. Three major types of prairie ecosystems can be found in Nebraska: tallgrass prairie, mixedgrass prairie, and shortgrass prairie. Describe which praries might be found in each colored region on your map.
6. In which type of prairie could you expect to find prairie prairie dogs? If you don't know, try looking in a book on online.
7. In which colored region(s) of Nebraska do you find the Sandhills? If you don't know, try looking in a book or online. Why are their so many lakes in this area?
8. In which colored regions would you be most likely to find an oak forest?

## Rainfall on the Plains <br> Rainfall Amounts

Yearly Rainfall Averages for Selected Cities in Nebraska

| Arthur | 17.2" |
| :---: | :---: |
| Hastings | 24.5" |
| Oakdale | 24.7 " |
| Alliance | 16.5" |
| Tekamah | 29.3" |
| Nenzel | 19.0" |
| Lodgepole | 17.2" |
| Wisner | 31.3" |
| Callaway | 22.8" |
| Hooper | 31.2 " |
| Haigler | 17.1" |
| Curtis | 22.0" |
| Beatrice | 27.8" |
| Hyannis | 16.3" |
| Greeley | 22.6" |
| Atkinson | 20.2" |
| Tecumseh | 30.4 " |
| Kimball | 16.5" |
| Santee | 23.6" |
| North Platte | 18.2" |
| Stapleton | 19.4" |
| Auburn | 34.1 " |
| Nemaha | 36.1 " |
| Dubois | 34.2" |
| Pawnee City | 31.1 " |
| Falls City | 33.7 " |
| Bellevue | 30.0" |
| Mitchell | 14.0" |
| Gordon | 17.4 " |
| Harrison | 18.9" |
| Ord | 23.8" |
| Halsey | 20.9" |

Color Key

| Green | 33 " or more |
| :---: | :---: |
| Blue | 24.0 " -32.9 " |
| Yellow | $18.0 "-23.0 "$ |
| Red | $14.0 "-17.9$ |

NEBRASKA


