

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

## Glacial Valley

Valley glaciers are found in locations with large amounts of snowfall and temperatures that are cold enough for snow to remain on the ground year-round. As snow accumulates from one year to the next, the thickness of the snow increases and under the weight of the upper layers, the bottom layers are compacted and turn into ice. When the thickness of snow and ice increases enough, the ice at the bottom is squeezed so much that it partially melts. This liquid acts as a lubricant and allows the snow and ice above it to start sliding slowly downhill. This mass of moving snow and ice is called a glacier. The valleys shown in this image are located in Wyoming, near Yellowstone National Park.

1. Even though this photograph was taken in late August, there is snow visible at S9, L1, and H5. Why is there snow in these locations but not in most other places in this image? \_\_\_\_\_  
\_\_\_\_\_
2. What evidence can you find that suggests that the valley at Q31 has not contained an active glacier for many years? \_\_\_\_\_  
\_\_\_\_\_
3. During the winter this region is covered with a thick layer of snow. Why aren't glaciers formed each year? \_\_\_\_\_  
\_\_\_\_\_
4. In what way would the climate of this region need to change for glaciers to form again in these valleys? \_\_\_\_\_  
\_\_\_\_\_
5. What are the locations of two horns? \_\_\_\_\_
6. What are the locations of two cirques? \_\_\_\_\_