

## **When Precipitation Patterns Change**

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### **PART A: What is Drought?**

**1.** List 5 cities or locations for which you examined dynamic climographs or accumulated precipitation maps. Include the date range that you observed. Tell whether each location is wetter than normal, about normal, or drier than normal. Explain your reasoning.

**2.** Write a definition for *drought* in your own words.

**PART B: Graphs that Describe Climate**

**3.** Compare your model to the real world: describe the situation represented by each container.

**4.** On average, the Western U.S. experiences fewer cloudy days per year than the Eastern U.S. Based on this fact, which area is more likely to have drier soil and, therefore, be more prone to drought?

**5.** Which areas in the continental U.S. consistently received less precipitation than normal during January 2008?

**6.** Based on your explorations, describe the locations that you think were developing or experiencing drought by June of 2008.

**7.** If an area shows just one stream gage location with lower-than-normal streamflow, can you assume that the area is in drought? Why or why not? Describe one or more conditions besides drought that could account for low streamflow.

**8.** Based on patterns in the streamflow data, predict which areas of the country are experiencing drought.

**9.** How well did your predictions match the drought monitor map? Describe areas where your predictions were correct and areas where they did not match.

**10.** Of the two main types of data you examined—precipitation and the streamflow—which of the two seems to be a better predictor of drought conditions identified by the Drought Monitor layer?

