Land Use Layers

Read map descriptions to connect Oklahoma's land and human activity.

OKH.C.1.1 "Describe the diverse physical features of Oklahoma and how the environment, ecological regions, and natural resources can affect human activity, by comparing information on historical and contemporary thematic maps."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the 1910 and 2020 land uses in both regions. Circle the physical features and natural resources that help explain each region's pattern.

Two Dates, Two Regions

1. Two thematic maps of Oklahoma tell different stories about the same land. A description of a 1910 land-use map identifies broad grazing areas in the Panhandle and logging areas in the southeast. A description of a 2020 land-use map identifies irrigated cropland in parts of the Panhandle and a mix of managed forests and recreation areas in the southeast. These descriptions show activities, not every physical feature behind them. To explain the patterns, compare the dates and the regions. Western Oklahoma includes high plains with relatively little rainfall, while southeastern Oklahoma includes the forested Ouachita Mountains, where rainfall is generally greater.

2. In the Panhandle, shortgrass prairie and broad, fairly level ground helped support the grazing shown in the 1910 map description. Farmers later gained access to groundwater from the High Plains aquifer, often called the Ogallala aquifer. Some land used for grazing could then support irrigated crops, which helps explain the cropland in the 2020 description. Irrigation does not erase the region's dry climate. It supplies water that rain alone may not provide. Because groundwater is limited and replenishes slowly in many places, water use can shape future farming choices.

3. The southeast offers a different comparison. Its Ouachita Mountains have steep ridges, valleys, and extensive forests. The logging areas in the 1910 map description reflect a local resource, timber, even though rugged terrain made moving wood difficult. The managed forests and recreation areas in the 2020 description show that forests can support several activities, including wood production and hiking. Rainfall helps trees grow, while slopes may make large, level crop fields harder to establish than on the western plains. A land-use map shows what people do. Comparing dates and geography helps explain why activities vary and change.

2 ANSWER WITH EVIDENCE

Use the passage

1. How did the Panhandle land use described for 1910 differ from that described for 2020? Explain how a natural resource helped make the change possible.

2. Compare the southeast's land use in the two map descriptions. How did its physical features and timber resource affect those uses?

3. Why might large, level crop fields be harder to establish in the southeast than on the western plains? Use the physical features described in the passage.

4. The 2020 description includes irrigated Panhandle cropland that the 1910 description does not. Why does that difference not show that the Panhandle became wetter?

3 YOUR TURN

Your own words

Write a note for a possible 2050 land-use map. Predict one change in either region, compare your prediction with both map descriptions in the passage, and explain how a physical feature or natural resource could drive it. Make clear that your 2050 land use is a prediction.

ANSWER KEY

Land Use Layers

HIGH SCHOOL · OKH.C.1.1

PART 1 · READ AND MARK

Underline the 1910 and 2020 land uses in both regions. Circle the physical features and natural resources that help explain each region's pattern. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How did the Panhandle land use described for 1910 differ from that described for 2020? Explain how a natural resource helped make the change possible.	**The 1910 description shows broad grazing areas, while the 2020 description shows irrigated cropland in parts of the Panhandle. Groundwater from the High Plains aquifer helped farmers irrigate crops.**
2	Compare the southeast's land use in the two map descriptions. How did its physical features and timber resource affect those uses?	**The 1910 description shows logging areas, while the 2020 description shows managed forests and recreation areas. Forests supplied timber and space for recreation; steep ridges made moving wood difficult.**
3	Why might large, level crop fields be harder to establish in the southeast than on the western plains? Use the physical features described in the passage.	**The southeast has steep ridges and valleys, while the western plains have broad, fairly level ground.**
4	The 2020 description includes irrigated Panhandle cropland that the 1910 description does not. Why does that difference not show that the Panhandle became wetter?	**Irrigation supplies groundwater that rainfall alone may not provide, so cropland can expand without an increase in rain.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I predict that a 2050 map might show more grazing and less irrigated cropland in parts of the Panhandle. The 1910 description shows broad grazing areas, while the 2020 description shows some irrigated cropland. Groundwater from the High Plains aquifer made irrigation possible, but it replenishes slowly in many places. If less groundwater is available, some farmers might choose a land use that needs less irrigation.

Accept predictions that clearly distinguish the proposed 2050 land use from the two described dates and give a plausible link to rainfall, terrain, forests, or groundwater. Students need not predict the same change as the sample.