

# GRIDIRON

## GEOGRAPHY



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Oklahoma Alliance for Geographic Education

# TEACHER'S GUIDE

# WEEK 1 GAMES

Written by Julie Guild  
OKAGE Teacher Consultant  
Choctaw

## GAME SCHEDULE

Northern Illinois at Iowa State  
Illinois at Missouri  
Colorado State at Colorado  
UCLA at Kansas State  
Texas at Rice

Washington State at  
**Oklahoma State**  
North Dakota State at Kansas  
Utah State at **Oklahoma**  
Sam Houston State at Baylor

Stephen F. Austin at Texas A&M  
Western Kentucky at Nebraska  
Southern Methodist at  
Texas Tech

**1.** Name the states through which the football team and fans of Washington State University would probably drive to get to Oklahoma State University in Stillwater?

**2.** The OU Sooners play Utah State this week. Utah State's nickname is the Aggies. What Big 12 team is also nicknamed the Aggies?

**3.** The University of Colorado is located in Boulder and Colorado State University is located in Fort Collins. What is the state capital, and which university is closer to it?

**4.** Using an atlas, match these rivers to the Big 12 states through which they flow: the South Platte River, the Arkansas River, and the Colorado River.  
(Note: some rivers flow through more than one state.)

**5.** The two largest universities in Kansas are both members of the Big 12. In what cities are they located, and how far apart are they?



## OVERTIME ACTIVITY

This week, the Big 12 teams of Baylor, Texas and Texas A&M are playing other college football teams located in Texas. Stephen F. Austin State University is playing at Texas A&M, Sam Houston State University is playing at Baylor, and Texas plays at Rice University. Look up these non-Big 12 colleges and the cities in which they are located, and mark their locations on a Texas map.

## WEEK 1 ANSWERS:

1. Idaho, Wyoming, Colorado, and Oklahoma. Some may travel through Idaho, Wyoming, Nebraska, Kansas, and Oklahoma.

2. Texas A & M

3. Denver is the capital and the University of Colorado is closer.

4. (a)The South Platte River flows from Colorado into Nebraska, where it joins the

North Platte, becoming simply the Platte River; the Platte eventually empties into the Missouri River.

(b)The Arkansas River flows from Colorado, through Kansas and Oklahoma. It then flows into Arkansas (not a Big 12 state) and eventually empties into the Mississippi River.

(c)There are actually two Colorado Rivers in the United States! The larger of the two starts in Colorado and flows west through Utah and Arizona before becoming part

of the boundary between Nevada and Arizona and California and Arizona. Of these, only Colorado is a Big 12 state. The river eventually flows into Mexico and empties into the Gulf of California. The other Colorado River is located entirely within the state of Texas, eventually emptying into the Gulf of Mexico.

5. Manhattan (Kansas State) and Lawrence (Kansas) are about 80 miles apart.

# WEEK 2 GAMES

Written by Patricia Anduss  
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Bartlesville High School, Bartlesville

## GAME SCHEDULE

Georgia Tech at Kansas  
Idaho at Nebraska  
Colorado at California  
Iowa State at Iowa

Florida State at **Oklahoma**  
McNeese State at Missouri  
Wyoming at Texas  
Buffalo at Baylor

Texas Tech at New Mexico  
Louisiana Tech at Texas A&M  
Troy at **Oklahoma State**  
Missouri State at Kansas State  
Kansas at Southern Miss

**1.** If Texas Tech fans wanted to travel to the football game at the University of New Mexico, what historic road could they enjoy by driving north about 125 miles at the start of their journey? This highway has been immortalized in song.

**2.** Which of this week's Big 12 games will be played at the lowest elevation? What accounts for this variation in elevation? In what geographic region is this site located?

**3.** Time zones generally change one hour for every 15 degrees of longitude. A pass intercepted by an Oklahoma State football player at 6:30 p.m., in Stillwater would be viewed live on television at what time by a fan in Seattle, Washington? Name the time zones in the contiguous United States.

**4.** Longitude lines run from pole to pole. Norman and Stillwater both have an approximate longitude of 97 degrees West. Find two international cities located within two degrees of the same longitude.

**5.** There are several types of National Parks in the United States. Fans driving from Florida State University in Tallahassee, Florida to Norman, Oklahoma could visit several National Parks on their way. Name one of these parks.

## OVERTIME ACTIVITY

Find two (2) articles in a recent newspaper that mention a highway. Many U.S. highways were built in the 1920's and 1930's. What are some challenges facing those who use, build and maintain our highway system today?



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## WEEK 2 ANSWERS:

1 Historic Route 66.

2.The Louisiana Tech—Texas A&M game will be played at Kyle Field in College Station, Texas where the elevation is 364 feet above sea level. This elevation is accounted for by the location of College Station on the West Gulf Coastal Plain.

3. At 6:30 p.m., in Stillwater (Central Daylight Time), the time in Seattle, Washington, is 4:30 p.m. (Pacific Daylight Time). The time zones in the contiguous United States are Eastern,

Central, Mountain, and Pacific. In the 19th century, railroad companies established the time zones in the United States in order to help people board trains on time.

4.International cities with similar longitudes include Mexico City at 99 degrees West; Winnipeg, Canada, at 97 degrees West; and Veracruz, Mexico, at 96 degrees West.

5.National Parks that are located generally on the way from Tallahassee to Norman and on the return trip include Natchez Historical Park and Vicksburg National Military Park in Mississippi;

Cane River Creole National Historical Park in Louisiana; Hot Springs National Park and Fort Smith National Historic Site in Arkansas; and the Chickasaw National Recreation Area and the Oklahoma City National Memorial in Oklahoma.

## OVERTIME ACTIVITY

Possible answers include overcrowding (resulting in traffic jams, rush hour traffic, smog/ air pollution, etc.), "road rage," the size and weight of vehicles on the road, deteriorating bridges, maintenance, and construction costs.

# WEEK 3 GAMES

Written by Lyndal Caddell  
OKAGE Teacher Consultant  
Curtis Inge Middle School, Noble

## GAME SCHEDULE

Iowa State at Kansas State  
Hawaii at Colorado  
Nebraska at Washington

Air Force at **Oklahoma**  
Baylor at TCU  
Tulsa at **Oklahoma State**

FIU at Texas A&M  
San Diego State at Missouri  
Texas at Texas Tech

**1.** In the Big 12 this week, fans from which two universities will span the largest difference in time zones?

**2.** Oklahoma State University hosts Tulsa this week. Use an Oklahoma highway map and find which toll road and which free state highway could be used by fans driving to Stillwater from Tulsa. Also, use the mileage chart on the map to find the distance between the two cities.

**3.** Of the Big 12 games this week, only one will be played east of the Mississippi River. Which game is it, and where will it be played?

**4.** Texas universities playing this week include Texas Christian University (Ft. Worth), Texas Tech (Lubbock), Texas (Austin), Texas A&M (College Station), and Baylor (Waco). Use an atlas and find the names of the three river basins that include these sites.

**5.** This week Air Force plays Oklahoma in Norman. In addition to being home to the Air Force Academy, Colorado Springs, Colorado is also the training site for U.S. Olympic athletes. Name the U.S. cities that have hosted the Olympics, both summer and winter.



## OVERTIME ACTIVITY

The Air Force Academy of the Mountain West Conference plays the University of Oklahoma which is part of the Big 12 Conference. On a map of the United States, use two colors to show the states with universities in each conference. Be sure to include a map key. In what two states do the conferences overlap?

## WEEK 3 ANSWERS:

1. The University of Hawaii plays the Colorado Buffaloes at Boulder. Hawaii, in the Hawaii-Aleutian Time Zone, does not observe Daylight Saving Time, while Colorado, in the Mountain Time Zone, does, so there is a four-hour time difference.

2. Fans could drive the Cimarron Turnpike or State Highway 51. The mileage chart says it is 64 miles between Stillwater and Tulsa.

3. Kansas plays at the University of Southern Mississippi in Hattiesburg.

4. TCU is in the Trinity River basin, Texas is in the Colorado River basin, while Baylor, Texas Tech, and Texas A&M are all in the Brazos River basin.

5. St. Louis, Los Angeles, and Atlanta have hosted the Summer Olympics. Salt Lake City, Utah; Lake Placid, New York; and Squaw Valley, California; have hosted the Winter Olympics.

## OVERTIME ACTIVITY

The Big 12 map will show Texas, Oklahoma, Kansas, Missouri, Colorado, Nebraska and Iowa. The Mountain West Conference includes schools in Colorado, Utah, Wyoming, New Mexico, Texas, Nevada, and California. The two states where the conferences overlap are Texas and Colorado.

# WEEK 4 GAMES

Written by Lyndal Caddell  
OKAGE Teacher Consultant  
Curtis Inge Middle School, Noble

## GAME SCHEDULE

Central Florida at Kansas State  
**Oklahoma** at Cincinnati  
South Dakota State at Nebraska

Miami OH at Missouri  
UCLA at Texas  
Northern Iowa at Iowa State

New Mexico State at Kansas  
Baylor at Rice  
Texas A&M at **Oklahoma State**

**1.** The seven villages of the Amana Colonies were among America's longest-lived and largest religious utopian societies. What does "utopian" mean? This communal society, founded in 1855 by German immigrants, is located in what state that hosts a major intrastate rivalry game this week?

**2.** Cincinnati plays host to the Oklahoma Sooners this week. In the poem "Catawba Wine" by Henry Wadsworth Longfellow, he calls Cincinnati the "Queen of the West ... on the banks of the Beautiful River." To what river was Longfellow referring?

**3.** South Dakota State plays the Nebraska Cornhuskers this week. What are the state capitals of Nebraska and South Dakota, and for whom were they named?

**4.** One of the states with the highest range of elevations is California, home to UCLA, which plays Texas this week. What are the highest and lowest geographic points in California?

**5.** The nation's "largest state fair" is located near the site of which Big 12 game this week? This state is a leading producer of corn, soybeans, and pork.



## OVERTIME ACTIVITY

The University of Oklahoma plays the University of Cincinnati this week. On a map of the United States, locate the three largest cities in Oklahoma and the three largest cities in Ohio. How do the home cities of these two universities rank?

## WEEK 4 ANSWERS:

1. A "utopia" is an imaginary place where people live peacefully and in harmony with one another. A utopian society was one in which the residents tried to eliminate any behavior or activity that might keep them from getting along with one another. Iowa State and Northern Iowa play this week. Iowa is the site of the Amana Colonies.

2. Cincinnati is located on the Ohio River.

3. Lincoln, Nebraska, is named in honor of President Abraham Lincoln. Pierre,

South Dakota is named after Pierre Chouteau who founded St. Louis, Missouri. (The Chouteau family, prominent traders with Native Americans, also established trading posts in Oklahoma resulting in a town and a creek both named Chouteau).

4. Highest point is Mt. Whitney at 14,494 feet above sea level, and the lowest point in Death Valley, which is actually 282 feet below sea level.

5. The self-proclaimed "largest state fair in the United States" is in Des Moines, Iowa not far

from Ames, site of the Iowa State-Northern Iowa game. However, other state fairs claim the "largest" title, depending on the annual attendance, how long the fair runs, the size of the fairgrounds, etc.

## OVERTIME ACTIVITY

Students will map Columbus, Cleveland, and Cincinnati for Ohio and Oklahoma City, Tulsa, and Norman for Oklahoma. The home cities for both universities rank third in population in their respective states.

# WEEK 5 GAMES

Written by Janet Hall  
OKAGE Teacher Consultant  
Bethany Middle School, Bethany

## GAME SCHEDULE

Texas Tech at Iowa State  
Kansas at Baylor

Texas at **Oklahoma**  
Georgia at Colorado

Nebraska at Kansas State  
**Oklahoma State** at LA-Lafayette

**1.** Originally named Fair Park Stadium, this site in Dallas has served as the home of the OU-Texas game since 1932. What is Fair Park Stadium called today? What other cities hosted the OU-Texas games before Dallas?

**2.** Although the Lone Ranger was a fictional character, he was based on a group of real lawmen called "Texas Rangers." Which city is home to the Texas Ranger Hall of Fame and Museum, and what is the name of their Big 12 team?

**3.** Two Big 12 universities were founded several years before their territory became a state. Which schools were they and how many years after they began did their territory receive statehood?

**4.** The air we breathe contains less oxygen at higher elevations. It becomes harder to exercise, play games, and just breathe as you gain altitude. What Big 12 team

is said to have a natural advantage on the football field when it plays its games at home, because of their high elevation? What is that elevation?

**5.** Although Texas A&M will play Oklahoma State in Stillwater this week, OSU Cowboy fans may see evidence of one of the Texas Aggies' oldest traditions: the Twelfth Man. What is this tradition?



## OVERTIME ACTIVITY

The Shawnee Trail started in San Antonio and went through Austin and Waco, Texas. This was one of several trails used to drive cattle from Texas ranches to the railroads in Kansas and Missouri. Map the routes of the Shawnee Trail, the Chisholm Trail, and the Great Western Trail.

## WEEK 5 ANSWERS:

1. Fair Park Stadium was renamed the Cotton Bowl in 1936.

2. Go to Waco, Texas to visit the Texas Ranger Hall of Fame and Museum. Waco is also home of the Bears of Baylor University.

3. The University of Oklahoma was founded in 1890, 17 years before Oklahoma became a state in 1907. Oklahoma State University was also founded in 1890 as Oklahoma Agricultural and Mechanical College (Oklahoma A&M), renamed OSU in 1957. Note to teacher: Both OU and OSU began classes

about two years after they were founded so students may give 1892 as the start date. Baylor University was founded two weeks before Texas became a state in 1845. The University of Colorado was founded four months before Colorado became a state in 1876.

4. The University of Colorado is located in Boulder which is 5430 feet (a little more than one mile) above sea level.

5. College football rules allow only eleven players from each team to be on the field whenever the ball is in play. All other players stay on the sidelines. The Twelfth Man tradition at Texas A&M dates back to

a football game in 1922 when only one player was still standing on the sidelines at the end of the game. Today, the entire student body at A&M is symbolically the Twelfth Man, and they stand during the entire game to show their support. The Twelfth Man is always in the stands waiting to be called upon if needed.

## OVERTIME ACTIVITY

Note to teacher: There were "feeder trails" throughout southern Texas as cowboys drove their cattle from the ranches onto the main trails. Therefore, students can find maps with several different southern routes.

# WEEK 6 GAMES

Written by Glenda Sullivan  
OKAGE Teacher Consultant  
Lawton

## GAME SCHEDULE

Utah at Iowa State  
Texas A&M at Arkansas

Colorado at Missouri  
Baylor at Texas Tech

Kansas State at Kansas

**1.** The Morrill Act of 1862 granted federal land to states and territories to establish agricultural, engineering and mechanical colleges. Which of the schools (Big 12 and their opponents) playing this week began as land grant colleges?

**2.** From 1860 to 1861, the Pony Express hired horseback riders to carry the mail from a city in northwest Missouri to Sacramento, California. The relative location for this Missouri city is approximately 150 miles northwest of the University of Missouri at Columbia, and the absolute location is 40°N, 95°W. What is the name of this city and what is the difference between relative and absolute location?

**3.** All but two of the Big 12 schools and their opponents playing this week are located in the Central Time Zone (CST). Which two schools are not and what is their time zone? If the football games begin at 2:00 p.m. CST, what time will these teams' fans who stay home need to turn on their televisions to make sure they do not miss a single play?

**4.** If fans drive from Stillwater to Lafayette for this week's game taking the most direct way, they will cross a major river and then drive parallel to it for nearly 200 miles. What is this river and into what other river does it eventually empty?

**5.** Near Columbia, Missouri the Katy Trail State Park follows the former Missouri-Kansas-Texas Railroad, nicknamed the "Katy". Name all the states through which the "Katy" once ran, carrying passengers and freight.



## OVERTIME ACTIVITY

Use a road atlas to plan a trip from the University of Utah in Salt Lake City to the following national parks located in southern and southeastern Utah: Zion National Park, Bryce Canyon National Park, Capitol Reef National Park, Canyonlands National Park and Arches National Park. Tell which highways you will take to get to each park, approximately how many total miles you will travel, and how many days your trip will be.

## WEEK 6 ANSWERS:

1. University of Nebraska  
Kansas State University  
Oklahoma State University  
Iowa State University  
University of Arkansas  
Texas A&M University  
University of Missouri

2. (a) St. Joseph (b) Relative location = the location of a place relative to other landmarks while absolute location is locating a place using the latitude/longitude coordinate system.

3. (a) University of Utah, University of Colorado  
- Mountain Time Zone  
(b) 1:00 p.m.

4. (a) Red River south to the Mississippi River

5. The "Katy" ran through Missouri, Kansas, Oklahoma and Texas. Many atlases have railroad maps in them.

## WEEK 7 GAMES

Written by Glenda Sullivan  
OKAGE Teacher Consultant  
Lawton

## GAME SCHEDULE

Baylor at Colorado  
Iowa State at **Oklahoma**

Texas at Nebraska  
Missouri at Texas A&M

**Oklahoma State** at Texas Tech

**1.** From its base to its summit, Cavanal Hill is 1,999 feet high, making it "the tallest hill in the world." Use an Oklahoma state road map to find Cavanal. In which county is Cavanal Hill located? What city is the county seat of that county, and what intermediate direction is it from Cavanal?

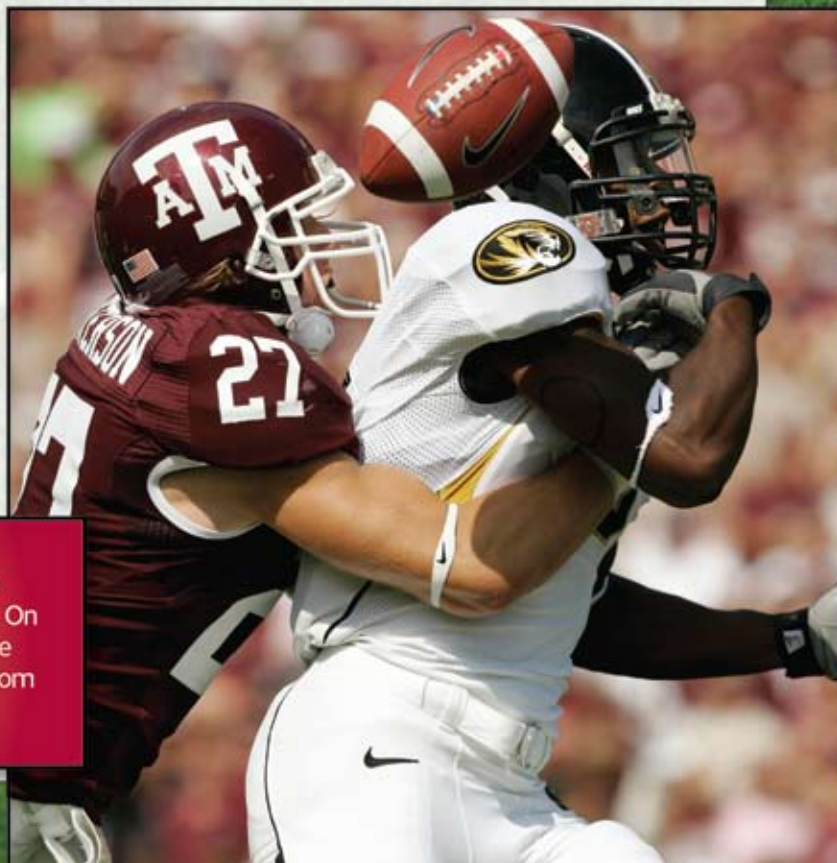
**2.** The OSU-OU football game, which dates back more than 100 years, is usually called the "Bedlam game." What does the term "bedlam" mean, and how was it first used? What Big 12 game played this week is known as the "Sunflower Showdown"?

**3.** Many college students flock to Padre Island National Seashore near Corpus Christi, Texas each year for spring break. Calculate how many miles it is from Corpus Christi to each of the Big 12 schools. From which campus would students travel the longest distance and shortest distances

**4.** The University of Oklahoma in Norman is located near what major river? A dam was built across this river to create the largest

lake located entirely in the state of Oklahoma. Name this lake.

**5.** A popular sport in Colorado is climbing the "14ers," the fifty-four mountains whose elevation is over 14,000 feet. The closest "14er" to the University of Colorado at Boulder is Longs Peak, elevation 14,255 feet. Boulder's elevation is 5,344 feet. What is the difference in elevation from Boulder to the summit of Longs Peak?



## OVERTIME ACTIVITY

Tourism is important to the economy of Oklahoma. Choose a state park that you have never been to, but would like to visit. On an Oklahoma state road map, highlight the park you would like to visit. Using a highlighter, trace the route you would travel from your hometown to your chosen state park.

## WEEK 7 ANSWERS:

1. Cavanal Hill is located in LeFlore County. The county seat is Poteau which is located northeast of Cavanal Hill.

2. The term bedlam means "a place, scene, or state of uproar and confusion." The word is actually a mispronunciation of Bethlehem, in the name of the oldest hospital for treating the mentally ill, the Hospital of St. Mary of Bethlehem in London. The "Sunflower Showdown" is applied to several sports played between Kansas and Kansas State Universities.

3. The approximate distances students from each campus would travel to Corpus Christi are as follows:

Baylor = 261 miles  
Colorado = 958 miles  
Iowa State = 1008 miles  
Kansas State = 790 miles  
Kansas = 783 miles  
Missouri = 826 miles  
Nebraska = 903 miles  
Oklahoma State = 577 miles  
Oklahoma = 516 miles  
Texas A&M = 204 miles  
Texas Tech = 480 miles  
Texas = 181 miles

The school that is the longest distance from Corpus Christi is Iowa State University. The school that is the shortest distance from Corpus Christi is the University of Texas.

NOTE: The actual mileage answers may vary if students use another website such as Google Maps or Mapquest.).

4. The University of Oklahoma is located near the Canadian River. The Canadian was dammed to create Lake Eufaula.

5. The difference in elevation from Boulder to the summit of Longs Peak is 8,911 feet.

# WEEK 8 GAMES

Written by Teresa Begley  
OKAGE Teacher Consultant  
Pauls Valley

## GAME SCHEDULE

Iowa State at Texas  
Nebraska at **Oklahoma State**

Texas Tech at Colorado  
Kansas State at Baylor

Texas A&M at Kansas  
**Oklahoma** at Missouri

**1.** Iowa State will play the University of Texas at Austin. Traveling from Ames to Austin by bus, what three major rivers will the team cross? Name the source and mouth of each of these rivers. What do these three rivers have in common?

**2.** If the Iowa State Cyclones do travel by bus to Austin to play the Texas Longhorns, they will pass near the largest waterfall in Oklahoma. What is the name of this waterfall, where is it located and how far is it from the closest Big 12 university?

**3.** The Colorado River of Texas (not to be confused with the much longer Colorado River that flows through the Grand Canyon) passes through Austin, where the University of Texas is located. Name the source, mouth, and length in miles of the Colorado River.

**4.** The University of Nebraska's football team is called the Cornhuskers, which is also the state's nickname. What was the state's original nickname, and when was it changed? What other nicknames does Nebraska have?

**5.** The OU Sooners travel to Columbia to play the Missouri Tigers this week. Both Missouri and Oklahoma have "sons" who became famous for their humorous writings. One grew up



in Hannibal and the other was born near Oologah. Who were these two "famous sons" and when were they born? What unusual connection did they have?

## OVERTIME ACTIVITY

Rivers have played a major role in the economic development of many states. The Missouri River flows through or borders four Big 12 states and is a major source of water for them. Using whatever resources available (e.g., atlases, encyclopedia, almanacs, and the Internet), trace the Missouri River from its source to its mouth, identifying at least three different landscapes and state at least three important facts about it. Name the four Big 12 States that the river flows through or borders on its journey to its mouth.

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## WEEK 8 ANSWERS:

1. Missouri River: source in the Rocky Mountains in southwest Montana and mouth at Mississippi River.  
Arkansas River: source in the Colorado Rockies and mouth at the Mississippi River.  
Red River: source in the Texas Panhandle and mouth at the Mississippi River.  
All three rivers have in common that they empty into the Mississippi River.

2. Turner Falls, 77 feet high, is located in the Arbuckle Mountains near Davis, and is the largest waterfall in Oklahoma. It is approximately 63 miles south of University of Oklahoma in Norman.

3. The Colorado River rises (source) on the Texas-New Mexico border and flows for about 600 miles to its mouth at

the Gulf of Mexico at Matagorda Bay.

4. The state nickname used to be the "Tree Planters State," and it was changed in 1945 to the "Cornhusker State." Other nicknames are the Beef State, Antelope State, Bug Eating State and Blackwater State.

5. Samuel Langhorne Clemens (pen name: Mark Twain) was born in Florida, Missouri, in 1835. William Penn Adair Rogers (pen name: Will Rogers) was born in 1879, and usually called Claremore, Indian Territory, his hometown. One of Twain's famous novels, A Connecticut Yankee in King Arthur's Court, was made into a movie in 1931, starring Will Rogers.

## OVERTIME ACTIVITY

Its principal headwaters (source) are the Jefferson,

Madison, and Gallatin Rivers, which unite to form the main stream at Three Forks, Montana, and the river empties (mouth) into the Mississippi River at St. Louis, Missouri. (Accept: source - Rocky Mountains in Montana; mouth - Mississippi River)

Some landscapes on its path are mountains, valleys, prairies, plains, canyons, basins, and lakes.

Three important facts are: 1) longest river in the United States; 2) drains or is watershed for 529,350 square miles, one-sixth of the entire U.S.; and 3) combined with the Mississippi River, it forms the world's third largest river system. (Accept other facts.)

Four Big 12 States are: Nebraska, Iowa, Kansas, and Missouri.

# WEEK 9 GAMES

Written by Teresa Begley  
OKAGE Teacher Consultant  
Pauls Valley

## GAME SCHEDULE

Kansas at Iowa State  
Colorado at **Oklahoma**

Texas Tech at Texas A&M  
Missouri at Nebraska

**Oklahoma State** at Kansas State  
Baylor at Texas

**1.** If they travel in a bus by the most direct route, which Big 12 team has to go the farthest this week to play a conference game? Calculate the distance between these two teams.

**2.** What is the elevation of the westernmost and the southernmost Big 12 universities? What is the difference between the two elevations, and what explains the difference?

**3.** If the Nebraska football team is called the "Cornhuskers" because the state's major crop is corn, why is the University of Kansas football team called "Jayhawks"? What is the major crop of Kansas?

**4.** Sometimes the offensive and defensive linemen crash into each other on the football field with such intensity, it almost feels like an earthquake! Since the Haitian earthquake on January 12, 2010, there has been a renewed interest in earthquakes, especially since there have been several in recent Oklahoma history. When and where was the epicenter of the largest earthquake to occur in Oklahoma? How strong was the temblor on the Richter (moment) magnitude scale? How did Oklahoma's largest earthquake compare with the one in Haiti?

**5.** As the Missouri Tigers travel westward to play the Nebraska Cornhuskers this week, the fans may be reminded that many wagon trains went west through Missouri in the 1800s. What famous landmark can be found in Missouri that marks the starting point of the frontier during the Westward Expansion era? Where is the landmark located and what are its latitude/longitude coordinates?



## OVERTIME ACTIVITY

What is the relationship between each of the following Big 12 teams' nicknames and its history, geography, or economy? The teams are: Oklahoma Sooners, Texas Longhorns, Texas A&M Aggies, and Oklahoma State Cowboys. Search in whatever resources or references (including the Internet) are available to you to find the answers.

## WEEK 9 ANSWERS:

1. The Colorado Buffaloes must travel about 660 miles to play the Oklahoma Sooners in Norman.

2. The Western most Big 12 school is University of Colorado at Boulder, with an elevation of about 5202 feet. The Southern most Big 12 school is Texas A&M at College Station, with an elevation of about 311 feet. Boulder's elevation is 4891 feet higher than College Station, because Boulder is situated in the Rocky Mountains while College Station is in the Interior Coastal Plains. As one moves east and south towards sea level, the elevation decreases.

3. The Jayhawk is a mythical cross between two birds—the noisy blue jay and the quiet sparrow

hawk. The word came to prominence just before the Civil War in "Bleeding Kansas," where it was adopted by militant abolitionist groups known as Jayhawkers. With the admission of Kansas to the Union as a free state in 1861, the term Jayhawker became synonymous with the people of Kansas. The Jayhawk appears in several Kansas cheers, most notably "Rock Chalk, Jayhawk" which is chanted in unison before and during games.

Kansas's largest crop is wheat and accounts for about 12% of the state's total agricultural production. In fact, Kansas is the #1 wheat-producing state in the United States generating about 15% of the nation's total crop.

4. The epicenter of Oklahoma's largest earthquake ever recorded was El Reno on April 9, 1952. The quake had a magnitude of 5.5, while the quake in Haiti last January registered a magnitude of 7.0.

5. Gateway to the West or Gateway Arch, located in St. Louis, Missouri on the Mississippi River. Latitude: 38-37'28" N; Longitude: 090-11'14"W.

## OVERTIME ACTIVITY

Oklahoma Sooners: a name given to those settlers who jumped the gun during the great Oklahoma land rush; in other words, they came into the land "sooner" than they were supposed to.

# WEEK 10 GAMES

Written by Denise Rhodes  
OKAGE Teacher Consultant  
Quapaw High School, Quapaw

## GAME SCHEDULE

Nebraska at Iowa State  
Texas at Kansas State

Baylor at **Oklahoma State**  
**Oklahoma** at Texas A&M

Missouri at Texas Tech  
Colorado at Kansas

**1.** Name the president of a Big 12 university who is a former state governor and United States senator. Where was he born?

**2.** If the OU Sooners drive to Texas A & M this week on I-35 and I-45, they will pass through some of the world's most ancient mountains. What are these mountains, and what is their geological age? Why are the calcium deposits here so thick?

**3.** Several U.S. Presidents are claimed as "native sons" by Big 12 states, even though some of them were born elsewhere. Who are these presidents, where were they born, and which states claim them as "native sons"?

**4.** What Big 12 state has the most "eco-regions" in the nation? Name all twelve. In which eco-region do you live?

**5.** Which Big 12 state is home to more caves and caverns than any other state? About how many are there? What kind of topography exists where most of these caves are located?



## OVERTIME ACTIVITY

Which Big 12 universities have animals for mascots? Name the animals.

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## WEEK 10 ANSWERS:

1. David Lyle Boren, born in Washington DC, where his father was serving as a member of the U.S. House of Representatives from Oklahoma.

2. The Arbuckle Mountains, which may once have been more than 20,000 feet tall, are more than 200 million years old; they were old mountains when the Rocky Mountains were just forming. The area is rich with fossilized, calcified remains of sea organisms, because it was once completely covered by an ocean.

3. Texas claims Lyndon Baines Johnson (born near Johnson City, Texas), George Herbert Walker Bush (born in Milton, Massachusetts), and George Herbert Walker Bush, Jr. (born in New Haven, Connecticut) because all were residents of Texas when they were elected president.

Texas also claims Dwight David Eisenhower (born in Denison, Texas), although his family moved to Abilene, Kansas when he was a child, and Eisenhower considered Kansas his home state. Missouri claims Harry S. Truman who was born in Lamar and lived in Independence most of his life. Herbert Clark Hoover (born in West Branch, Iowa, where he is also buried) is claimed by Iowa, although he lived most of his life in California, New York, and overseas as a mining engineer.

4. Answer: Oklahoma has more eco-regions than any other state in the union. They are:

- a. Arkansas Valley
- b. Boston Mountains
- c. Central Great Plains
- d. Central Irregular Plains
- e. Cross Timbers
- f. Flint Hills
- g. High Plains
- h. Ouachita Mountains
- i. Ozark Highlands
- j. South Central Plains

- k. East Central Texas Plains
- l. Southwestern Tablelands

5. Missouri has more than a dozen caverns that are open to the public, although the state has an estimated 6,000 caves. Karst topography provides the landscape of soluble limestone and dolomite that often contains springs, sinkholes, and underground rivers.

## OVERTIME ACTIVITY

Baylor Bears, Colorado Buffalos, Texas Longhorns, Missouri Tigers, and Kansas State Wildcats. Some would include the Kansas Jayhawks, but there is no actual animal by that name. The jayhawk is a mythical cross between two birds: the noisy blue jay and the quiet sparrow hawk.

# WEEK 11 GAMES

Written by Ann Kennedy  
OKAGE Teacher Consultant  
Southeast High School, Oklahoma City

## GAME SCHEDULE

Oklahoma State at Texas  
Kansas at Nebraska

Kansas State at Missouri  
Texas Tech at Oklahoma

Iowa State at Colorado  
Baylor at Iowa State

**1.** If you follow Big 12 football, you have heard of the Orange Bowl, the Rose Bowl and the Fiesta Bowl but what about the Dust Bowl? During the 1930s, severe dust storms caused agricultural damage to the Great Plains region. Identify the states of Big 12 teams playing this week that were affected by the Dust Bowl.

**2.** This week the Oklahoma Sooners take on the Texas Tech Red Raiders, but in 1935 at the height of the Dust Bowl, it was the OSU Cowboys (then called the Oklahoma A&M Aggies) who played the Red Raiders. What were the causes of the Dust Bowl?

**3.** When the Iowa State Cyclones travel to Colorado this week, they may want to visit the Black Canyon of the Gunnison National Park. A favorite spot for rock climbers and bird watchers, the canyon itself is so narrow that it receives only a small amount of sunshine each day. How was the canyon formed? How deep is it? Why is it called the "black" canyon?

**4.** This week the Texas Aggies will travel to Waco to take on the Baylor Bears. After the game the fans can visit a museum devoted to one of the nation's oldest major soft drinks and see a huge collection of soft drink memorabilia. What is the name of this soft drink and when was it first sold? What gives this beverage its unique taste?

**5.** About 500 miles west of Austin, Texas, is Big Bend National Park. Big Bend is sometimes referred to as "three parks in one" because of its varied terrain. What types of environmental terrain can be found in this particular park? What country borders Texas along the southern edge of the park? What is the name of the river you would have to cross to leave the United States from Big Bend?



## OVERTIME ACTIVITY

Long before Kansas State and Missouri started playing football, the trails from their two states played significant roles in settling territory "out west." Kansas and Missouri were jumping off points for adventurous explorers such as missionaries, gold seekers, traders, fur trappers, and people seeking a new start in life with land of their own. Research the paths followed in their trek west. Identify at least three of the major trails and draw them on a map. Which of the trails crossed what is Oklahoma today? Which rivers did they follow? Why was the journey so dangerous?

## WEEK 11 ANSWERS:

1. Oklahoma, Texas, Kansas, Colorado, and Nebraska.

2. Extreme weather conditions (i.e., flooding from record breaking heavy rains followed by three years [1934-1936] of almost no rainfall; late blizzards that killed spring crops; winds that blew for days and created huge dust storms) accompanied by farming practices that were not well suited to the Great Plains resulted in what was sometimes called the "Dirty Thirties."

3. The canyon was formed slowly by the action of the Gunnison River, with sheer cliffs rising more than 2700 feet (more than half a mile) above the water. What makes the canyon "black" are the particular kinds of rocks and minerals through which the river has carved, along with the narrowness of the canyon that allows very little sunlight to penetrate to the bottom.

4. Dr Pepper was created, manufactured and sold beginning in 1885 in Waco, Texas. The manufacturer says Dr Pepper's unusual taste comes from a combination of 23 fruit flavors, but actual recipe is a secret.

5. A visitor will see environmental terrains of desert, river and mountains. The Rio Grande ("Great River" in English) forms the southern boundary of the park, and serves as the border between Mexico and the United States.

# WEEK 12 GAMES

Written by Helen Chaney Hackney  
OKAGE Teacher Consultant  
Wilson Elementary School, Wilson

## GAME SCHEDULE

Weber State at Texas Tech  
Oklahoma State at Kansas  
Kansas State at Colorado

Missouri at Iowa State  
Florida Atlantic at Texas  
Nebraska at Texas A&M

Oklahoma at Baylor  
Texas A&M at Texas  
Colorado at Nebraska

**1.** One of the Big 12 teams is playing this week against a university located on a former military base where the radar crew of the "Enola Gay" was trained. Name this university and tell where it is located. What was the "Enola Gay" and what is its significance?

**2.** The Weber State Wildcats travel to Texas Tech this week. Compared with what they are used to at home, how different will the players and their fans find the landscape in Lubbock?

**3.** Several of the Big 12 colleges are located between 30° and 33° north latitude. Name these schools and identify the one that receives the least amount of direct sunlight annually because of where it is located. Why is this?

**4.** Pistol Pete will be looking to shoot down the Kansas Jayhawks this week. What latitude line forms the border between Oklahoma and Kansas? With what states do Oklahoma and Kansas both share borders?

**5.** Oklahoma Sooners fans will "invade" Waco, Texas, this week to watch their team play the Baylor Bears. Driving from Norman to Waco, what highway gives you the most direct route? Assuming there are no construction projects, traffic tie-ups, bad weather, or other events that may slow you down, how long should it take to get to Waco if you average 65 miles per hour?

## OVERTIME ACTIVITY

Every ten years the United States conducts a census, a counting of everyone who lives in the country. This process began in January of this year. Besides how many people live in Oklahoma, what other interesting facts can you learn from the data gathered by the U.S. Census Bureau? For instance, how many amusement parks do you think were in Oklahoma in 2000? How many in Texas? Visit this site to discover some "fun facts" about Oklahoma and other states.



GRIDIRON GEOGRAPHY 2010 13

## WEEK 12 ANSWERS:

1. Florida Atlantic University was established in 1964 on the site of the Boca Raton Army Air Field which was closed in 1947. Named for the mother of the pilot, Paul Tibbets, Jr., the "Enola Gay" was the B-29 Superfortress bomber that in 1945 was used to drop the first atomic weapon used in combat on Hiroshima, Japan, helping to end World War II.

2. Lubbock and Texas Tech (elevation 3256 feet above sea level) are located in the Llano Estacado (the Staked Plains) in the panhandle of Texas which receives on average less than 20 inches of

precipitation annually and is heavily dependent on water pumped up from the Ogallala Aquifer. On the other hand, Weber State University in Ogden, Utah (elevation ranges between 4300 and 5200 feet above sea level), which receives an average of 42 inches of snow each year, rests in the foothills of the Wasatch Mountains with the Great Salt Lake plainly visible ten miles in the distance. Ogden also hosted the downhill, slalom, and giant slalom ski events as well as the ice events for the 2002 Winter Olympic Games.

3. The universities are Texas Tech in Lubbock, Texas at Austin, Texas A&M in College Station, and Baylor in Waco, Texas. Texas Tech receives the least amount of direct sunlight because it is located the farthest north at 33.122037° N latitude.

4. Oklahoma and Kansas share 37° N latitude and they share borders with the states of Missouri and Colorado.

5. I-35 is the most direct route from Norman to Waco, a distance of about 272 miles. Averaging 65 mph, it should take about 4 ½ hours to make the trip.

# WEEK 13 GAMES

Written by Brad Bays & GEOG 1113 students  
Associate Professor of Geography  
Oklahoma State University, Stillwater

## GAME SCHEDULE

Oklahoma at Oklahoma State  
Kansas State at North Texas

Houston at Texas Tech  
Kansas at Missouri

Texas Tech at Baylor

**1.** Texas is well-known as the largest state in the lower 48 contiguous states. Only \_\_\_\_ miles separate its two largest universities. Name these two Big 12 schools. While on the road between these two universities, you will drive near Dime Box, Texas. Why is it called Dime Box?

**2.** As Colorado fans descend the Rocky Mountain foothills of Boulder to Lincoln, Nebraska, how many feet in elevation will they descend? What are the major similarities and differences between these two places?

**3.** Many Kansas State fans will travel south on I-35 to Denton, Texas, for the game against the University of North Texas. What phenomenon in the 1800s involved the movement of livestock north from Texas to Kansas? In the 1870s what specific routes north were used? Name at least one route.

**4.** What river has its headwaters near Texas Tech University in Lubbock and flows just southwest of Houston before emptying into the Gulf of Mexico? What is the longest river in Texas?

**5.** Since 2004 the Kansas Jayhawks-Missouri Tigers rivalry has been dubbed the "Border Showdown." The name was changed from the "Border War" (commemorating past guerilla war along these states' common border). What historical issue inspired the original "Border War"? What river serves as a natural boundary along part of the Kansas-Missouri border?



## OVERTIME ACTIVITY

Nebraska and Colorado are leaving the Big 12 Conference. Determine the percentage of loss to total undergraduate student enrollment in the Big 12. Use enrollment statistics for each university to determine your answer. What will the approximate student population of the Big 12 be in two years (when Nebraska and Colorado leave the Big 12) compared to today?

## WEEK 13 ANSWERS:

1. The distance between Texas and Texas A&M is about 107 miles. Until a post office was established in Dime Box in 1877, a person would leave an outgoing letter and a dime for postage in a box at a sawmill named Brown's Mill.

2. Boulder's elevation is about 5400 feet, while Lincoln's is about 1200, so the difference in altitude is about 4200 feet. Besides elevation differences, some of the similarities and differences revolve around farming and

agriculture: Colorado for past mining, farming, livestock, corn, hay, wheat and tourism; Nebraska for leading grain producer, cattle and hog industry, and meat packing.

3. Cattle drives involved the movement of beef cattle from ranches in Texas to railheads in Kansas, Nebraska and Missouri, for transport to markets back East. The Chisholm, Great Western and Shawnee Trails were the major routes.

4. The Brazos River nearly connects Texas Tech and the University of Houston. From its headwaters in Colorado, the Rio Grande is 1896 miles long, with 1254 miles of its length in Texas, making it the longest river in Texas.

5. The issue of extending slavery into the Kansas Territory from the slave-holding state of Missouri igniting much of the conflict known as the Border War. The Missouri River forms the natural boundary between Kansas and Missouri



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\*National Geographic - Roper Survey  
of Geographic Literacy (2006)

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