

LESSON 20

Calendars in Texas

- *The Seasons, Eclipses, Major Meteor Showers*
- *Morning and Evening Stars*
- *Astronomical Calendar for 2010 and 2011*
- *206-Year Calendar, A.D. 1894–2099, Inclusive*

SOCIAL STUDIES TEKS

4 - 6, 23

7 - 8, 21

8 - 29

INSTRUCTIONAL SUGGESTIONS

1. Using “A Brief Sketch of Texas History,” “Extreme Weather Records in Texas,” and “206-Year Calendar, A.D. 1894–2099, Inclusive,” students will compute the day of the week each of the events occurred on the **This Day in History** page. Then have student make observations about the information. For example: On what day did most events occur? On what day did the least number of events occur?



A total lunar eclipse, photographed beginning at 3:52 a.m., Sept. 28, 2007, in Dallas. At 4:53 a.m., the Earth’s shadow completely overlapped the Moon, causing its red appearance. Texas Almanac file photo.

2. Students will visit the United States Naval Observatory’s website (<http://www.usno.navy.mil/USNO/astronomical-applications>), “Data Services” section, to determine the exact rise and set times of the sun and moon at their location on their birthday this year. As a class, collect the rise and set times for each student. Use the data to create a class line graph/ bar graph. Use **Class Birthdays** to record your data.
3. Students will complete the **Astronomical Calendar Word Search**, using the “Astronomical Calendar for 2010–2011” section. Students should fill in the blanks first and then use these terms to complete the word search.

This Day in History

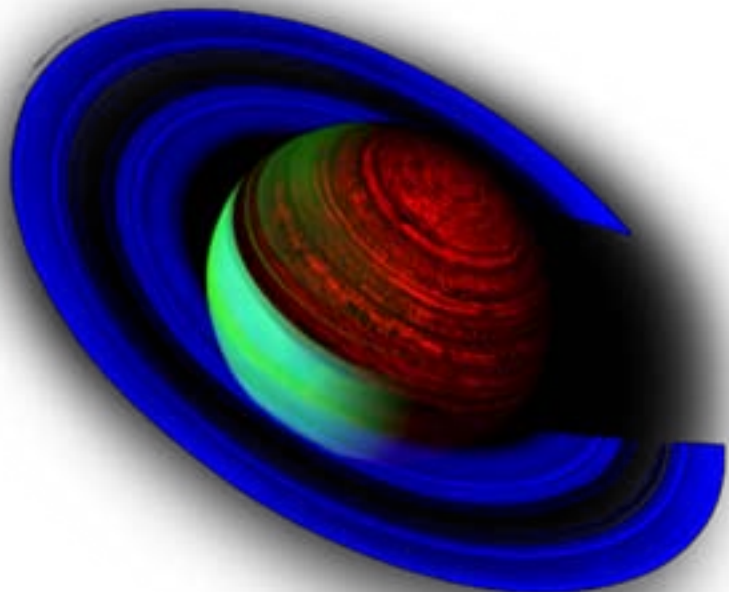
Step 1 Directions: Investigate each event and compute the day of the week on which each event occurred. Use “A Brief Sketch of Texas History,” “Extreme Weather Records in Texas,” and “206-Year Calendar, A.D. 1894–2099, Inclusive” to find dates.

1. Hurricane destroys half of Galveston and kills 6,000 people, the greatest natural disaster in human terms ever to strike North America. (1900)
2. Gusher drilled by mining engineer, Captain A. F. Lucas, at Spindletop, near Beaumont, brings Texas into the Petroleum Age. (1901)
3. Black Tuesday, the stock market crashes, ushering in the Great Depression. (1929)
4. The temperature reached its record low, 23°F, at Seminole. (1933)
5. The temperature reached its record high, 120°F, at Seymour. (1936)
6. Bombing of Pearl Harbor in Hawaii by Japanese pulls United States into World War II. (1941)
7. Allies invade Normandy (D-Day). (1944)
8. V.E. Day marks the end of World War II in Europe. (1945)
9. World War II officially ends when Admiral Chester Nimitz, a Texan, accepts the Japanese surrender. (1945)
10. President John F. Kennedy is assassinated in Dallas; Vice President Lyndon B. Johnson succeeds to the office, becoming the 36th president of the United States. (1963)
11. 19th Amendment (woman suffrage) ratified. (1920)
12. Apollo 11 lands on the moon. (1969)
13. 26th Amendment (suffrage for 18-year-olds) ratified. (1971)
14. Berlin Wall torn down. (1989)
15. Ann Richards is elected governor of Texas. (1990)
16. Kay Bailey Hutchison becomes first woman to serve as United States senator from Texas. (1993)
17. Terrorists attack the United States. (2001)

Astronomical Calendar Word Search

1. A partial eclipse of the moon was visible in parts of the continent of _____ on June 26, 2010.
2. _____ is the point at which a planet's orbit is farthest from the sun.
3. _____ is that point of the moon's orbit farthest from the Earth.
4. _____ is the approximate geographical center of the state.
5. The time period from the second Sunday in March to the first Sunday in November is called _____ Saving Time.
6. On July 6, 2010, the _____ was at its aphelion.
7. A partial eclipse of the sun will be visible in the northern portion of the state of _____ on June 1, 2011.
8. The planet _____ will be the evening star from January 29 to December 5, 2010.
9. The _____ shower Leonid is at its peak on November 18, 2010.
10. _____ is that point of the moon's orbit nearest the Earth.
11. _____ is the point at which a planet's orbit is nearest the sun.
12. On March 20, 2011, the season of _____ begins.
13. The planet _____ will be the morning star on November 4 to December 31, 2010.
14. On December 21, 2010, the season of _____ begins.

This image of Saturn, provided by NASA on May 31, 2007, was taken as the Cassini spacecraft flew over the unlit side of the sixth planet, capturing its glow.



Astronomical Calendar Word Search (continued)

B	W	T	V	E	N	U	S	R	S	J	C	D	V	J	O
F	R	N	H	A	N	G	Y	S	R	M	S	L	R	R	A
K	L	Q	A	G	U	K	P	U	O	Y	S	U	M	P	B
B	C	B	M	K	I	S	W	P	W	Z	T	Z	O	R	L
Z	L	D	N	S	S	L	T	I	Z	N	F	G	A	N	G
O	P	R	I	O	N	A	Y	R	S	P	E	D	O	D	K
A	O	O	J	V	Z	W	L	A	A	E	Y	I	D	L	T
X	F	E	A	J	R	B	A	A	D	L	L	R	C	K	M
T	G	T	U	K	N	T	T	R	N	E	I	D	I	M	E
B	B	E	U	V	N	Z	S	O	H	P	K	A	F	O	W
A	P	M	T	H	O	G	I	I	E	W	Q	U	N	M	T
H	X	Z	R	Y	N	L	R	R	Z	P	I	P	O	A	S
T	F	C	L	I	E	E	I	Q	M	F	F	N	D	B	R
R	R	B	R	H	P	G	O	I	Q	L	V	E	T	V	A
A	Z	P	P	W	E	J	X	D	G	M	H	X	I	E	M
E	S	A	Z	E	M	A	B	T	Z	O	Z	N	B	P	R

