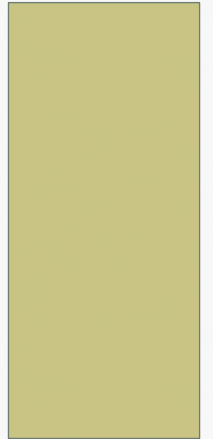


THE GREAT DEPRESSION

THE DUST BOWL



DAY 1 & 2 – THE DUST BOWL

- ❑ Direct instruction – students will participate in lecture through active listening, note-taking and by watching short videos.
- ❑ Students will periodically respond to formative assessments targeted at learning unit chunks.
- ❑ Students will write a summary of the learning unit and hand in for points in the current ongoing portfolio.

DAY 1 – THE DUST BOWL

- ❑ The Dust Bowl was a period of severe dust storms causing major ecological and agricultural damage to American prairie lands from 1930 – 1936.
- ❑ The Dust Bowl was caused by a combination of severe drought (Mother Nature) and decades of extensive farming without crop rotation, fallow fields, cover crops or any techniques to prevent soil erosion (Man).
- ❑ Deep plowing of the virgin topsoil of the Great Plains had displaced the natural deep-rooted grasses that kept the soil in place and trapped moisture even during periods of drought and high winds.

DAY 1 – THE DUST BOWL



DAY 1 – THE DUST BOWL

- ❑ During the 1930s, without the natural anchors to keep the soil in place, it dried, turned to dust and blew away eastward and southward in large dark clouds.
- ❑ At times, the clouds blackened the sky reaching all the way to East Coast cities such as Washington, D.C..
- ❑ Much of the soil was deposited into the Atlantic Ocean, carried by prevailing winds.
- ❑ The Dust Bowl affected 400,000 km² in Texas, Oklahoma, New Mexico, Colorado and Kansas.

DAY 1 – THE DUST BOWL



DAY 1 – THE DUST BOWL



DAY 1 – THE DUST BOWL

- ❑ Hundreds of thousands of people were forced to leave their homes due to the dust storms and the inability to raise crops.
- ❑ Many migrated to California, where the economic conditions were no better during the Great Depression.
- ❑ These migrants no longer owned their own land and were forced to travel from farm to farm to pick fruit and other crops at starvation wages to survive.

DAY 1 – THE DUST BOWL

- A. What was the Dust Bowl?
- B. Where was the Dust Bowl located?
- C. What happened to some of the people who lived in the Dust Bowl?

Dust in the Wind

DAY 1 – CAUSES

- ❑ Spanish explorers first saw the Great Plains of Texas, Kansas and Nebraska in 1540.
- ❑ The Little Ice Age gripped portions of North America for several centuries.
- ❑ The U.S. made the Louisiana Purchase in 1803 and Lewis and Clark explored the Great Plains in 1804.
- ❑ Early American pioneers began to inhabit the Great Plains in the early 1800s.
- ❑ The region was known as the Great American Desert due to the lack of surface water and timber – it was unsuitable for great settlement and agriculture.

DAY 1 – CAUSES

- ❑ During the Civil War, in 1862, the U.S. Congress passed the Homestead Act, encouraging settlers to claim up to 160 acres of land provided that they lived on it for 5 years and cultivated it.
- ❑ After the Civil War, the transcontinental railroads and waves of new European immigrants hungry for land of their own caused settlement in the Great Plains to greatly increase.

DAY 1 – CAUSES

- ❑ There was also an unusually wet period in the Great Plains during this same time – a potential side affect of coming out of the Little Ice Age - settlers and the federal government mistakenly believed that the climate of the region had changed permanently.
- ❑ Initial attempts at agriculture were cattle ranching with limited cultivation, but a series of harsh winters starting in 1886, overgrazing and a short drought in 1890 led to an expansion of land under cultivation.
- ❑ Immigrants from Europe continued to flood into the Great Plains into the 20th Century.

DAY 1 – CAUSES

- ❑ Unusually wet weather returned to the Great Plains in the early 1900s – convincing settlers that the area could now support large-scale agriculture.
- ❑ Technological improvements led to increased automation, which led to the greater cultivation of the land.
- ❑ World War I increased agricultural prices, which encouraged farmers to dramatically increase cultivation in the Great Plains.

DAY 1 – CAUSES

- ❑ These new farmers did not use appropriate practices for the environment – instead they used agricultural methods that encouraged erosion.
- ❑ Cotton farmers left fields bare over the winter months, when winds in the Great Plains are highest – and they burned the stubble as a form of weeding before planting the next year.
- ❑ These practices deprived the soil of organic nutrients and increased exposure to erosion.

DAY 1 – CAUSES

- ☐ The unusual wet period ended in 1930, leading to drought.
- ☐ The native grasses that covered the prairie for centuries and that held the soil in place and retained moisture had been eliminated by extensive plowing.
- ☐ The drought caused the topsoil to dry out and become dust, and it was carried away by the winds.
- ☐ The dust clouds aggregated in the air and prevented rainfall.

DAY 1 – CAUSES

- ❑ A strong dust storm stripped topsoil from farmlands in South Dakota in November, 1933
- ❑ A severe drought struck the Great Plains in 1934, and in May of that year, a 2 day dust storm removed massive amounts of topsoil. Dirt fell like snow in Chicago.
- ❑ On April 14, 1935, 20 of the worst dust storms occurred throughout the Great Plains – this became known as 'Black Sunday'.

DAY 1 – CAUSES

- A. What is the normal weather like in the Great Plains?
- B. What happened during the unusual wet period in the Great Plains?
- C. How did cultivation practices of settlers in the Great Plains affect the land?
- D. What happened when the unusual wet period in the Great Plains ended?

DAY 1 – COMPLETION

Dust in the wind – 2

Students should begin writing a summary of their notes – to be completed on Day 2 of this exercise

DAY 2 – AFTERMATH

- ❑ The Dust Bowl caused an exodus of people from the Great Plains – 500,000 Americans were left homeless.
- ❑ Many fell ill and died of dust pneumonia or malnutrition.
- ❑ With their land barren and homes seized by banks in foreclosure, many farm families were forced to leave the Great Plains.
- ❑ By 1940, 2.5 million people had moved out of the Great Plains.

DAY 2 – AFTERMATH

- ❑ In 1933, within the first 100 days of Franklin D. Roosevelt's presidency, governmental programs to conserve soil and restore the ecological balance of the U.S. were implemented.
- ❑ The Soil Erosion Service was reorganized under the Department of Agriculture in 1935 and was renamed the Soil Conservation Service.
- ❑ The Federal Surplus Relief Corporation (FSRC) was created after 6 million pigs were slaughtered by farmers to stabilize prices – the pigs went to waste.

DAY 2 – AFTERMATH

- ❑ The FSRC diverted agricultural commodities to relief organizations – apples, beans, canned beef, flour and pork products were distributed locally. Cotton goods were later included to clothe the needy.
- ❑ In 1935, the Drought Relief Service (DRS) was formed to coordinate relief activities – buying cattle to give to the FSRC.
- ❑ The government cattle buying program helped many farmers avoid bankruptcy.

DAY 2 – AFTERMATH

- ❑ The Civilian Conservation Corps (CCC) began to plant 200 million trees from Canada to Abilene, Texas to break the wind, hold water in the soil, and hold the soil in place.
- ❑ Farmers were educated in soil conservation and anti-erosion techniques, including crop rotation, strip farming, contour plowing, terracing and other improved practices.
- ❑ Dust Bowl farmers were encouraged to practice the new methods by being paid \$1/acre.
- ❑ By 1938, the massive conservation effort reduced the amount of blowing soil by 65 percent.

DAY 2 – AFTERMATH

- ❑ In 1939, the Dust Bowl drought ended with the return of regular rainfall to the Great Plains.
- ❑ Credit availability was lacking due to so many failed banks in the Great Plains region – which prevented many farmers obtaining funding needed to buy capital to shift crop production.
- ❑ Dust Bowl land values dropped dramatically and the loss of topsoil caused farmers to shift from growing crops to raising animals on the lower quality lands.

DAY 2 – AFTERMATH

- A. How were people who lived in the Dust Bowl area affected by it?
- B. How did the federal government respond to the Dust Bowl?

DAY 2 – THE 21ST CENTURY

- ❑ Climate change may cause rain patterns and temperatures in the Great Plains to change – possibly resulting in future mass relocation of residents.
- ❑ Even a small increase in temperature could quickly cause critical amounts of moisture in the soil of the Great Plains to evaporate due to the region's dry climate.
- ❑ That could lead to a return of severe dust storms.
- ❑ Droughts could become longer as weather patterns shift.

DAY 2 – THE 21ST CENTURY

- ❑ The Ogallala Aquifer, the vast underground reservoir the Great Plains relies on for almost all of its water is being depleted by growing demand from commercial agriculture and urban centers.
- ❑ When the Ogallala Aquifer declines further – as it will with continual usage, many more wells will go dry – affecting water availability in the region.

DAY 2 – THE 21ST CENTURY

- ❑ In 2010, workers at the Muleshoe National Wildlife Refuge in Texas pushed a giant bale of hay into a drainage ditch.
- ❑ The ditch was formed by decades of poorly managed water runoff from nearby agricultural fields, carrying away vast amounts of dirt with each major rainfall – the hay will catch the dirt and slow down erosion.

DAY 2 – THE 21ST CENTURY

- ☐ When tumbleweeds pile up on barbed wire fences, and are not regularly removed, they act as a net to collect blowing dust.
- ☐ An entire fence can be covered up in a matter of years.
- ☐ Ravines then form around the untended fence lines, carrying away dirt during storms.
- ☐ The temperature in the high plains of west Texas can fluctuate 50 degrees in 24 hours – this type of weather explains why small man-made mistakes can trigger a chain of environmental disaster.

DAY 2 – THE 21ST CENTURY

- A. What is the connection between the Dust Bowl and the 21st Century?
- B. What can Americans do to prevent a future Dust Bowl?

DAY 2 – THE 21ST CENTURY

- ❑ Students will complete their summary statement about the Dust Bowl and include it in the current portfolio for classroom points.
- ❑ Consideration should be given to what caused the Dust Bowl and what could cause it to happen again in the 21st Century.
- ❑ 20 classroom points

DAY 3 – THE DUST BOWL REVISITED

- ❑ Dust Bowl – 1 – Greening of the Dust Bowl – 3:14
- ❑ Dust Bowl 2 – Woodie Guthrie – Dust Bowl Blues – 3:29
- ❑ Dust Bowl – 3 – This land is your land – 2:18
- ❑ Dust Bowl – 4 – Talking Dust Bowl Blues – 2:40

DAY 3

- ☐ Write a reflection of how climate change can and has affected human lifestyles in the U.S. – paper must include references to the 5 videos watched yesterday
- ☐ Consideration should be given to the possibility that another Dust Bowl could occur in the Great Plains of America – what are arguments with evidence one way or another?
- ☐ Homework - 15 classroom points

DAY 4

- ❑ Students will write a 1 page discussion on one of the standards they have selected in the classroom.
- ❑ 15 classroom points