



The State Fair of
TEXAS
Curriculum

LIVESTOCK & AGRICULTURE
GRADE 8 SOCIAL STUDIES

WHAT'S IT GONNA COST ME...TOMORROW?!
THE REAL FACTS BEHIND WHAT WE EAT



STUDENT EDITION

LIVESTOCK & AGRICULTURE

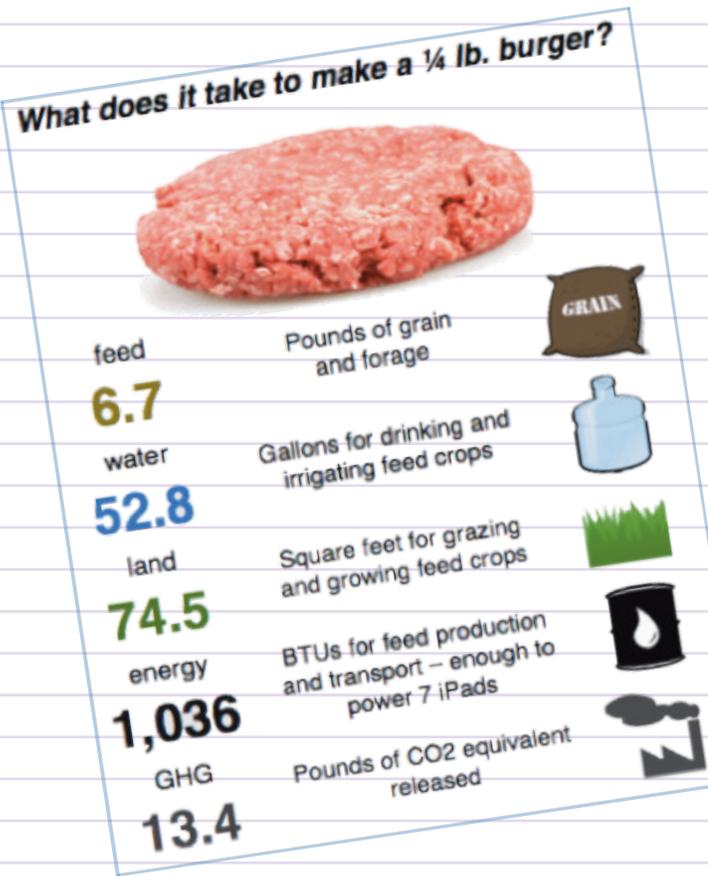


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Recap

- ★ Recall the class discussion about changing food prices, and the factors that cause those changes.
- ★ Watch the [video](#) on George Rodrigue, or visit the [artist website](#).
- ★ Review the infographics in this document, which you analyzed in class:



Infographic provided by Business Insider



Infographic provided by Growing Voices

GRADE: Eight

SOCIAL STUDIES

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THE FACTS BEHIND FOOD PRICES

- WEATHER**
Drought, flooding and freezing reduce supply, which can cause dramatic price increases in essential crops. The 2012 U.S. drought, which is the most widespread in more than half a century, is expected to negatively impact the production of key grains like corn and soybeans and/or result in record prices in those commodities.
- GLOBAL DEMAND**
A growing middle class in China and India means increased demand for meat and grains. The U.N. estimates 50 percent more food will need to be produced by 2030 to meet growing global demand with world population expected to reach 9 billion by 2040.
- BIOFUEL POLICY**
Due to U.S. mandates, 40% percent of the corn crop – or 3 billion bushels – are used for ethanol, diminishing supply for other uses to its lowest level in 10 years.
- LIMITED FARMLAND**
Farmland is being lost at an alarming rate due to development and other factors. At the same time, food prices increase as more farmland is directed to non-food items.
- MACROECONOMIC FACTORS**
A strong U.S. dollar, relative to European and other currencies, has a dramatic effect on all commodity prices. The economic woes in Europe and slowing growth in China have played a significant role in 2012 commodity markets.
- GOVERNMENT POLICY**
Government policies, such as tariffs to support domestic production, reduce competition, and supplies available for international (export) impact prices. Russia's ban on animal imports reduced global trade supplies by 20 million metric tons in 2010/11.
- DISEASE**
Chickens and turkeys have close relationships in grain production, which reduce food supply on average, roughly 35 percent of global crop production falls prey to diseases and pests.
- ENERGY COSTS**
Higher prices drive up the costs of bringing food to market. These costs are passed along to consumers.
- GEOLOGICAL CONFLICTS**
Political unrest can disrupt productivity, impacting supply and commodity pricing. During 2012, wheat prices spiked as a direct result of protests in Egypt, one of the world's biggest wheat exporters.
- DECLINING GRAIN RESERVES**
Grain stocks for major nations are expected to be at record low levels again in 2012, meaning grain reserves are declining globally as we use more grains to meet rising demand.



THE FACTS BEHIND BEEF PRICES

- INCREASING FEED COSTS**
The 2012 U.S. drought has reduced grain and oilseed yields and pushed up feed prices for livestock producers. During the summer of 2012, corn prices increased 60 percent and soybean meal prices increased 25 percent.
- GLOBAL DEMAND**
A growing middle class in China and India means increased demand for meat. The U.N. estimates 50 percent more food will need to be produced by 2030 to meet growing global demand, with world population expected to reach 9 billion by 2040.
- WEATHER**
Severe U.S. drought in 2011 and 2012 – and the ensuing shortage of feed and grain – resulted in ranchers sending cattle to market sooner than their herds, rather than bear the cost of feeding large herds through the winter. The 2012 beef cow slaughter was 15 percent higher than the previous 5-year average, and the 2012 calf crop is expected to be at its lowest level since 1952.
- COMPETITION**
Pork and chicken price levels impact the cost of beef because these alternative protein sources are less expensive per pound and compete for consumers' spending.
- GLOBAL TRADE RESTRICTIONS**
Ten percent of beef consumed in the U.S. is imported and is taxed according to the exporting countries' tariff quotas, resulting in higher costs to consumers.
- REDUCED CATTLE WEIGHTS**
When the cost to raise cattle is high, producers must sell cattle at lighter weights. This results in less beef production, lower revenue for producers and higher prices for consumers.
- FLUCTUATING CURRENCIES**
Beef is priced in U.S. dollars, so a weak dollar means additional import costs for foreign beef and increased exports of U.S. beef to foreign consumers.
- FOOD SAFETY CONCERNS**
Food safety concerns – such as Bovine Spongiform Encephalopathy or "mad cow disease" – can have an impact on both cattle and beef prices. In the past, food safety concerns have resulted in bans on U.S. beef exports, driving down domestic cattle and beef prices, in the short term, as demand for beef decreased and supplies built up.



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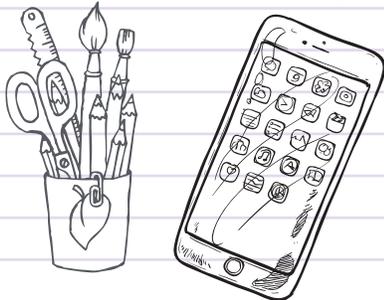
Plan Your Route.

- ★ From the Texas Star, follow MLK Blvd. around behind the Cotton Bowl Stadium.
- ★ Find Cattle Barn #2 and explore.
- ★ Next, go see the Livestock Shows and Cattle Barn #1, next door



Optional Materials to Bring

- ★ Smart Phone, Tablet
- ★ Pencil & Notepad
- ★ Sketchbook for Arts Connection



While You're There

You will use information you gather at the State Fair to help you with TWO project goals:

1. **Farmer vs. Rancher:** Imagine there is a massive drought in Texas. Based on your research at the State Fair, you will have to decide, back at school, which would be the most important to save: Farms or Ranches. Then you'll work on a project.
2. **Mascot:** Design a State Fair mascot based on the animals you observed, inspired by the Blue Dog artwork of George Rodrigue.





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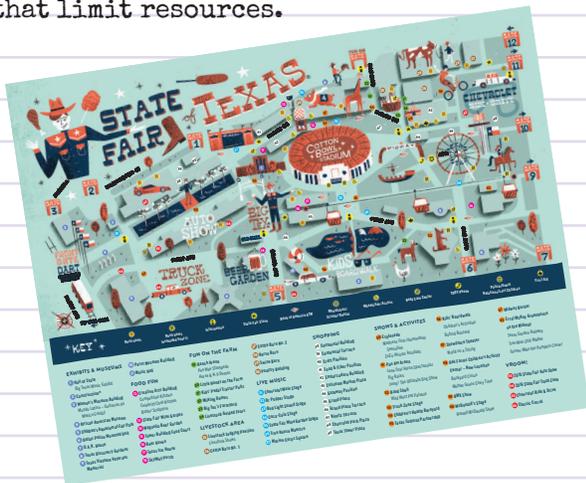
So...the goal of your visit is to discover the resources needed for the Livestock and Agriculture industries to thrive.

- ★ **LIVESTOCK SHOWS AND BARNYARDS:** Make observations about what the cattle need. Ask the exhibitors:
 - * How much do the cows need to eat?
 - * How much water do they consume?
 - * What happens when there's a drought?
 - * What are environmental factors that cause a decrease in cattle production?
 - * What happens when there isn't enough food for the cattle?
 - * When there's a drought, do cattle prices change?



Plan Your Route...your next stop will be the Food & Fiber Pavilion!

- ★ Go back down toward the Cotton Bowl and turn right on to Nimitz Drive.
- ★ Continue walking until you see the Food & Fiber Pavilion on your right.
- ★ **FOOD & FIBER PAVILION:**
 - * Make observations about the environment.
 - * Ask questions about cost, resources needed and factors that limit resources.



Back at School

When you return to class following your State Fair visit, you will work on your two projects. See your teachers for more information.