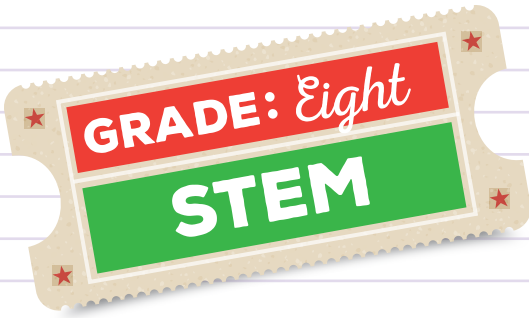The State Fair of
TEXAS
Curriculum

BIG TEX
GRADE 8 STEM
SURVEY SAYS...
USING DATA TO MAKE TEXAS-SIZED DECISIONS

STATE FAIR OF TEXAS

BIG TEX

GRADE: Eight
STEM

Survey Says...
Using Data to Make Texas-Sized Decisions

In this lesson students will:

★ Analyze survey data to help State Fair of Texas organizers make decisions.

★ Organize and present the data in the form of graphs and other charts.

★ Design a new Big Tex based on survey results.

Almost every time you get onto a computer, data is being collected and used by companies to make more informed advertising choices. The State Fair doesn't have the benefit of using computers. Instead they use surveys to help drive their decisions about the future of the Fair.

Standards

★ ELAR TEKS: 8.27
★ Math TEKS: 8.1(A), 8.1(B), 8.1(C), 8.1(D), 8.1(G), 8.5 (F)
★ Science TEKS: 8.2(B), 8.2(D), 8.2(E)
★ Art TEKS: 8.2(A), 8.2(C), 8.3(B)

Before You Go

Driving Question:

★ How do we use data to make decisions in real life?

★ Define infographics, and how they are used to display and share important information.

BIG TEX

GRADE: Eight
STEM

Survey Says...
Using Data to Make Texas-Sized Decisions

Using Surveys to Make Smarter Decisions

Companies and organizations determine which products to create and promote based on research, including survey results.

Here is the research question the State Fair of Texas organizers want to answer:
★ Is there a relationship between age and the number of people who like Big Tex?

They have started their survey with the following two questions, and need your help in developing additional questions.
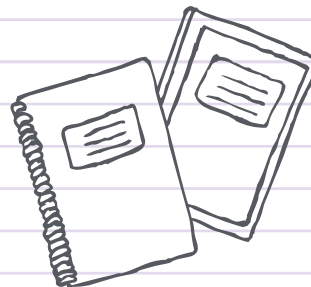
1. What is your age?
2. Should we continue using Big Tex to promote the State Fair of Texas?

★ What additional information or questions do you think should be included in this survey?
★ How will you determine which questions to ask?
★ Add your questions to the survey before you visit the fair.

Plan Your Route.
★ Go Directly to Big Tex Circle.

Optional Materials to Bring
★ Smart Phone, Tablet
★ State Fair of Texas map
★ Pencil & Notepad
★ Survey

While You're There
The objective of your visit is to use your survey to collect data from at least 50 people while you are in Big Tex Circle.

★ Be sure you collect data from people from as many different age groups as possible!

GRADE: Eight
STEM

Survey Says...
Using Data to Make Texas-Sized Decisions

After the Fair
When you return to class following your State Fair visit, you will:
★ Use the data you collected to answer the research question.
★ Is there a relationship between age and the number of people who like Big Tex?
★ What conclusions can be drawn from your data?
★ Does your data present a proportional situation or a non-proportional situation? What does this tell you about your data?
★ Create a report or an infographic of your data
★ Includes graphs of your results.
★ Summarize your results in 5–10 sentences.
★ Compare your data and a classmate's data on the first two survey questions.
★ Is your data consistent?
★ Could different scientists be used to complete multiple trials?
★ What variables could produce differing results, depending who you interviewed? Your classmate? An adult? A first-grade child?

Arts Connection: Reimagining Big Tex
Take the survey to another level! Add the question:
★ If you could change anything about Big Tex, what would it be?
★ Collect these results and see if there is any crossover.
★ Design a new Big Tex, based on these results.
★ You could use a number of media choices from colored pencils and paper to paint or sculpture.
★ Be sure to add your own personal touch to the changes.
★ Remember – YOU are the artist!
★ Present your design to the class, along with your reasoning for the changes you made.